

FINAL REPORT

# Lempster Mountain Wind Power Project Lempster, New Hampshire

# **Phase I Environmental Site Assessment**

Prepared for:



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Prepared by:

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#### LIST OF ACRONYMS

ACM	Asbestos-Containing Materials
AIHA	American Industrial Hygiene Association
ASTM	American Society for Testing and Materials
AST	Aboveground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLIS NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Reports
EDR	Environmental Data Resources. Inc.
ERNS	Emergency Response Notification System
FLAP	Environmental Laboratory Approval Program
FSA	Environmental Site Assessment
	Federal Insecticide Fungicide and Rodenticide Act
FINDS	Facility Index System
FLIDS	Formarky Head Defense Sites
	Formerry Used Detense Siles
	Hazardous Materiais Hacking System
HUD	United States Housing and Urban Development
LASI	Leaking Aboveground Storage Tank Sites
LBP	Lead-Based Paint
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NHDES	New Hampshire Department of Environmental Services
NPL	National Priorities List
NVLAP	National Voluntary Laboratory Accreditation Program
O&M	Operations and Maintenance
ODI	Open Dump Inventory
OSHA	Occupational Safety and Health Administration
PADS	PCB Activity Database System
PCB	Polychlorinated Biphenyls
nnm	Parts Per Million
pCi/l	Picocuries Per Liter
RCR A	Resource Conservation and Recovery Act
RCRA-TSD	RCBA Treatment Storage and Disposal Facility
DEC	Percognized Environmental Condition
POD	Recognized Environmental Condition
SCI	State Equivalent CEDCLIS List
	State Harandous Wests Site
5HW5	
SQG	Small Quantity Generator
SWLF	Solid waste Landfill Facilities
TCLP	Toxicity Characteristic Leaching Procedure
TRIS	Toxic Chemical Release Inventory System
ISCA	I oxic Substances Control Act
TSD	Treatment, Storage and Disposal Facility
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank

## **EXECUTIVE SUMMARY**

On behalf of Community Energy, Inc. (Community Energy), The Louis Berger Group, Inc. (Berger) conducted a Phase I Environmental Site Assessment (ESA) on 17 November 2005 of a five-parcel conglomeration of parcels totaling approximately 1,568 acres, located in a rural, mountainous area in the Town of Lempster, Sullivan County, New Hampshire (the "Site"). Community Energy is considering leasing the Site (or certain areas there upon) from its current owners to construct and operate a wind power project. The project would consist of approximately 12 wind turbines, associated access roads/trails, electrical transmission lines, and an electrical substation.

The Site's center line generally snakes along a 2-mile stretch of the Lempster Mountain ridge, which is located east of State Route 10 and west of State Route 31, east of the community of East Lempster. Except for one residence (the Onnela home, located near the center of the Site) and associated sheds and outbuildings, the Site is undeveloped. Several trails and one rough vehicle road (Bean Mountain Road) are present on the Site. Parts of the Site and general area have been used historically for logging purposes. Some evidence of logging is still present, as is limited farming, cattle grazing, and hunting; small hunting structures are reportedly present in the northern areas of the Site.

The purpose of this Phase I ESA is to determine any obvious areas or potential sources of environmental concern for liabilities that might exist at the Site; identify to what extent these sources are likely to impact the Site; and to report on our findings to assist Community Energy in assessing the need for any further investigations or analytical work that may be required to accurately determine the presence and extent of any detected or suspected contamination. The ESA was conducted in accordance with the scope and limitations of the American Society for Testing Materials (ASTM) Standard E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*; the "due diligence" regulations of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 9601 (35)(b) of the Superfund Amendment and Reauthorization Act (SARA); and our scope of work approved by Community Energy in November 2005.

Based on the data obtained during the Site reconnaissance, review of maps and photographs, review of environmental regulatory databases, and interviews with persons familiar with the Site and its history, Berger did not identify any Recognized Environmental Conditions (RECs) associated with the Site. However, the following issues of potential environmental concern were noted and should be considered throughout project planning, design, construction, and operation:

- There are nearly 20 small wetland areas located throughout the Site. While the majority of these will likely be able to be avoided during project construction, some (including possibly a beaver pond located on the Skeie parcel) may be impacted by road construction. Therefore, it is likely that an Army Corps of Engineers Section 404 permit and a New Hampshire Wetlands Bureau permit may be required prior to project construction. Although it is possible that some of the wetlands are not jurisdictional (i.e., they are isolated), some are within close proximity to stream channels and/or provide valuable wildlife habitat and would therefore likely be considered jurisdictional. Consultation and coordination with these federal and state agencies are therefore recommended and may, in fact, be required.
- There are steep slopes located throughout many parts of the Site. Erosion and sedimentation control measures and best management practices (BMPs) should be implemented throughout project construction (in particular, during access road development) to minimize potential impacts on Site soils and subsequent runoff impacts.
- A small area of the Site (several acres along Bean Mountain Road, south of the Onnela home) was historically used as a small apple orchard. Other parts may have been farmed historically. It is possible that pesticides and/or herbicides may have been used in these areas. These substances may have contained known contaminants (e.g., arsenic and lead) that are environmentally persistent. The possibility exists that analyses of soil and/or groundwater on the Site might reveal the presence of pesticide residuals. If turbines or access roads are constructed in these historically farmed areas, construction workers should be made aware of possible soil contamination and accompanying health and safety issues.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data obtained during the Site reconnaissance, review of maps and photographs, review of environmental regulatory databases, and interviews with persons familiar with the Site and its history, Berger did not identify any Recognized Environmental Conditions (RECs) associated with the Site. However, the following issues of potential environmental concern were noted and should be considered throughout project planning, design, construction, and operation:

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