we energies

231 W. Michigan St.
Milwaukee, WI 53203

www.we-energies.com

August 14, 2008

David Siebert, Director
Office of Energy
Wisconsin Department of Natural Resources
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921

RE: Randolph Wind Project: Engineering Plan

Dear Mr. Siebert:

Wisconsin Electric Power Company (doing business as We Energies) is pleased to submit the enclosed Engineering Plan for the Randolph Wind Project located in the Towns of Randolph and Scott in Columbia County.

This Engineering Plan initiates the application process for a Certificate of Public Convenience and Necessity (CPCN) as outlined in s. 196.491(3)(a)3.a., Stats. This requires the applicant to provide an Engineering Plan to the Department at least 60 days prior to the submittal of a CPCN application to the Public Service Commission. The Department will review the Engineering Plan and determine those Department permits or approvals that appear to be required based on the submitted Engineering Plan and provide this list to We Energies within 30 days of receipt.

We Energies intends to submit a CPCN application to the Public Service Commission on or about October 15, 2008. Applications for those Department permits or approvals necessary for the Project will be submitted to the Department as described in 196.491(3)(a)3.a., Stats.

If you have any questions about the content of the Engineering Plan or any other aspect of the Project, please contact me at susan.schumacher@we-energies.com or 414-221-2189.

Sincerely,

Susan Schumacher
Environmental Project Manager

Attachment
Engineering Plan
Two hardcopy of map set
Two CDs of map set

cc: Michael John Jaeger – PSC (w/ attachment)
Cheryl Laatsch – DNR Office of Energy (w/ attachment)
Jim Lepinski – PSC (w/ attachment)
Roman Draba – We Energies (w/o attachment)
Paul Farron – We Energies (w/o attachment)
Andy Hesselbach – We Energies (w/o attachment)
Kristine Krause – We Energies (w/o attachment)

WISCONSIN ELECTRIC POWER COMPANY

ENGINEERING PLAN

RANDOLPH

WIND PROJECT

PSC Docket No. 6630-CE-302

Introduction

Wisconsin Electric Power Company ("Wisconsin Electric" or "Company") is preparing an application for a Certificate of Public Convenience and Necessity ("CPCN") to the Public Service Commission of Wisconsin ("PSC") to construct and place in utility service an electric generation facility in excess of 100 MW.

In accordance with Wis. Stat. § 196.491(3)(a)3.a, the Wisconsin Electric submits this engineering plan ("Plan"). This Plan is being provided to the Wisconsin Department of Natural Resources ("Department" or "DNR") at least 60 days before Wisconsin Electric will file the corresponding CPCN application with the PSC. Wisconsin Electric requests that within 30 days after receipt of this Plan, the Department provide Wisconsin Electric with a listing of all DNR permits or approvals, which, on the basis of the information contained in this Plan, appear to be required to construct the generation facilities. Wisconsin Electric, consistent with Wis. Stat. § 30.025(1s), will apply for all DNR permits and approvals identified in the listing within 20 days of receiving the list.

All distances, widths, and descriptions below are estimates and are subject to change based upon final turbine siting and routing of cables, roads and crane walks.

Project overview

The Project is being designed to accommodate approximately 90 wind turbines (and associated auxiliary facilities) with a total capacity of up to approximately 234 megawatts (MW) of electric generation. This facility will be known as the Randolph Wind Project ("Project"). The Project is located in Columbia County, Wisconsin, entirely within the Towns of Randolph and Scott.

Power generated by the turbines will be collected via a 34.5 kV collection system and connected to the transmission system via a 34.5/138kV step-up transformer. The step-up transformer and related interconnection facilities will require a new substation.

In addition, there will be a new operations and maintenance (O&M) building for the Project.

Finally, it is likely that cross-country "crane walks" will be performed during construction.

In order to provide additional information about the proposed project, Wisconsin Electric is including with this submission maps that identify the following features:

- Available turbine sites
- Access road locations
- Major water features such as rivers, streams, and lakes
- Field / aerial delineated wetlands
- Federal, state, and public land
- Other major environmental features not identified in the above list

The following structures have not been sited, but will be included in the application submittal:

- Associated construction (crane) access routes
- Associated collector system routes
- New 138 KV substation
- O&M building

The following maps are enclosed:

Title	Number	Revision
Preliminary Site Layout w/Aerial Image	1	0
Preliminary Site layout w/USGS 7.5 Minute Topoquad	2	0
Public Lands w/Aerial Image – Project Area	3	0
Public Lands – 10 Mile Overview	4	0
Preliminary Site Layout – w/Wetlands and Waterways (Individual Section Grids)	5	0

Turbines

Each wind turbine will be mounted on top of a tubular steel tower. The tower is fastened at the base to a buried, reinforced concrete foundation. The turbines under consideration will have a hub height of 80 meters (262.5 feet) and blade lengths of between 38.5 and 46.5 meters (126.3 to 152.6 feet) with total tip heights of 118.5 to 126.5 meters (388.8 to 415.1 feet). A temporary construction area of approximately 0.5 acres is required at each turbine location. These areas will not infringe upon wetlands or waterways.

Access Roads

Each turbine will require a permanent access drive to the site, a permanent crane pad for erection of the turbine, and a temporary equipment laydown area in the immediate vicinity of the turbine site.

Access roads will be constructed from existing roadways to each turbine site to provide access for equipment necessary for construction, and to facilitate access to the turbine for ongoing operation and maintenance. Temporary access roads will be constructed within a corridor approximately 40 feet wide. Upon completion of construction, the temporary access roads will be converted to smaller permanent access roads approximately 16 feet wide. Certain access roads will cross navigable waterways and require permanent installation of a culvert and/or bridge. We do not anticipate crossing wetlands unless the wetland is adjacent to a waterway crossing and cannot be practicably avoided.

Approximately 20 miles of access road are anticipated.

Collection System

Each wind turbine will be connected to substation via a 34.5 kV collection system. The collection system cables are run both under and above ground.

Underground cables are aluminum, approximately 2 to 3 inches in diameter (with insulation and concentric neutral) and are installed approximately 4 feet under ground. A 10 foot wide space between cables is necessary. The temporary construction corridor for the installation of the underground cables will be up to approximately 50 feet wide. The disturbed area along cable runs will vary, depending primarily on the type of equipment used to install the lines. Certain portions of the collector system will cross wetlands and waterways, resulting in temporary construction impacts. All wetlands and waterways crossed by the collection system will be restored to pre-construction conditions.

Sections of the collection system that may be constructed aboveground will utilize bare, aluminum-clad-steel-reinforced wire, approximately ¾ to 1 inch in diameter. Conductors will be supported on cross-arms of utility poles. Existing poles will be used if practical. If additional poles are required, they will be placed so as to avoid waterways and wetlands to the greatest extent practicable.

Approximately 50 miles of Collection System cable run are anticipated.

Substation

The substation area will have a gravel surface. The fenced area of approximately 600 ft. by 800 ft. will contain the transformers and switchgear and will be located adjacent to an existing transmission line. The substation will have driveways that connect the substation to the public road. The driveways will be approximately 200 ft. long and 30 ft. wide. If necessary, a permanent stormwater basin may be constructed. We do not anticipate waterway or wetland impacts associated with construction of the substation or associated facilities.

O&M Building & Parking Lot

The O&M Building consists of offices, control room, locker rooms, spare parts storage, and indoor garage. Gravel employee and equipment parking lots are provided at the O&M Building site. The O&M Building will be similar in design to a single story farm shop with approximately 8,500 ft^2 floor area.

Temporary parking for construction trailers, personal vehicles, construction vehicles and to accommodate equipment laydown will cover approximately 15-20 acres. Following construction, this area will be reduced to 5 acres and the temporary laydown space restored to its pre-construction state. We do not anticipate waterway or wetland impacts associated with construction of the building, parking lot or temporary construction areas.

Crane Walks

Cross-country crane walks will be required during construction of the Project. The crane walks will likely require the installation of timber mats and/or temporary bridges across

wetlands and waterways to allow the crane to access certain turbine sites. These mats and/or bridges would be temporary impacts and all wetlands and waterways would be restored to pre-construction conditions.

Potential Environmental Impacts

Attribute	Impact
Will any recreational areas/trails be affected?	No
Will construction activities disturb more than one acre of land?	Yes
Will there be construction in wetlands?	Yes
Will there be permanent fill placed in wetlands? (est. acres of fill)	Not anticipated
Will temporary bridges over waterways be required for construction?	Yes
Will any fill, poles, or facilities be placed in wetlands or waterways below the ordinary high water mark?	Potentially Yes (Utility Poles)
Will more than 10,000 square feet of land be graded or removed within 300 feet of a waterway?	Yes
Will there be any discharge of water from excavations during construction?	Yes
Are any threatened, endangered or species of special concern or habitats potentially within the project area?	Yes[1]

List of Needed Permits

Based on the information presented above, Wisconsin Electric understands that the permits checked in the table below will be required to construct the proposed project. This list is based on information known at the time of this submission.

DNR permit	Proposed Facilities
Wis. Stat. Chapter 30	Yes
U.S. Army Corps of Engineers § 404	Yes
U.S. Army Corps of Engineers § 10	Yes

[1] A habitat assessment is being completed for the Western Slender Glass Lizard (WSGL) upon recommendation by the WDNR Office of Energy. Wisconsin Electric will work with the WDNR to develop and implement avoidance protocols for identified threatened / endangered species found within the project area. However, if complete avoidance cannot be achieved, Wisconsin Electric will consult with WDNR to determine whether incidental take authorization is necessary

Wetland Water Quality Certification (Wis. Stat. § 281.36, Wis. Admin. Code Chapters NR 103 & NR 299)	Yes
WPDES for pit/trench de- watering (Wis. Stat. Chapter 283)	No[2]
Construction Stormwater (Wis. Stat. Chapter 283, Wis. Admin. Code Chapters NR 216 & NR 151)	Yes
Threatened & Endangered Incidental Take (Wis. Stat. § 29.604)	No[3]

Permitting and Construction Schedule

Anticipated DNR Utility Permit application submittal date October 3, 2008
Anticipated CPCN Application submittal date October 15, 2008
Anticipated Commission approval date April 2009
Anticipated DNR Utility Permit issuance date April 2009
Anticipated start of construction June 2009
Anticipated in-service date May 2010

[2] De-watering activities will be covered under the General WPDES Construction Stormwater Permit acquired through NR 216 & NR 151.
[3] To be determined based on consultation with WDNR. Wisconsin Electric will work with the WDNR to develop and implement avoidance protocols for identified threatened / endangered species for the facilities. However, if complete avoidance cannot be achieved, Wisconsin Electric will consult with WDNR to determine whether incidental take authorization is necessary.