



DEFINING ENVIRONMENTAL SOLUTIONS



STATEMENT OF QUALIFICATIONS SUPPORT FOR WIND ENERGY PROGRAMS

May 2010



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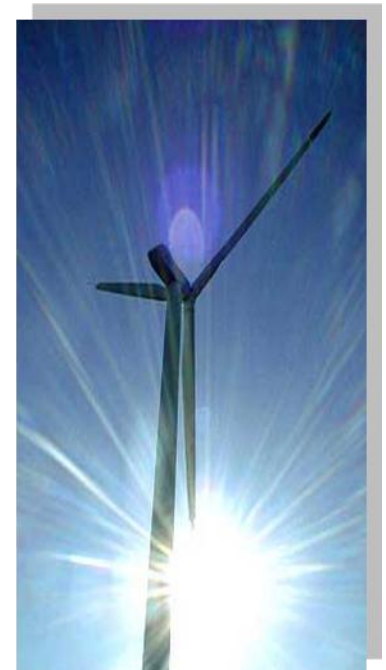
Statement of Qualifications Support for Wind Energy Programs

BHE Environmental, Inc. provides land use planning, siting, permitting, and monitoring services for energy and transmission projects throughout the country. Our qualifications and project experience reflect our corporate focus on support to the wind power industry.

BHE Environmental, Inc. is an environmental and engineering services firm headquartered in Cincinnati and with offices in Columbus, Ohio and Knoxville, Tennessee. BHE specializes in regulatory compliance and permitting, environmental engineering, site assessment, industrial hygiene, construction safety, and natural and cultural resource management. We employ approximately 75 full-time technical professionals with broad experience that can be called upon to support the complex regulatory requirements of wind power projects.

BHE specializes in supporting multidisciplinary projects requiring advanced capabilities in the acquisition of environmental permits. Our firm is structured to address these requirements, with internal technical groups that understand the environmental assessment regulatory requirements of the energy production and transmission industries. We offer vertically integrated services, supporting our clients in project planning and technical investigations from early feasibility and siting analyses through permit application and post-construction (operational) monitoring.

BHE's Wind Power Program has provided support to utility-scale wind projects throughout the Midwest, Mid-Atlantic, and Plains states. We are proud to currently provide multiple project support to the majority of the top 10 developers of wind power assets in the US, as cited in the AWEA 2008 Annual Rankings Report. As active members of industry groups serving the wind power market at the national, regional, and state levels, BHE participates closely with developers, manufacturers, utilities, and regulatory agencies to shape the economic opportunities and the policies which guide development throughout the Midwestern and Eastern United States.



BHE provides environmental analyses for wind power projects from early site development through construction and operation. BHE offers full-service environmental project support, and provides professional capabilities in feasibility and critical issues analyses, agency permitting and regulatory compliance, as well as the detailed, on-site field studies needed to give wind farm developers complete environmental information. With a corporate history of environmental support for public utilities and land use planning, our team of professionals has the scientific training and experience with regulatory agency negotiation and expedited project schedules to address the breadth of issues facing project managers and other stakeholders. BHE provides state-of-the art environmental decision-making tools to support the collaboration fundamental to project success. We offer these in support of comprehensive environmental management to meet the budget and time-sensitive nature of wind energy projects.

Below is a summarized list of the capabilities BHE Environmental offers in support of wind power projects and programs, followed by selected project descriptions which demonstrate BHE's experience in the technical and management requirements of the wind industry.



SITING STUDIES & CRITICAL ISSUES ANALYSIS

Wind Energy Conversion Plants (wind farms), Infrastructure (Substations, Utility Corridors, Highways and Roads)

- **Natural Resources - Bats, Birds, Wildlife, and Threatened & Endangered Species**
 - Preconstruction/Post-construction Studies
 - Bat and Bird Impact Assessment and Monitoring
 - Habitat Conservation Plans, Biological Assessments
 - Habitat Classification
 - Aquatic Ecology
- **Clean Water Act Compliance**
 - Wetland Delineation and Permitting
 - Water Quality/NPDES
- **Cultural Resources**
 - Archaeology
 - Historic Properties
 - Viewshed Analysis
- **NEPA Compliance**
- **Visual Impact Assessment**
 - Project Visibility, Appearance, and Landscape Context
 - Scenic Resources Values and Sensitivity Levels
 - Determination of Aesthetic Impacts
 - Mitigation
- **Noise Impact Analysis**
- **DoD, FAA, EMF Compliance**
- **Permitting**
 - Environmental Compliance
 - State Siting Permits
 - County and Municipal Special Use Permits

WIND RESOURCE EVALUATION SERVICES

- **Climatology Studies**
- **Meteorological Tower Installation and Data Analysis**
- **Wind Prospecting Surveys**
- **Turbine Micro-siting**

WIND FARM SITE ENGINEERING & PRELIMINARY DESIGN

- **Initial Project Set Up**
 - Site Layout, Site Civil, Digital Elevation Modeling
 - GIS Mapping/Data Management/File Integration
 - Document & Report Management



- **Energy Production Modeling**
 - Single Turbine & Comprehensive Site Power Generation Calculations
 - Turbine Array Optimization
 - Wind Resource Data Collection, Evaluation, Mapping, Documentation
- **Environmental Modeling**
 - Photosimulation
 - Viewshed/Geo-Spatial Analysis
 - Noise
 - Shadow Flicker

ENVIRONMENTAL SITE ASSESSMENT & ENVIRONMENTAL INSPECTION

- **Phase I ASTM Environmental Assessment**
- **Due-Diligence Investigation**
- **Regulatory Compliance/Remediation Design**

EXPERT WITNESS TESTIMONY & PUBLIC RELATIONS SUPPORT

BHE’s staff is formally trained and experienced with providing both formal legal testimony and informal public hearing support in a variety of technical project issues.

BHE is a leader in developing and providing innovative ways to support the wind industry. We continue to expand these capabilities by working with team members in the industry, government, legal and regulatory communities, and the public. BHE’s involvement with the wind energy market is reflected in the organizations we actively support by chairing and participating in technical committees, and by our participation as invited speakers in conferences and symposia. BHE is active in the following organizations:

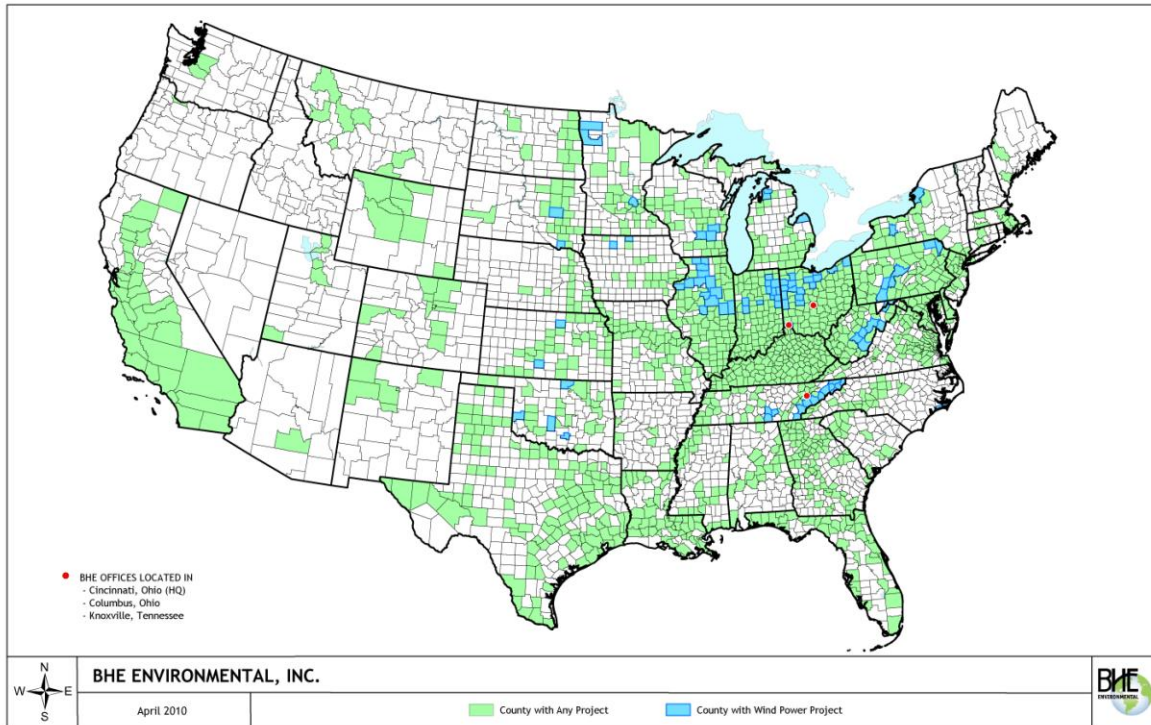
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|--|---------------------------------|
| American Wind Energy Association | USFWS Indiana Bat Recovery Team |
| National Wind Coordinating Collaborative | Illinois Wind Work Group |
| Great Lakes Region Wind Coordination Group | Indiana Wind Workgroup |
| Ohio Wind Workgroup; Green Energy Ohio | Michigan Wind Workgroup |

BHE’S NEW AMWIND MODEL FOR ADDRESSING IMPACTS TO BAT AND AVIAN SPECIES

BHE recently developed the AMwind model to define and resolve conflicts between siting new wind farms and conserving wildlife where impacts to birds and bats are of concern.

AMwind supports adaptive management by providing a tool for developing predictable, stable scenarios that describe project impacts to bats and birds. AMwind can be used to negotiate project design with regulatory agencies, while at the same time keep fundamental project goals relating to financial position and schedule in the forefront of planning.

The AMwind model uses standard industry approaches to calculate effects of proposed wildlife conservation on capacity factor and energy production, so that an economically feasible approach to addressing effects to bats and birds can be reached.



BHE has recent wind project experience (shown in blue, above) throughout the U.S.

Following are summaries of recent projects highlighting BHE’s accomplishments in dealing with issues that are important in the siting and operation of wind energy projects. BHE has a long history of providing integrated permit management and technical studies to a variety of energy-generation facilities and their associated infrastructure. This experience directly reflects our capabilities to support wind project permitting and a breadth of project development technical studies.

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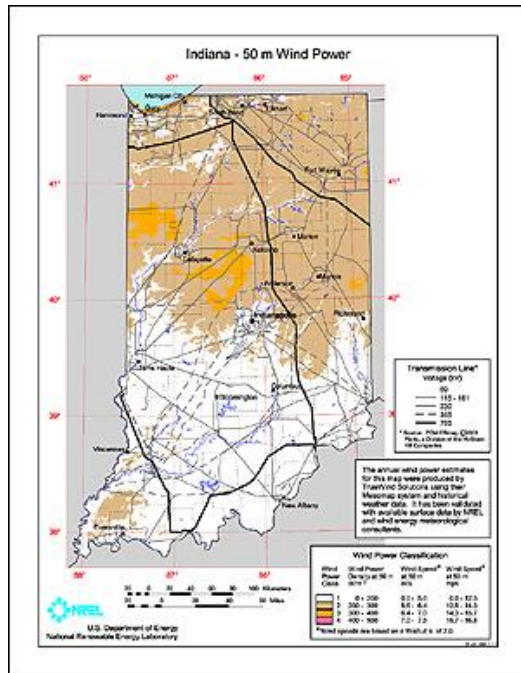
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SELECTED PROJECT EXPERIENCE

SITING APPLICATIONS & RELATED ENVIRONMENTAL PERMITTING

Critical Issues Analysis and Permit Management at a Proposed Wind Farm, Jay and Randolph Counties, Indiana



BHE has been retained by a large Midwestern Utility to engage in early-stage development of a proposed 100 MW wind farm located in Randolph and Jay Counties, Indiana. BHE scientists and permit specialists are currently working with Randolph County public officials to understand the draft wind farm siting regulations and current status of Randolph County's efforts to bring wind farm development to the County. At the request of the County, BHE prepared and submitted comments on Randolph County's draft regulations. Subsequent activities will involve critical issues analysis, permit preparation and management, and requisite wildlife studies.

Environmental Screening and Early-Stage Feasibility for Three Confidential Wind Energy Projects - Noble, Wells, and Whitley Counties, Indiana

BHE was selected to provide Environmental Screening and Early-stage Feasibility on three proposed commercial wind sites in Indiana. BHE prepared a site database from publicly available sources to include: parcels, wetlands, roads, transmission lines, airports, floodplains, watersheds, topography, and aerial photography. BHE developed and hosts a web-based portal for exchange and viewing of project data, utilizing BHE's Ultimap® to display up-to-date GIS and CADD file information.

BHE developed a preliminary analysis using WindPro software to determine potential turbine layouts. The initial modeling evaluated generalized (generic) setbacks from roadways, homes, and property lines; identified sensitive environmental features such as wetlands and streams; as well as airports and other readily identified elements from publically available sources. The WindPro set-up produced a turbine layout for the purposes of establishing overall project scale and to identify parcels that should be considered for addition or deletion to the project.



Environmental Screening Analysis for Confidential Wind Energy Project - Tipton County, Indiana

BHE was selected to perform an Environmental Screening and Permit Scoping Analysis for a potential commercial wind farm in Tipton County. Technical issues of study included wetlands and floodplains, groundwater and surface water, habitat characterization, endangered species, soil and erosion control and NPDES, and federal, state, and local environmental permit requirements.

BHE reviewed appropriate databases and contacted local, state, and federal agencies to prepare a report of findings (issues and constraints) along with recommendations for additional inquiry and studies pertinent to project findings. A description of the information needed to prepare the applications, an estimate of the time necessary to develop each permit application, and an estimate of the time needed by the applicable agencies for processing each permit was developed to facilitate project timelines.



Avian and Bat Risk Assessment for Confidential Wind Energy Project - Wells and Adams Counties, Indiana

BHE was selected to prepare an avian and bat risk assessment based upon a literature search, agency coordination, and field investigations. The scope of the project is described below.

- BHE identified Important Bird Areas, known migratory concentration areas, breeding bird areas, the presence of forest nesting species, forest interior species, waterfowl concentration areas, federal, state, and local wildlife/resource management areas and parks within 10 miles of the project area. BHE reviewed the Indiana Breeding Bird Atlas, the Breeding Bird Surveys (BBS), Christmas Bird Counts, and available hawk migration/count data from sources local to the project. We identified Indiana bat roost trees, caves, and karst within 5 miles of the study/planning area.
- BHE queried the Indiana Natural Heritage database to obtain data describing known occurrences of important natural features within 10 miles of the project. Further, we identified any proximate federally designated wilderness areas, national forests, state forests, wildlife management areas, wildlife preserves, lands protected by The Nature Conservancy for purposes of protecting important bird habitat, and wildlife refuges.
- BHE identified and assessed the quality of habitat in the project area. We acquired digital NWI data, topographic quadrangle maps, National Land Cover Data (NLCD), and aerial photography of the project site to identify known/potential vegetative cover types/habitat types.
- We identified species protected by the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and state wildlife laws that were present in the project vicinity, and identified the likelihood of the species being present at the site. We also identified the presence of any known designated Critical Habitat for listed species.

- BHE examined descriptions/location data of state and federal endangered or threatened bird species, species proposed for federal listing, and designated Critical Habitat potentially present on or near the project site based upon a Natural Heritage database query.
- We compiled available post-construction monitoring data from other proximate wind farms and related these data to the extent practicable. Based upon these data and other site specific information we characterized the anticipated magnitude of avian and bat mortality at the site. BHE identified options for avoiding or mitigating impacts as appropriate, and identified further research needed to assess specific risk or fill information gaps needed to more fully assess risk.

Environmental Screening Analysis for Confidential Wind Energy Project - Allen County, Indiana

BHE was retained to perform an Environmental Screening and Permit Scoping Analysis for a commercial wind farm in Allen County. BHE established a scope of work to include investigation of issues such as wetlands and floodplains, groundwater and surface water, habitat characterization, endangered species, soil and erosion control and NPDES, and federal, state, and local environmental permit requirements.



BHE reviewed appropriate databases and contacted local, state, and federal agencies to prepare a report of findings (issues and constraints) along with recommendations for additional inquiry and studies pertinent to project findings. A description of the information needed to prepare the applications, an estimate of the time necessary to develop each application, and an estimate of the time needed by the applicable agencies for processing each permit was developed to facilitate project timelines.

Preliminary Issues Analysis and Agency Scoping - Confidential University, Wind Energy Farm, Indiana

The purpose of this ongoing project is to identify environmental and other potential siting issues pertinent to this project and prepare a strategy and plan for compliance.

Scoping issues included:

Federal

- Clean Water Act, including stormwater management and wetlands
- Endangered Species Act, Migratory Bird Treaty Act, Bald Eagle Golden Eagle Protection Act



- Federal Aviation Administration
- Department of Defense
(military training routes)

State/Local

- Notification to Indiana Utilities Regulatory Commission
- County, township and/or municipal zoning requirements
- Viewshed (photo-simulation)
- Noise
- Well drilling
- Sewer system (Indiana Department of Health and Department of Environment)
- Historic preservation
- Building permits
- Right of Entry permit
- Highway Department permits and approvals for roadway construction and maintenance

A GIS-based approach was used to optimize turbine siting, which included all known constraints such as interconnection with electrical systems, zoning requirements, avoidance of existing agricultural systems (e.g., irrigation), and minimization of environmental factors such as noise, shadow-flicker, icing, and viewshed. Several photo-simulations of this proposed installation were prepared.

Ohio Power Siting Board (OPSB) Application Management for an Ohio Wind Farm

In mid-2008, BHE Environmental was contracted by an international infrastructure and wind farm management company to identify and manage the completion of the requirements of the OPSB certificate application and other regulatory drivers associated with the OPSB approval process. This work was for a proposed wind farm in west-central Ohio. BHE identified the requirements in a work breakdown/task oriented approach along with the corresponding schedule and budget for delivery of services that formed the foundation for successful development and processing of the OPSB siting certificate application [note: this project was ultimately not completed due to other project priorities of the owner].

Specifically, BHE was tasked with the following scope of work:

- GIS Mapping
With input from the project owner, BHE completed GIS mapping of those items required for the OPSB application. This task also included development, operation and management of an on-line digital information management system for fast and efficient transfer, storage, modification and use of documents, GIS files (through ArcGIS server) and other digital information, including shape files, Gantt charts and other management information and tools for the project.



- Management Plan and Schedule
BHE developed a complete plan and schedule for processing of the OPSB application as well as other state, federal and local permit applications and approvals. The plan and



schedule included critical steps through all points of the development process up to construction, and was integrated with other project Gantt charts already in use by the project owner.

- Application Management

BHE coordinated with the OPSB, the project owner and other involved agencies to assure these initial services are completed in a manner to allow an approvable siting application to be delivered on schedule. Frequent contacts with agencies occurred to assure application completeness and acceptability.

- Agency Coordination

BHE arranged and led several discussions and a joint meeting with the Ohio DNR and the USFWS to negotiate a study plan appropriate for the level of risk to wildlife at the project site.

- Wildlife Study Plan and Field Work

As part of the negotiation with the agencies, BHE developed a study plan to expeditiously complete required wildlife studies. BHE also conducted extensive field work focused on endangered species present on the site that may be impacted by the project. This work included:

- Migratory birds
- Songbirds
- Raptors
- Sandhill cranes
- Bats (mist netting and acoustic monitoring)

- OPSB Pre-application Meeting

BHE managed and participated a meeting with the OPSB to familiarize the board with the project, with the project's owner, and to assure application development would occur efficiently and in compliance with OPSB siting guidance and regulations.

Project Planning Services, Butler Ridge Wind Energy Facility - Eurus Energy America, Wisconsin

BHE was contracted by Eurus Energy America for our expertise in project planning; agency negotiations; and identification, minimization, and management of the effects of wind power development on sensitive bat species. Our ongoing services on this multi-year project have focused upon developing and negotiating the scope of pre-construction and post-construction studies necessary to minimize effects to bats from this wind energy development planned within two miles of a bat hibernaculum housing over 100,000 bats. With an emphasis of maintaining the client's aggressive project schedule and strong environmental stewardship interests, BHE leads project coordination with the U.S. Fish and Wildlife Service, Wisconsin Department of Natural Resources and with other interested parties, including the project developer, the project financial backer, and other consultants.

Site Selection, Environmental Studies, and Permitting for Merchant Electric Generating Facilities - DPL Energy, LLC, Ohio, Kentucky, Indiana

In response to a changing regulatory environment and projected shortages of electricity, DPL Energy, LLC planned to develop, own, and operate numerous merchant electric generating facilities in Midwestern states. BHE performed site selection studies including environmental reviews, and prepared applicable permit packages.

For more than 25 sites BHE completed background investigations and field studies to develop environmental compatibility information that, combined with other ranking criteria, allowed DPL to identify preferred sites for proposed development. Following selection of preferred sites, BHE prepared *Applications for a Certificate of Environmental Compatibility and Public Need* for submission to the Ohio Power Siting Board. A total of five applications were prepared and submitted to the OPSB, from among nine sites screened. These five applications were for facilities with proposed generating capacities ranging from 200 MW to 510 MW; the total proposed generating capacity of the five facilities was 1,710 MW. Of the five, three facilities totaling 1,030 MW were constructed.

For each OPSB application, BHE conducted a review of existing ecological conditions, air quality, water quality, land use, cultural and recreation resources, and noise levels at the proposed site. Included in the review of existing ecological conditions were wetland surveys and delineations; surveys of flora and fauna; and consultation with state and federal agencies regarding the presence of endangered species and their critical habitat followed by field surveys for these species and habitats. BHE recommended project design changes to the Client, where appropriate, to avoid or minimize impacts to these resources, and proposed mitigation measures where appropriate.

BHE conducted literature reviews for the presence of archaeological and historic resources on or near the sites; conducted field surveys to identify archaeological resources; and prepared Cultural Resources Survey reports for submission to the Ohio Historic Preservation Office (OHPO). At one site, BHE recommended project design changes to avoid impacts to a significant prehistoric site and consulted with OHPO for approval of these changes. Avoidance of this site saved delays and expense associated with Phase II eligibility testing and, potentially, Phase III mitigation of the prehistoric site. At another development site, BHE performed a Historic Architecture Inventory of a 19th century farmhouse to determine eligibility for the National Register of Historic Places and to identify preservation requirements. This farmhouse was not directly affected by construction of the proposed facility; therefore, the inventory was performed after construction of the generating facility under an agreement with the OHPO and OPSB that allowed the Client to develop the project and provided for protection of the resource, if deemed significant. However, the house was deemed not to be eligible for the National Register of Historic Places.



To identify project-related noise impacts, BHE performed monitoring of existing noise levels during day and nighttime periods. Nearby residential, institutional, and commercial receptors



were identified, and noise monitoring was conducted at receptors nearest the site, as well as along site boundaries. BHE then performed noise modeling to identify maximum anticipated noise levels at these receptors during operation of the facility, and compared these calculated noise levels to current levels.

Land use impacts were assessed by identifying project compatibility with local zoning ordinances and regional land use plans, as well as by identifying recreational resources and analyzing impacts to these resources. Mitigation measures were proposed where appropriate.

Each application included a discussion of the need for the project. To support the project's need, BHE reviewed and summarized published information from the North American Electric Reliability Council, the East Central Area Reliability Coordination Agreement, the Public Utilities Commission of Ohio, and the Federal Energy Regulatory Commission concerning the availability and reliability of the bulk electric supply in the region and throughout North America.

BHE compiled information on geology and climatology for each site from published sources, as required by OPSB, and assessed impacts to water quality, including a calculation of increased storm runoff and analysis of effects on mean and low flow conditions in receiving streams. BHE also completed a literature review of ground water availability and provided analysis of impacts to nearby ground water users in each OPSB application. BHE provided additional assistance to the Client following submission of each OPSB applications. BHE responded to OPSB inquiries, prepared maps for use at public meetings, and served copies of the application to local public officials and planning agencies.

BHE also prepared permit-to-install applications for each site. For each site, we:

- Reviewed equipment manufacturer specifications and emission information.
- Identified attainment/non-attainment status of the project area and how this status may affect permitting requirements.
- Identified preferred modeling protocols and scenarios in consultation with state agencies, and performed this modeling under varying operating conditions.
- Reviewed modeling results and recommended design changes and operating limits where appropriate.
- Prepared a BACT (best available control technology) analysis for each proposed facility.
- Prepared Permit-to-Install applications.

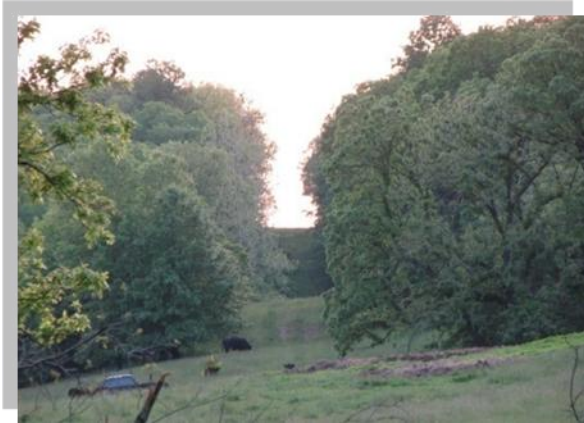
Wildlife Consultation with Ohio Dept. of Natural Resources

BHE provided ecological and wildlife study consultation with the US Fish and Wildlife Service and Ohio Department of Natural Resources to support siting of three proposed wind farm projects in Ohio. Examination of vegetative cover and land use provided data to determine the appropriate wildlife studies for songbirds, raptors, threatened and endangered species, bats, and habitat characterization for each site. The projects will have a combined capacity of nearly 400 MW.

Foster to Bath 40-mile 345 kV Transmission Line Project - Dayton Power & Light, Warren County and Greene County, Ohio

BHE provided Dayton Power & Light (DP&L) comprehensive consulting services in support of Ohio Power Siting Board certification and project construction of a new 345 kV circuit between DP&L's Foster Substation near Maineville in Warren County, Ohio, and Bath Substation near Beavercreek in Greene County, Ohio. BHE completed environmental and cultural resources field surveys; the environmental sections of a Notification to the Ohio Power Siting Board; environmental permitting; and agency coordination. Specifically, BHE's services included:

- Clean Water Act Section 404 and 401 permitting; prepared a Pre-Construction Notification and submitted it to the Louisville District U.S. Army Corps of Engineers for coverage under Nationwide Permit 12 (Utility Crossings); obtained coverage under NWP 12;
- Rivers and Harbor Act Section 10 permitting for six crossings of the Little Miami River. This was a component of the Section 404 application;
- Wetland delineations and assessments of streams and other waters of the United States in support of Clean Water Act Section 404 permit;
- Comprehensive archaeological investigations; obtained clearance from the Ohio State Historic Preservation Offices;
- Scenic River Coordination with U.S. Park Service and Ohio Department of Natural Resources for the multiple crossings of the Little Miami River (LMR) (National and State Scenic River); prepared a Reforestation Plan at request of ODNR at crossing in Warren County; prepared Bioengineering Implementation Plan, performed reforestation oversight, and implemented LMR stream bank bioengineering;
- Flood Hazard Area Development permitting with Warren and Greene counties;
- NPDES Construction Stormwater permitting and preparation of a Storm Water Pollution Prevention Plan;
- Federally listed species habitat surveys for Indiana bat, running buffalo clover and clubshell mussel; and
- Environmental Inspection during project construction.



Environmental Permitting and Related Studies for Marathon Ashland Petroleum LLC, Midwest and Eastern United States

Over the course of several years BHE conducted a large number of environmental screenings and permitting projects in 13 eastern states for Marathon Pipeline. This work has been primarily driven by regulatory compliance needs for ground-disturbing activities associated with operations and maintenance of petroleum product, crude oil, and liquid petroleum gas pipelines.

BHE's project work includes environmental screenings for regulatory compliance issues associated with, and resource surveys for, threatened and endangered species, land-use, wetlands, streams, lakes, floodplains, state lands, and federal lands. Our GIS-mapping of project areas is an integral part of these environmental screenings, and has been included as a final deliverable to the client.

BHE provided Marathon Ashland Petroleum comprehensive consulting services for biological and cultural resources, Clean Water Act Sections 404 and 401 permitting, NPDES permitting, and other permitting for construction of a 149-mile petroleum products pipeline from Kenova, West Virginia to Columbus, Ohio. The project began in 1998, with construction completed in 2003. BHE's responsibilities included:

- Agency coordination with USACE, USEPA, USFWS, Ohio EPA, Ohio DNR, and West Virginia DEP, including individual and multi-agency meetings, negotiations, and public hearings/meetings.
- Completed Individual Clean Water Act §§ 404 and 401 permit applications.
- Delineated wetlands, streams, and other waters of the United States in support of Clean Water Act §§ 404 and 401 permitting.
- Identified/obtaining required permits for construction in floodways.
- Prepared a comprehensive Storm Water Pollution Prevention Plan.
- Completed surveys for federal and state-listed endangered species.
- Completed Endangered Species Act coordination with the U.S. Fish and Wildlife Service.
- Completed uptake and discharge permitting in support of hydrostatic testing.
- Completing due diligence surveys.
- Assessed hazardous waste concerns.
- Construction monitoring of wetlands, streams, and protected species sites.
- Completed comprehensive archaeological/cultural resources investigations and obtained clearances from the Ohio and West Virginia State Historic Preservation offices.



BHE completed extensive, multi-year coordination with numerous state and federal agencies to identify concerns and permitting requirements. Key agencies included the U.S. Army Corps of Engineers, Huntington District; U.S. Environmental Protection Agency; U.S. Fish and Wildlife Service (USFWS); Ohio Environmental Protection Agency; Ohio Department of Natural Resources; West Virginia Department of Environmental Protection; Ohio and West Virginia Historic Preservation offices; numerous state and county agencies in Ohio and West Virginia; and numerous Soil and Water Conservation districts and Natural Resource Conservation Service offices.

BHE prepared Individual Clean Water Act §§ 404 and 401 permit application packages. These efforts included extensive coordination with numerous state and federal regulatory agencies and legal representatives of the client and project opponents.

Intensive surveys were completed for federally listed species including the small whorled pogonia, running buffalo clover, Indiana bat, northern monkshood, and American burying beetle. BHE led Endangered Species Act consultation with the USFWS. We documented the location of wetlands and other sensitive resources using GPS technology, and maintained an extensive GIS database for the alignment including all sensitive environmental features and route planning elements.

BHE completed pedestrian surveys of numerous alternative alignments of the 149-mile corridor for environmental and cultural resources. Phase I cultural resource surveys, including deep testing, were completed where our predictive model indicated heightened sensitivity. Our surveys identified almost 100 sensitive cultural resources, including 43 deemed eligible for the National Register of Historic Places. Impacts to these resources were avoided through a variety of rerouting strategies.

BHE played a critical role in coordinating, planning, and participating in a substantial public outreach effort.

Environmental Reporting and Supporting Studies - FERC Natural Gas Pipelines, Nationwide

BHE has completed over 150 projects in 21 states for the Federal Energy Regulatory Commission-regulated natural gas industry. Projects include new pipeline construction, pipeline maintenance, system upgrades, and pipeline abandonments. BHE assists clients in meeting Federal Energy Regulatory Commission (FERC) reporting, construction inspection, and maintenance requirements, as mandated under the Natural Gas Act and the National Environmental Policy Act (NEPA).

For new construction and abandonment projects, BHE prepares Exhibit F, the Environmental Reporting component of an Application to the FERC for a *Certificate of Public Convenience and Necessity*. An Environmental Report is required by FERC for NGA Section 7(c) (new construction) or 7(b) (abandonment) projects. The Environmental Report consists of 13



Resource Reports, serves as the project's technical document, and is used as the support documentation for preparation of NEPA documentation. BHE has prepared several Environmental Assessments (EAs) for the FERC.

BHE performs environmental, cultural resources, and hazardous materials surveys of pipeline rights-of-way (ROWs) and associated facilities, and provides recommendations for environmental resource impact avoidance, minimization, and/or mitigation. Environmental surveys and/or assessments include wetland delineations; stream assessments;

threatened and endangered species habitat assessments, and species-specific surveys; noise modeling for compressor stations; geological and soil analyses; vegetative cover/land use assessments; wildlife habitat assessments; and socio-economic analyses. During field investigations, BHE locates and maps environmental features using Global Positioning System (GPS) and Geographic Information system (GIS) technology.

BHE's cultural resources services consist of locating and describing cultural properties within the project's Area of Potential Effect. Site detection surveys typically involve archival research at the State Historic Preservation Office, analysis and tabulation of archival data to develop site location predictive models, and field investigations.

Interstate natural gas pipeline construction is governed by FERC's Upland Erosion Control, Revegetation, and Maintenance Plan and their Wetland and Waterbody Construction and Mitigation Procedures. BHE provides Environmental Inspection (EI) services to assist clients with environmental compliance during project construction. BHE's Environmental Inspectors also assist clients with preconstruction planning, ROW restoration, and post-construction activities such as monitoring, maintenance, and reporting.

Agency Scoping and Preconstruction Studies, Wisconsin

As part of the siting approval process for Wisconsin Power and Light Company's Cedar Ridge Wind Farm in Fond du Lac County, the Wisconsin Department of Natural Resources (WDNR) and the US Fish and Wildlife Service (USFWS) requested preconstruction studies to assess the



presence of and habitat use by bats in the project area. BHE negotiated the project scope with these agencies, and prepared a study plan documenting our proposed data collection and analysis methods.

We used mist nets to survey six sites during summer 2007 to identify bat species present in the project area. Thirty bats of five species were captured in our stratified sampling; none of the species is federally or state-listed.

Broadband ultrasound detectors were used to record echolocation calls from bats flying near three meteorological towers in the project

area. Resulting data were used to evaluate variations in bat activity over time (during a night, among nights, and during an entire active season) and at various locations and elevations. One objective of this analysis was to determine the impact of climatic variables on bat activity (passes) for two species groups (high frequency vs. low frequency) at three different heights (2 m, 22 m, 40-48 m).

Earlier studies have confirmed that bat activity is a function of wind speed, temperature and time of year. Our study postulated that bat activity is a function of time of year, temperature, and wind speed, and tested the inclusion of barometric pressure and rainfall measured during the times when bats were active. An information-theoretic criterion approach was used to analyze the data. Of the variables tested, temperature, wind, rain, and time of year were determinates of bat activity.

Lebanon Hub to Middletown Works Application to the Ohio Power Siting Board for an 8.3-mile, 16” Natural Gas Transmission Pipeline - AK Steel, Butler and Warren Counties, Ohio

BHE provided Matrix Gas Corporation comprehensive consulting services in support of Ohio Power Siting Board certification of a new 8.3-mile, 16” natural gas transmission pipeline from Texas Gas Transmission and



TETCO/ANR’s existing pipeline transmission system at the Lebanon Hub in Warren County, Ohio to AK Steel Corporation’s Middletown Works in the City of Middletown, Butler County, Ohio. The pipeline provided AK Steel with a direct natural gas supply to the plant.

BHE completed environmental and cultural resources field surveys and prepared an *Application for a Certificate of Environmental Compatibility and Public Need* for review by the Ohio Power Siting Board (OPSB).

BHE also completed an Indiana bat habitat assessment within the proposed pipeline corridor in accordance with U.S. Fish and Wildlife recommendations made during agency consultation for Endangered Species Act compliance. BHE completed a U.S. Department of Transportation (DOT) audit for the proposed pipeline and prepared an Operation and Maintenance Manual to assist AK Steel in DOT compliance for the new pipeline facility.



Agency Coordination and Preconstruction Acoustic Studies, Wisconsin

The Wisconsin Department of Natural Resources requested preconstruction studies to document bat activity at the 5100-acre site of a proposed 80 MW wind farm in south central Wisconsin. BHE was contracted to negotiate with the state, and develop a study plan to address agency concerns.

We have installed numerous broadband ultrasound detectors on meteorological towers and are currently collecting data to characterize bat activity in the project area. Statistical analyses of the data will be completed to identify variables correlated with bat activity.

Permitting and Related Environmental Services for 2000-Mile Level (3) Communications Fiber Optic Network - Kiewit Pacific Company, California

BHE’s multidisciplinary team provided oversight, coordination, and permitting services for construction of a 2,000-mile, state-of-the art underground fiber optic network throughout California. The fiber optic network was owned by Level (3) Communications, and is part of a 15,000-mile national network. BHE’s team worked with Level (3) to reduce environmental impacts by incorporating environmental mitigation measures into project planning, design, and technical specifications.



The detailed environmental assessment completed by BHE’s team covered “trunk” lines, as well as environmental and permitting issues at nearby support facilities, including in-line amplification units, regeneration units, distribution nodes, and terminals.

BHE compiled “Proponents Environmental Assessment” (PEA), as required under provisions of the California Environmental Quality Act (CEQA). BHE’s responsibilities included:

- Identification of environmental changes that would result from construction or operation of the project
- Analysis of impacts of these changes on each environmental factor
- Recommendations of impact minimization measures

BHE coordinated a four-step process to expedite completion of the environmental assessments:

1. Preparation of field questionnaires to ensure all information needed for the impact assessment was acquired expeditiously.
2. Site visits by multidisciplinary field teams including biologists, land use planners, and cultural resources specialists.
3. Discipline-specific impact analyses to determine environmental impacts of each project element. The environmental impacts evaluated by BHE’s team included:

Aesthetics	Agricultural Resources
Land Use	Biological Resources
Geological Resources	Hazards and Hazardous Materials
Hydrology and Water Quality	Air Quality/Noise
Mineral Resources	Population and Housing
Public Service	Recreation
Transportation/Traffic	Utilities

4. Cumulative impact assessments of each of the environmental factors.

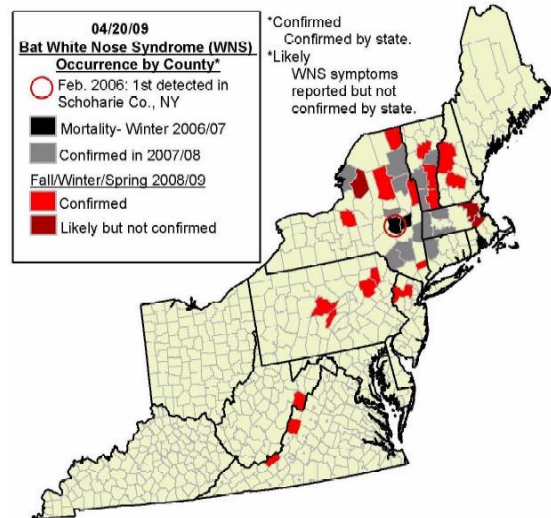
BHE’s team also coordinated and assisted in obtaining approvals and permits required for construction and operation of the network. This included identifying permitting requirements, coordinating with state and local resource management agencies, preparing permit applications, and negotiating terms and conditions with appropriate agencies. State and regional agencies included the California Department of Fish and Game, State Land Commission, Public Utilities Commission, and various regional water quality and air quality control boards. Permits and approvals obtained from local authorities included building and demolition permits, conditional use permits and zoning variances, encroachment permits, and air quality permits.

To ensure construction contractors and subcontractors were aware of the adverse impact that non-compliance could have on the environment and on the construction schedule, BHE assisted in the development of operating procedures, workbooks, and other documents that outlined the permit conditions and agency guidelines applicable to each project element. These workbooks included storm water pollution prevention plans, erosion and sediment control plans, and spill prevention control and countermeasure plans.

Finally, BHE provided experienced environmental inspectors, biological monitors, and cultural resources monitors to ensure construction contractors were aware of environmental issues. Our inspectors and monitors documented construction practices and verified compliance with the applicable permit conditions.

Biological Assessment for a Commercial Wind Farm in Upstate New York, Confidential Client

When a confidential client faced complex Endangered Species Act compliance issues at their proposed wind farm development site in upstate New York, BHE was contracted to review data generated in preconstruction surveys, and develop a GIS database depicting project-specific, and regional data, including up to date results of winter surveys identifying the presence of White Nose Syndrome in and near New York State. Because this syndrome has potentially significant implications regarding the persistence of the endangered Indiana bat in the region, we included this information in our description of baseline conditions in the project vicinity. We coordinated with state agencies; and the lead federal agency, the Baltimore District Army Corps of Engineers, and led a meeting with the US Fish and Wildlife Service to identify an approach for preparation of a Biological Assessment. Our client agreed to deprioritize development of the project pending additional results of local surveys for bats afflicted by White Nose Syndrome. As the project proceeds BHE anticipates an Adaptive Management approach will be required. Substantial uncertainty exists pertaining to aspects of Indiana bat biology and interactions between the species and wind turbines. Adaptive management will be useful in minimizing effects to the sensitive species while providing a pre-identified set of potential management scenarios to the project owner because of significant uncertainty.



We anticipate the Biological Assessment will conclude that the project will affect Indiana bats, and therefore our document will include extensive measures to avoid, minimize, and compensate for effects.

Biological Assessment for the Seneca Meadows, NY Landfill Expansion

When Seneca Meadows, Inc. planned expansion of the largest sanitary landfill in New York State, BHE Environmental, Inc. (BHE) was recruited to prepare a Biological Assessment and lead the Endangered Species Act (ESA) compliance initiative. The 2000-acre landfill



expansion included relocation of a watercourse, relocation of roads, extensive earthmoving activities, and a large on-site wetland mitigation effort. BHE led Section 7 consultation with Buffalo District Army Corps of Engineers and the US Fish and Wildlife Service Cortland Field Office, designed and negotiated habitat assessment methodologies, and utilized BHE's Indiana Bat Habitat Suitability Index Model to assess the potential impact of the project on spring, summer, and fall habitat suitable for the species. BHE conducted mist net surveys and radio telemetry investigations, and

unexpectedly identified the presence of Indiana bats in the project area.

This occurrence constituted a westward expansion of the known species range in New York State. Our radio telemetry investigations provided data characterizing the home range and numerous roost trees within the Action Area. BHE worked with the project proponent to develop conservation measures including seasonal restrictions on land clearing, roost tree creation, silvicultural enhancements, and development of a conservation easement to successfully conclude the Biological Assessment without triggering the critical schedule delay of formal Section 7 consultation.

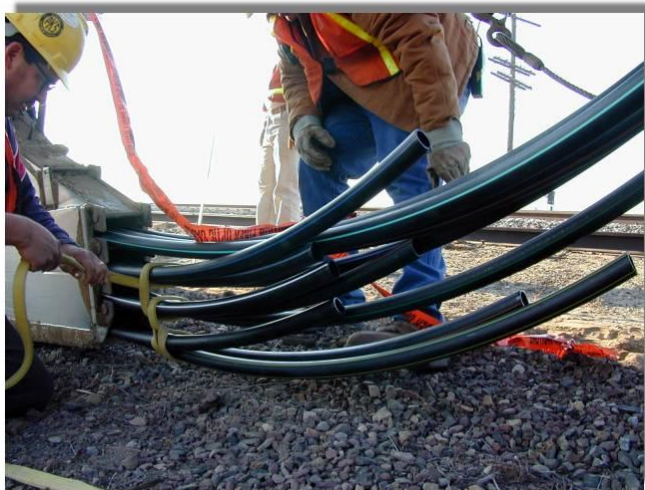
Bat Mist Net Surveys at Ft. Drum, NY Military Reservation

BHE completed Indiana Bat mist net surveys at eight different sites of the Fort Drum Military Reservation. Each site consisted of two mist net locations, and the surveys were done for a minimum of three net nights or two calendar nights. BHE obtained all necessary Federal and state wildlife collector's permits. Site selection was coordinated with the primary contact of the client. BHE recorded appropriate information and took digital photographs for each bat captured. Draft and final reports were prepared.



Permitting and Consultation for New York Fiber Optic Cable Installation

BHE provided consulting services and oversight for the preparation of permit applications for U.S. Army Corps of Engineers Permitting for a proposed 13.5-mile Newark to Manhattan PF.Net/AT&T fiber optic conduit. BHE attended two one-day project meetings. Consultation included meeting with Federal and state agencies and technical review of plans, maps, and documents during the Federal and state permitting. BHE also provided cultural resources consultation to facilitate permit applications for the line. BHE completed a field inspection of the conduit route to document conditions of land use and the effects of same on archaeological sensitivity. BHE met with state historic preservation authorities at the New Jersey Historic Preservation Office and the New York State Museum to review the project. BHE also prepared a letter report on the results of these consultations.



CRITICAL ISSUES ANALYSES, INTEGRATED ENVIRONMENTAL MANAGEMENT, & PRELIMINARY SITE DESIGN

Environmental Evaluation and Project Planning/Permitting, White Oak Wind Energy Facility and Grand Ridge Wind Energy Facility; LaSalle, McLean, and Woodford Counties, Illinois



BHE was contracted by Invenergy to lead environmental evaluation efforts for two wind power development sites totaling over 64 square miles in north-central Illinois. Our investigations centered upon the presence and potential impacts to bats, including federally listed species. Where significant ambiguities existed in accepted protocols, BHE led discussions to define the appropriate

scope of preconstruction investigations in multiple meetings with state and federal resource agencies. The nature of our investigations was tailored to the anticipated level of risk of significant bat mortality in these project areas dominated by tilled agricultural lands. As a basis for assessment of the project's effects, BHE prepared Chiropteran Risk Assessments for the two wind energy development sites. The assessments evaluated the risk to twelve species of bats known to occur in Illinois, and predicted annual mortality at the sites based upon the best available information. Potential complications were posed by the presence of designated Critical Habitat at an Indiana bat hibernaculum approximately 20 miles from one of the project sites. We developed an impact assessment approach based upon remote sensing data and aspects of the species biology to conclude that this endangered species was not likely to be affected. Our biological expert provided sworn testimony at contentious county-level public hearings for both projects.

Preconstruction Studies, Confidential Wind Project, Maryland

BHE provided pre-construction wildlife surveys at the site of a proposed utility-scale wind farm in southern Maryland to support a power generation siting certificate application to the Maryland Public Service Commission. BHE's efforts included mist netting and acoustic studies for the presence and identification of bats in the project area in accordance with required pre-construction impact analyses.

Environmental Evaluation and Project Planning/Permitting, Beech Ridge Wind Energy Facility - Invenergy Wind LLC, West Virginia

In the summer of 2005 Invenergy announced plans to construct a 200 MW wind energy facility on 23 miles of Appalachian Mountain ridgelines in West Virginia. BHE has been under contract to address numerous issues necessary to complete the West Virginia Public Service Commission application for a Certificate of Public Convenience and Necessity. To address concerns of the State Historic Preservation Office, BHE utilized advanced GIS technologies to assess effects to viewsheds from numerous National Register-eligible historic structures. Our archaeologists developed a predictive model to identify



portions of the large project area with meaningful potential to contain archaeological resources. We led negotiations with the State of West Virginia SHPO to identify the necessary scope of architectural history and archaeological investigations, and implemented those studies in the project's 5-mile radius viewshed. To address concerns for sensitive flora and fauna, BHE led discussions with the State and the US Fish and Wildlife Service. BHE prepared a pre-construction Chiropteran Risk Assessment to address anticipated bat fatalities, including two federally listed bat species that occur in the proximity. To meet state and federal requirements, BHE surveyed the project area to detect the presence of listed bat species during the summer. BHE prepared sections of the PSC application called for in West Virginia Legislative Rule Title 150, Series 30 §150-16-3.1m and 3.1o pertaining to permits required by the US Fish and Wildlife Service and the WV Dept. of Natural Resources, prepared an affidavit regarding effects to endangered species, prepared a narrative describing effects of turbine lighting, and effects to cultural resources.

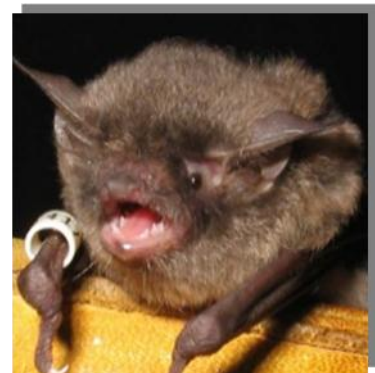


BHE provided expert witness services pertaining to cultural resources and endangered species for the PSC hearing in May 2006. We worked with the project proponent in developing a Memorandum of Understanding with project opponents to address critical issues and avoid the creation of an additional party claiming intervenor status. In 2009 we will develop a post-construction monitoring plan and adaptive management plan to address anticipated bat fatalities, and will assemble an independent Technical Advisory Committee to participate in our ongoing studies.

Critical Issues Analysis, Agency Review & Environmental Studies for an Ohio Wind Farm

BHE was retained by an international energy developer to define the scope of environmental requirements and agency coordination necessary to obtain all permits in support of a successful Application to the Ohio Power Siting Board (OPSB) for a certificate of environmental compatibility and public need to authorize the construction for a "major utility facility" on approximately 6,000 acres in Ohio.

As part of early project scoping, in an effort to define and resolve critical path concerns, BHE characterized the environmental and local permits and approvals needed to support the OPSB Certificate Application, and performed an assessment of potentially difficult (time consuming, expensive, and/or likely to engender public/agency opposition) challenges in the permitting process for the Ohio project, and described how these challenges would be resolved. The process challenges and the result of agency scoping efforts were addressed in the critical issues analysis.



To address critical environmental issues for this project, BHE performed the following tasks:



- Defined all required environmental permitting or agency approvals that are incorporated in the OPSB Application, as these must be completed to obtain a Certificate;
- Characterized those permitting/approval tasks that may be either controversial to the public or regulatory agencies;
- Defined a road map for successful permit/approval authorization (or identified constraints to successful permitting), including, developing an overview scope/schedule/cost analysis to:
 - mitigate effects to environmental resources, in order to avoid or minimize a critical path obstacle
 - define potential project alternatives or design features to resolve agency concerns while minimizing project impacts
 - characterize and provide examples of Best Management Practices (BMPs) to resolve/minimize agency concerns
- Identified the general effect to the project budget and schedule that addressing these issues entailed

The critical issue analyses performed by BHE identified and addressed impacts to the following resources or compliance requirements:

- National Environmental Policy Act (NEPA) Compliance
- Wetlands, Floodplains and NPDES
- Habitat characterization, endangered species, “major species,” birds, bats and other potentially affected wildlife
- Cultural and historic resources
- Noise, visual resources and shadow flicker
- Soil and geological suitability
- Agricultural districts
- Hydrological suitability
- Land use
- Recreational Areas
- Woodlands, Wetlands and Wildlife Habitats
- Urban, Commercial and Mining impacts
- Croplands
- Solid waste
- Other potential critical path issues resulting from state and local requirements

Results of these analyses were documented in a detailed, written report.

Critical Issues Analysis, Preliminary Agency Scoping, and Desktop Environmental Studies for Confidential Wind Energy Project, West Virginia

To support early project scoping, BHE developed the scope for and developed a comprehensive and detailed document characterizing the environmental permits and approvals needed to support the PSC Siting Certificate Application, along with an assessment of potentially difficult (time consuming, expensive, and/or likely to engender public/agency opposition) challenges in the permitting process for the project, and a description how these challenges might be resolved.

To address these critical issues for the Project, BHE:

- defined required environmental permitting or agency approvals that are incorporated in the PSC Application for a Siting Certificate;
- characterized those permitting/approval tasks that may be either controversial to the public or regulatory agencies;
- defined a road map for successful permit/approval authorization (or identified constraints to successful permitting), including, where appropriate, developing a scope/schedule/cost analysis to:
 - mitigate effects to environmental resources to avoid or minimize a critical path obstacle
 - define potential project alternatives or design features to resolve agency concerns while minimizing project impacts
 - characterize and provide examples of Best Management Practices to resolve/minimize agency concerns; and,
- identified the general effect to the project budget and schedule that addressing these issues may entail.



BHE provided a project description and a list of the permits required to support the PSC Application. BHE reviewed project-specific permitting needs for those technical issues addressed by the PSC application, and which were evaluated for their potential to be project “red flags,” or critical issues to project completion.

The critical issues analysis section summarized analyses of technical issues, and provided a brief determination of which issues may be on the project critical path. This section of the report also characterized the schedule and budget implications of critical path issues, and presented potential approaches to managing and resolving them.

Appendices provided supporting documentation and summary review tools where applicable, including permit process flow charts, agency scoping data, and a project Gantt chart (schedule). Information in this analysis was presented in a variety of ways throughout the document, to help the reader compare the significance of various project issues to each other, and to the overall path toward project completion.

Integrated Project Environmental Management, Permitting, Habitat Conservation Plan, and National Environmental Policy Act Compliance for Proposed Wind Energy Facilities, US Wind Force, LLC

During preparation of an application for a siting permit from the West Virginia Public Service Commission, US Wind Force (operating as Liberty Gap Wind Force LLC) identified critical technical shortcomings and potential schedule difficulties related to compliance with WV Legislative Rule Title 150, Series 30 §150-16-3.1m: Environmental Data. Specifically, concern arose regarding the potential effects of the project on federally listed, state-listed, and non-listed bats. The project's location is proximate to documented summer and winter



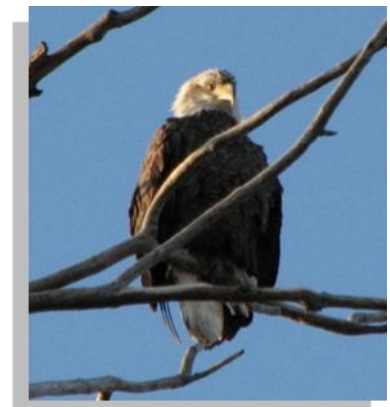
occurrences of sensitive bats, and is in a portion of the country where elevated bat fatalities have been documented at wind energy facilities. We prepared a document assessing effects of the project, re-initiated consultation with the US Fish and Wildlife Service and the WV Dept. of Natural Resources, and are developing a Post-Construction Monitoring Plan and an Adaptive Management Plan.

BHE is currently developing a multi-species HCP to address effects to Indiana bats and Virginia big eared bats. Protection of bald eagles under the Bald and Golden Eagle Protection Act is currently under statutory revision, and will also be addressed in this project work. In addition to developing and managing the HCP process, BHE is drafting the Incidental Take Permit, and the Environmental Impact Statement for this action. This project is the first HCP to address effects of a wind energy generation facility in the Continental US, and as such will address challenging technical and regulatory issues pertaining to the development of project alternatives and cumulative effects. To date, BHE is the only organization to author a successfully completed HCP in the State of West Virginia. The present effort will also be the first HCP in the State to address effects to these species. This project has been the subject of intense interest by both the general public, and federal and state agencies. BHE has managed the development of this project in compliance with agency concerns and sensitivity to public interest, while keeping project objectives foremost in the assessment process.

BHE has also provided integrated environmental management and technical studies for a proposed wind farm in northern West Virginia, as well as providing support for environmental permitting at a US Wind Force project in Maine.

BHE developed a scope of work for, and is currently providing project integration and streamlining of environmental tasks, with the goal of minimizing cost and schedule impacts, and to avoid data gaps and omissions in preparation of the West Virginia PSC Siting Certificate Application.

To establish agency concurrence with proposed study methodology and interpretative approach, BHE prepared a detailed study plan describing impact assessment for avian, bat, threatened and endangered species, habitat, and other wildlife resources. This plan was developed in coordination with the overall project schedule and cost requirements and reviewed and accepted by the client's Project Manager. BHE then arranged, managed, and



attended a meeting with appropriate resource and regulatory agencies to address these issues in a proactive manner. BHE negotiated with the agencies a position most favorable to project objectives and a successful project outcome.

BHE will conduct the following field studies:

- Bat cave and mine hibernacula studies
- Winter bald eagle nest search
- Habitat characterization
- Field survey for WV State Rare, Threatened, and Endangered (RTE) species

In addition, BHE is providing technical oversight and schedule management for execution of avian pre-construction studies and bat pre-construction mist netting studies.

BHE will complete written documentation for technical reports submitted to the PSC in support of the following requirements:

- Bat Risk Assessment
- RTE Species and Habitat Characterization
- Results from bald eagle nest search, provided to support avian risk assessment

BHE is also providing planning and management services and technical support for public interaction and outreach programs related to these technical issues.

Environmental Issues Screening Analysis, Confidential Client, Ohio

BHE completed a desktop screening analysis based upon data collected from accessible sources, a site visit, and contact with state and federal agencies. BHE identified specific tasks that required completion pertinent to each technical issue. The report summarized project activities and included the following:

- A list of environmental permitting requirements pertinent to the construction and operation of the project.
- A list of agencies contacted and agency databases queried, and results of database reviews.
- A summary of agency compliance requirements and the processes required to meet requirements.

A description of potential critical path environmental issues, including a brief and generalized statement describing budget and schedule implications of addressing these issues.

Public Service Commission Application, Agency Coordination, and Expert Witness Services, Forward Wind Energy Facility - Invenergy Wind LLC, Wisconsin

Invenergy's proposed 200 MW "Forward" wind energy facility in Wisconsin was the subject of intense public and agency scrutiny. The project significantly expanded the state's generation of electricity from wind energy, and was proposed near sensitive habitat for birds and bats on the Niagara Escarpment near the internationally known Horicon Marsh, and near the Neda mine, a hibernaculum for over 140,000 bats. BHE



worked with Invenergy to develop an approach to address potential impacts of the project on bats in the Public Service Commission application. Following preparation of an Environmental Impact Statement by the PSC and the Department of Natural Resources, BHE provided expert witness services to review the EIS, develop written testimony, and present oral testimony. We also provided technical expertise during an 8-hour public hearing with local landowners and other affected members of the public.

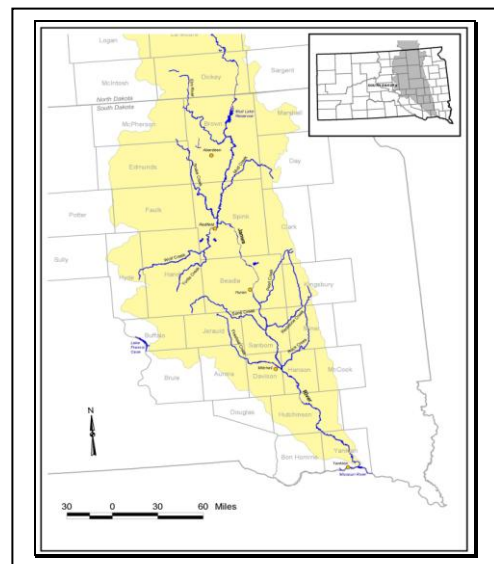
The PSC granted Invenergy the first conditional Certificate of Public Convenience and Necessity for a wind power project in Wisconsin in July 2005.

Project Management & Technical Studies for the James River Restoration, Economic Development, and Greenway Planning and Watershed Management, South Dakota

Watershed and river restoration has taken on increased importance under jurisdiction of the Clean Water Act, and as a result of recent National Disasters and changing land-use and demographics. Planning processes associated with successful project development and execution provide opportunities to examine and enhance existing land use and land management practices, but can be as complex as the watershed/river system itself. The James River in South Dakota is currently the subject of a federal Feasibility Study/Environmental Impact Statement to determine potential actions for flood damage reduction and ecosystem restoration. Agricultural uses predominate in the watershed, with the river and its tributaries critically important to the region for drainage, irrigation, recreation, and wildlife and fish habitat.

Current economic pressure for corn production to support production of biofuels has resulted in a significant conversion of marginal lands to row crops. The 14,000 square mile watershed (18% of the state's area) affords a significant opportunity to manage over 1 million acres of land for grassland conservation while serving as a new economic crop for the production of cellulosic ethanol. The conversion of 1 million acres to managed grasslands will provide significant attenuation of flood flows and provide improved flows during drought conditions. This project addresses the land resources, economic factors and policies necessary to implementing a long term, sustainable solution to both reduce flood damages and enhance the environmental and economic opportunities of this important region.

In support of the James River Watershed Development District, BHE is managing and completing a number of technical studies to support the James River restoration. A suite of analytical tools have been implemented to gather baseline information on the river, floodplain, and watershed. The baseline information has been used by planners, hydrologists, and ecologists to determine past and present parameters that define the structure and function of the river system including: land uses, floodplain boundaries, hydrology, river geomorphology, public infrastructure, and movement of fish and wildlife. Incorporation of technologies into the planning process has allowed quantification of the watershed and the generation of graphics as tools to target and communicate



needs and opportunities for restoration to the public. Armed with knowledge, a balance of watershed uses will be achieved to sustain the local economies while improving water quality and ecosystem function.

WIND FARM FEASIBILITY STUDIES, ENGINEERING & PRELIMINARY DESIGN

Wind Energy Conversion Facility Feasibility Study for a Municipal Airport

BHE Environmental, Inc. is providing consulting services associated with determining the feasibility of a wind energy conversion system/project to be located in Indiana. The following principal activities are being studied:

- review of wind resources
- preliminary determination of engineering feasibility
- assessment of regulatory and environmental issues
- economic analysis of benefits and costs
- presentations and summary reports of findings

The Project includes the installation of a wind turbine. The owner will use the energy produced by the Project to provide power for its airport facilities.



Wind Energy Conversion Facility Feasibility Study for an Indiana Manufacturer

BHE is providing environmental and engineering consulting services to determine the feasibility of a wind energy conversion system/project in Indiana. The Project includes the installation of a wind turbine intended to provide power to the on-site manufacturing operations.

The owner will also use the Project to support its mission of environmental sustainability and care, and achieve the objectives of its North American Environmental Committee, while providing a secure, fixed-price power source for on-site operations.

This ongoing project has included the following tasks in support of the evaluation of a proposed wind energy/electrical power facility:

- conduct a site visit to the proposed project location to collect information and clarify project requirements;
- identify environmental and other potential siting issues pertinent to this project and;
- prepare a strategy and preliminary work plan for regulatory compliance.

Issues that were evaluated included:

Federal

- National Environmental Policy Act
- Clean Water Act, including stormwater management and wetlands

- Endangered Species Act (Indiana bat, bald eagle)
- Federal Aviation Administration
- Department of Defense (military training routes)

State/Local

- Notification to Indiana Utilities Regulatory Commission
- County, township and/or municipal zoning requirements
- Visual impact (viewshed)
- Noise
- Well drilling
- Sewer system (Indiana Department of Health and Department of Environment)
- Historic Preservation
- Building permit
- Right of Entry permit
- Highway Department permits for roadway construction and maintenance



ENVIRONMENTAL SITE ASSESSMENT PROJECTS

National Program - Environmental Impact Assessments at multiple Wind Farms, Confidential Client

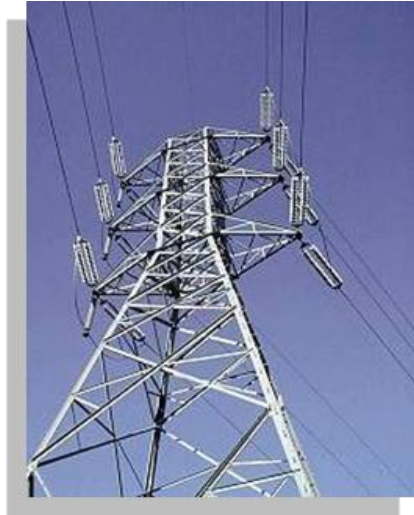
BHE prepared Environmental Impact Assessment (EIA) reports for multiple wind farm project locations across the continental United States. The EIA is a brief overview of the environmental issues affecting the wind farm, including biological conditions such as Threatened and Endangered species, birds, and bats; cultural resources impacts, noise and visual impacts, and recognized environmental conditions (ASTM Phase I Environmental Site Assessment). BHE also provided an overview summary of the projects environmental and permitting requirements. The reports require a review of pertinent technical studies and management plans, and completion of a site visit.

Phase I ASTM for Early Siting, Confidential Wind Farm, Ohio

In early 2008, BHE conducted a Phase I ESA of multiple parcels of real property in Ohio. The parcels ranged in size from less than 0.25 acre to over 200 acres which at present are primarily used for agricultural crop production. The project was conducted in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527-05 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process). The purpose of this Phase I ESA was to identify recognized environmental conditions (RECs) associated with the parcels. A REC is defined by ASTM Standard E 1527-05 as “the presence or likely presence” of any hazardous substances or petroleum products on a site under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the site or into the

ground, groundwater, or surface water of the site. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. BHE's Phase I ESA documentation reflected an inspection of the parcels, interviews with individuals knowledgeable of the parcels, a review of the history of the parcels and surrounding properties, a review of environmental data sources maintained by Federal and State of Ohio agencies, and a review of the physical setting of the site.

Environmental Assessment for Privatization of Electrical Utilities at Fort Leonard Wood, Missouri



BHE completed all environmental documentation to facilitate privatization of the entire electrical utility system at the installation including substations and all transmission infrastructure. Government-owned property being transferred under the privatization initiative included 252 miles of above ground distribution system, 8 miles of below ground distribution lines, an estimated 1380 transformers, 4 substations, and 3800 street light poles and lights. The planned transfer will result in permanent ownership, operation and maintenance by a public utility company.

Our efforts focused on review of existing data and information, as well as site visits and inspections. To support this effort, BHE completed an Environmental

Baseline Survey and Finding of Suitability to Transfer.

Our EA focused upon effects to the ecological resources of the area, human health and safety, socioeconomic values, threatened and endangered species, prehistoric and historic cultural resources, and wetlands. The results of the environmental impact analysis resulted in a Finding of No Significant Impact.

PUBLIC RELATIONS SUPPORT PROJECTS

National Environmental Support Program - Client Confidential, Nationwide

For one of the nations largest generators of wind power, with over 45 wind farms in 15 states and generating 40% of the total wind energy in the U.S. this wind power project developer/operator is in a unique position in the American wind industry, and has emerged as a leader in the national initiative to better understand, and to mitigate, effects of wind power turbines on bats. To avoid and minimize effects, this company sponsors research to address fundamental questions regarding bat interactions with turbines. BHE is under contract to establish a nationwide program to compensate for bat mortality deemed unavoidable. BHE's unparalleled leadership position in working with numerous industries to conserve sensitive species while meeting industry objectives provides an ideal match for program requirements. BHE worked with this client to develop a ranking/ prioritization protocol, and is coordinating with state, federal, and non-governmental entities in developing bat conservation practices/mortality compensation projects to compliment impact avoidance measures now being investigated. BHE is managing implementation of the two conservation projects.

Public Service Commission Application, Agency Coordination, and Expert Witness Services, Forward Wind Energy Facility - Invenergy Wind LLC, Wisconsin

Invenergy's proposed 200 MW "Forward" wind energy facility in Wisconsin was the subject of intense public and agency scrutiny. The project significantly expanded the state's generation of electricity from wind energy, and was proposed near sensitive habitat for birds and bats on the Niagara Escarpment near the internationally known Horicon Marsh, and near the Neda mine, a hibernaculum for over 140,000 bats. BHE worked with Invenergy to develop an approach to address potential impacts of the project on bats in the Public Service Commission application. Following preparation of an Environmental Impact Statement by the PSC and the Department of Natural Resources, BHE provided expert witness services to review the EIS, develop written testimony, and present oral testimony. We also provided technical expertise during an 8-hour public hearing with local landowners and other affected members of the public.

The PSC granted Invenergy the first conditional Certificate of Public Convenience and Necessity for a wind power project in the state in July 2005. BHE's work included negotiations with state and federal agencies regarding the scope of post-construction monitoring.

Wind Energy Project Developer Training

During the past two years, BHE has assisted developers of utility scale wind generation facilities, as well as staff and students at colleges and universities, with wind project manager training. We have developed and presented workshops that have ranged from overviews of critical issue analysis and siting process management to more detailed discussions of wildlife resource management (impact assessment and mitigation, legislative issues), regulatory compliance, and permitting.

BHE has provided training in both formal classroom settings, and in panel presentations with interactive question and answer sessions. We have focused our interactive workshops on helping developers understand and manage the implications of siting issues when responding to the regulatory community and other stakeholders in the development process.

