



OFFICIAL COPY

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Charleston, SC
Charlotte, NC
Columbia, SC
Myrtle Beach, SC
Raleigh, NC
Spartanburg, SC

September 2, 2011

By Hand Delivery

Ms. Renee Vance
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Raleigh, N.C. 27603

FILED

SEP 02 2011

Clerk's Office
N.C. Utilities Commission

RECEIVED FILING FEE \$25.00

Re: **Docket No. EMP-61, Sub 0**
Pantego Wind Energy LLC's Application for a Certificate of Public Convenience and Necessity to Construct a Merchant Plant and Registration as a New Renewable Energy Facility

Dear Ms. Vance:

Enclosed for filing are an original and forty (40) copies of the following documents, all of which are publicly available documents:

1. Pantego Wind Energy LLC's Application for a Certificate of Public Convenience and Necessity to Construct a Merchant Plant and Registration as a New Renewable Energy Facility;
2. Prefiled Direct Testimony of David Groberg and Steven Ryder.

The original and fifteen (15) copies of Exhibits 2 and 7 to the Application are submitted as "Confidential/Submitted Under Seal" because of the proprietary and confidential nature of the financial information contained therein.

We propose the following schedule for the Commission's consideration of this application:

9/12/11	(Monday)	Application on Agenda for Procedural Order and Publication Notice
11/4/11	(Friday)	Deadline for Petitions to Intervene
11/17/11	(Thursday)	Public Hearing in Beaufort County
11/21/11	(Monday)	Deadline for Expert and Intervenor Testimony/Exhibits
12/6/11	(Tuesday)	Evidentiary Hearing in Raleigh
12/2/11	(Tuesday)	Deadline for Rebuttal testimony

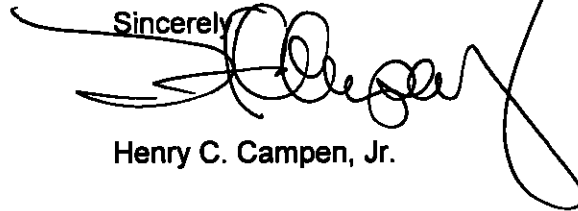
We have discussed the above schedule with the Public Staff and understand they are in agreement with the schedule.

PPAB 1865926v1

Also, enclosed is a check payable to the NC Department of Commerce in the amount of \$25.00 as the filing fee for this application.

Please file-stamp the extra copies of each document and return them by our courier. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Henry C. Campen, Jr.", with a long, sweeping flourish extending to the right.

Henry C. Campen, Jr.

HCC:ckc

Enclosures

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. EMP-61, SUB 0

FILED

SEP 02 2011

Clerk's Office
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

RECEIVED FILING FEE \$25.00

In the Matter of the Application of)	APPLICATION FOR A CERTIFICATE
Pantego Wind Energy LLC For a)	OF PUBLIC CONVENIENCE AND
Certificate of Public Convenience and)	NECESSITY FOR A MERCHANT PLANT
Necessity to Construct a Wind Facility)	AND REGISTRATION AS A NEW
of up to 80 MW in Beaufort County)	RENEWABLE ENERGY FACILITY
and Registration as a New Renewable)	
Energy Facility)	

Pantego Wind Energy LLC ("Pantego Wind" or the "Applicant"), through counsel, hereby applies to the North Carolina Utilities Commission (the "Commission") pursuant to G.S. § 62-110.1 and Commission Rule R8-63 for a Certificate of Public Convenience and Necessity authorizing construction of a wind facility (the "Facility" or "Project") of up to 80 megawatts ("MW"), to be located in Beaufort County. The Applicant also submits its Registration as a New Renewable Energy Facility pursuant to Commission Rule R8-66.

**APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
FOR A MERCHANT PLANT**

In support of its application, Pantego Wind shows the Commission as follows:

A. THE APPLICANT

(i) The Applicant's full and correct name, business address, and business telephone number are:

Pantego Wind Energy LLC
One South Wacker Drive
Suite 1900
Chicago, IL 60606
(312) 224-1400

(ii) Pantego Wind Energy LLC ("Pantego Wind"), is a Delaware limited liability company with its principal place of business in Chicago, Illinois. Pantego Wind was formed August 10, 2011. Pantego Wind has obtained authority from the North Carolina Secretary of State to conduct business in North Carolina. A true and correct copy of the Application for Certificate of Authority is included as **Application Exhibit 1**. Pantego Wind's officers are Michael Polsky, President; James, Murphy, Vice President; James Shield, Vice President; Bryan Schueler, Vice President; David Groberg, Vice President and Joseph Condo, Secretary.

The parent company of Pantego Wind is Invenergy Wind North America LLC ("IWNA"). IWNA is an affiliate of Invenergy LLC ("Invenergy"), the nation's largest independent wind energy owner, operator and developer. IWNA and Invenergy LLC are affiliates with the same ultimate parent company, Invenergy Investment Company LLC. Invenergy and its affiliated companies develop, own and operate large-scale wind energy, solar energy and natural gas-fueled electric generation assets in North America and Europe. The company serves a wide range of utilities and load serving entities. Invenergy is headquartered in Chicago and has North American regional offices located in Austin, Denver, Washington, D.C. and Toronto.

Invenergy has placed in service twenty-six (26) wind facilities with a total operating capacity of 2,435 MW and currently has wind projects totaling more than 15,000 MW in construction, under contract or in development, which will result in an operating wind power generation portfolio of over 3,500 MW by the end of 2012. Invenergy brings extensive experience in wind facility construction, management and ownership to the proposed Project.

Correspondence, documents, and filings regarding this application should be sent as follows:

David Groberg
Invenergy LLC
51 Monroe Street
Suite 1604
Rockville, MD 20850
dgroberg@invenergyllc.com

with copies to:

Henry C. Campen, Jr.
Parker Poe Adams & Bernstein LLP
150 Fayetteville Street, Suite 1400
Raleigh, North Carolina 27601
henrycampen@parkerpoe.com

(iii) A copy of Invenergy Wind's most recent balance sheet and income statement are being provided under seal because they constitute confidential and proprietary information within the scope of G.S. §132.1.2 and have been labeled **Confidential Application Exhibit 2**.

B. THE FACILITY

(i) The Applicant proposes to construct a wind energy facility of up to 80 MW. The estimated net capacity factor for the Facility is 25 - 36% and the estimated annual electrical output from the Facility is 174,000 – 250,000 MWh, dependent on final turbine selection. PJM Interconnection, LLC ("PJM") has established an initial accredited capacity of 13% for the Project. PJM calculates capacity based on a wind project's three year rolling average output from June through August, hours 2PM– 6PM EST.

The proposed Facility will consist of wind turbine generators, underground electrical collection and communications systems, a Collection Substation with a 34.5 kV/115 kV transformer, an operations and maintenance building, access roads, and a permanent meteorological tower.

Wind Turbine Generators

The proposed wind turbine generators ("WTG") consist of three main components: the tower, the nacelle (generator) and the rotor (3-blades). Turbine vendor, size, number and actual generation capacity are not finalized at this time. This application describes typical scale and impacts of turbines that may be used. The Project will not exceed 80 MW regardless of the turbine used. More information about each component is described below.

Tower

The towers for each WTG consist of a tubular conical steel structure of monopole construction that is mounted on a foundation to provide structural support. The tower will have a locked access door at its base and an internal ladder to the top of the tower at the nacelle. The tower is equipped with interior lighting and a safety guide cable alongside the ladder. Towers will be painted off-white to make the structure less visually obtrusive, and in accordance with FAA regulations.

Nacelle

The nacelle is bolted to the top of the WTG tower and consists of a machine platform mounted on a ring that allows the entire nacelle to rotate. A rotating nacelle keeps the turbine pointed into the wind to maximize energy capture. The main components inside the nacelle are the drive train, a gearbox and the generator. A fully enclosed steel reinforced fiberglass or all steel shell protects internal machinery from the environment and dampens sound emissions. The shell is designed to allow for adequate ventilation to cool internal machinery such as the gearbox and generator.

Rotor

Each WTG has a 3-blade rotor. The rotor hub bolts to the drive train at the front of the nacelle. The rotor blades are typically made from a glass-reinforced polyester composite similar to that used in the marine industry for sophisticated racing hulls. Independent electric drives in the rotor hub rotate the angle of each blade according to wind conditions, which enables the turbine to operate efficiently at varying wind speeds.

Electrical Collection System

The 60 Hz 600 volt electric energy produced by each WTG is conducted through cables running down the inside of the wind turbine tower, through an underground conduit, to a pad-mounted transformer that sits at the base of the WTG tower. The pad-mount transformers step up the power from the turbine output voltage to 34.5 kV. The pad-mount transformer is

connected to a system of insulated and shielded underground cables, referred to as the *Electrical Collection System ("ECS")*. The ECS collects the output of the wind turbines in a series of circuits that will carry power between the WTG and the Collection Substation. It is estimated that the Project will include up to four ECS circuits. The underground ECS cables will be routed along access roads or within easements to the proposed Collection Substation. The proposed Project will not require the construction of an above-ground transmission line to connect the WTGs to the regional transmission system.

Collection Substation

The ECS will be routed to a new 34.5 kV Collection Substation to be built by the Applicant proximate to Virginia Electric and Power Company's (doing business as Dominion North Carolina and hereinafter referred to as "Dominion") existing Pantego substation, where a transformer will step up the voltage of the ECS circuits from 34.5 kV to 115 kV. The Collection Substation will be located on approximately 1 acre, and will be fenced and locked in accordance with industry standards to provide safety and security. The Project will include a short 115 kV generator lead line from the proposed Collection Substation to Dominion's Pantego Substation to transport the generated electricity of the entire Facility to the regional transmission system. A diagram of the proposed Collection Substation is included as **Application Exhibit 3**.

Operations and Maintenance Facility

An operations and maintenance ("O&M") building with a service yard and parking area will be constructed on a parcel proximate to the proposed Collection Substation. The O&M building will include offices and an operations center, along with maintenance and storage bays for trucks and equipment, workspace, and a storage area for tools, supplies and spare parts.

The proposed Facility will be operated by a team of approximately 5 or more full-time operations and maintenance personnel, including wind turbine technicians, wind turbine SCADA operators, and an operations manager. The Facility's Supervisory Control and Data Acquisition ("SCADA") system will provide remote operation of the wind turbines and collects operating and

performance data 24 hours a day, 7 days a week. In addition to local staff, Invenergy has a control center located near Chicago, IL that is staffed 24 hours a day, 7 days a week. Subcontractors may be hired to perform specific tasks, such as substation maintenance, collector system maintenance, road maintenance, landscaping, facility studies, trash removal and O&M building upkeep and maintenance.

Invenergy Services LLC, a wholly owned subsidiary of Invenergy, operates substantially all of Invenergy's operating projects. Invenergy is currently managing a portfolio of over 1,800 MW of wind project within North America. With 98% of these projects employing GE wind turbine technology similar to the turbines proposed for this Project, Invenergy brings advanced technical and managerial expertise to the proposed Project.

Access roads

The Applicant will utilize existing roads to the extent practicable to access Project facilities; where necessary, new access roads will be constructed. Some of the existing roads may require improvements to accommodate vehicles, materials and equipment during construction.

Meteorological Tower

The Project will include the construction of one permanent meteorological tower to collect continuous measurements of wind speed and wind direction. This data will be used to check turbine performance and assist in wind and energy production forecasting. The proposed permanent meteorological tower will be 328 feet tall (100 meters).

(ii) The proposed Facility will be located on approximately 11,000 acres located near the communities of Terra Ceia and Pantego and approximately 20 miles east of the City of Washington, in Beaufort County (the "Project Area"). The Project Area is bounded by SR 1612 (Terra Ceia Road) and SR 1619 (Christian School Road) to the southwest, extends north along SR 1621 (Old 97 Road) and SR 1625 (Swindell Road) and continues east of Pantego along SR 1700 (Beech Ridge Road). A location map of the proposed Project Area is included as

Application Exhibit 4. A map showing the boundary of the Proposed Project is included as **Application Exhibit 5.** Property within the Project Area is privately-owned and actively farmed. Invenergy Wind, or its affiliates, has leases for land within the Project Area for the Facility.

(iii) A Site Layout, included as **Application Exhibit 6,** shows the proposed location of all major Facility components. The proposed Site Layout is based on a 1.6 MW turbine and reflects 49 turbines. The proposed Site Layout includes two potential locations for the O&M Facility and the Collection Substation. The final location of the Collection Substation will be made in consultation with Dominion as part of the PJM Interconnection process. The final Site Layout will be determined based on additional studies and data and final turbine selection.

Construction is expected to start in second quarter of 2012. The expected commercial operation date is December, 2012. The expected service life of the Facility is 25 years. *However, many older wind farms are "repowered" by upgrading existing infrastructure with more efficient turbines and related equipment.* The Applicant may upgrade the Facility with more efficient equipment to extend the service life of the Facility to 30 years or more.

The estimated construction costs are being provided under seal because they constitute confidential and proprietary information within the scope of G.S. § 132-1.2 and have been labeled **Confidential Application Exhibit 7.**

(v) A list of all potentially applicable federal, state and local approvals related to the Facility and site, and the status of each, is included as **Application Exhibit 8.** Invenergy has met with, among others, representatives from the following:

- N.C. Department of Environment and Natural Resources ("NC DENR"), including the Division of Water Quality and the Division of Coastal Management
- N.C. Wildlife Resources Commission
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers (Wilmington District)
- State Historic Preservation Office
- Marine Corps
- Air Force
- Navy
- Beaufort County

The Applicant will obtain all permits and approvals required by federal, state and local laws and regulations for construction and operation of the Facility.

(vi) The point of interconnection will be the Pantego Substation owned and operated by Dominion. A 115 kV generator lead line will be constructed between the Collection Substation and Dominion's Pantego Substation. An Interconnection Request was submitted to PJM and the Project was assigned queue number W2-022. PJM has completed the System Impact Study for the Project. The Facility Study is in progress and is scheduled to be completed by the 3rd quarter of 2011, with an Interconnection Agreement tendered by the 4th quarter of 2011. In the System Impact Study, which was completed in March, 2011, PJM did not identify any major network upgrades required for interconnection beyond the Attachment Facilities at the Pantego Substation for an output of less than 74 MW. Although the nameplate capacity of the Project will be greater than 74 MW, losses in the collection system and the Project's SCADA System will not allow the output to exceed 74 MW under any circumstances. To accommodate interconnection, the Pantego Substation will require the installation of one 115 kV breaker, line switches, a line terminal and associated equipment.

Periodic meetings and conference calls between representatives of PJM, Dominion and Invenenergy have been held to coordinate activities associated with this interconnection process. The interconnection facilities will be constructed in accordance with Dominion's Facility Connection Requirements.

(vii) Invenenergy owns and operates the following projects in the Southeastern Electric Reliability Council region:

Project Name	Location	Status	Type of Facility	Capacity (MW)	COD
Buffalo Mountain	Anderson County, TN	Operating	Wind	27	12/9/2004
Bishop Hill	Henry County, IL	Under Construction	Wind	200	4/1/2012
California Ridge	Vermillion County, IL	Under Construction	Wind	200	10/1/2012

C. STATEMENT OF NEED

In 2007, with the signing of Session Law 2007-397 ("Senate Bill 3"), North Carolina became the first state in the Southeast to adopt a Renewable Energy and Energy Efficiency Portfolio Standard ("REPS"). Under Senate Bill 3, investor-owned utilities in North Carolina are required to meet up to 12.5% of their energy needs through renewable energy resources or energy efficiency measures by 2021. Rural electric cooperatives and municipal electric suppliers are subject to a 10% REPS requirement, which must be met by 2018. G.S. § 62-133.8(8) defines wind as a renewable energy resource.

Investor-owned utilities, electric cooperatives and municipal electric suppliers ("Electric Power Suppliers") demonstrate compliance with Senate Bill 3 through the purchase of renewable energy certificates ("RECs"). A REC is equivalent to 1 MWh of electricity derived from a renewable energy source, or an equivalent amount of thermal energy in the case of combined heat and power and solar water heating, or 1 MWh of electricity avoided through an efficiency measure.

The Project will provide a significant source of RECs for use by Electric Power Suppliers to demonstrate compliance with Senate Bill 3. This Project is expected to generate approximately 174,000 - 250,000 RECs annually.

Senate Bill 3 amended G.S. § 62-2 to establish that it is the policy of the state of North Carolina to:

[P]romote the development of renewable energy and energy efficiency through the REPS to do the following:

- a. Diversify the resources used to reliably meet the energy needs of consumers in the State.
- b. Provide greater energy security through the use of indigenous energy resources available within the State.
- c. Encourage private investment in renewable energy and energy efficiency.
- d. Provide improved air quality and other benefits to energy consumers and citizens of the State.

G.S. § 62-2(a)(10). Granting this application will help achieve all four of these goals.

The generation of electricity with wind energy will diversify the resources used to meet North Carolina's energy needs. The Project will provide greater energy security for North Carolina by the use of a truly indigenous and renewable resource available within the state.

The Project will also have positive impacts on the local and regional economy from *increased tax revenues to Beaufort County and the State of North Carolina, lease revenues to participating landowners, short-term and long-term employment and the purchase of local goods and services.* Based on its experience developing, constructing and operating projects of similar size in the United States, Invenergy estimates the private investment related to the Project will be approximately \$160,000,000, that over 100 jobs will be created during construction and that 5 or more full-time operations position will be created once the Facility is fully operating. Construction will also result in increased demand on local business, including hotels and restaurants. Similar Invenergy projects have resulted in additional direct spending of over \$10,000,000 on construction labor, concrete, gravel, trucking, subcontracts, fuel, meals, hotels and other such construction costs, in the local community and across the state.

The Facility will have a generating capacity of up 80 MW with no air emissions. Therefore, granting this application and construction of the Facility will provide improved air quality and other benefits for the citizens of North Carolina.

REGISTRATION AS A NEW RENEWABLE ENERGY FACILITY

In support of its registration as a new Renewable Energy Facility pursuant to R8-66, the Applicant states as follows:

1. The Applicant incorporates by reference each of the foregoing sections, including all subsections, in support of its Registration as a New Renewable Energy Facility.

2. The Applicant will read the energy production meter for the purpose of REC issuance.

3. The Applicant anticipates participating in the North Carolina Renewable Energy Tracking System (NC-RETS).

4. The Applicant certifies that it is in substantial compliance with all federal and state laws, regulations and rules for the protection of the environment and conservation of natural resources.

5. The Applicant certifies that the Facility satisfies the requirements of G.S. § 62-133.8(a)(5) as a new renewable energy facility and will continue to be operated as a new renewable energy facility.

6. The Applicant certifies that that any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. § 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including *another renewable energy portfolio standard or voluntary purchase of renewable energy certificates* in North Carolina or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.

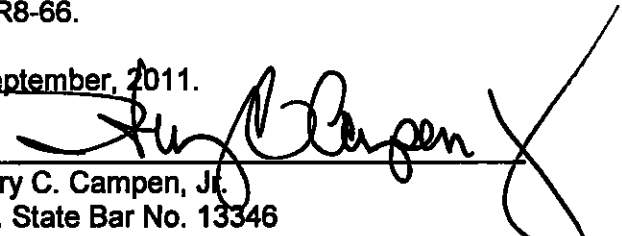
7. The Applicant certifies that it consents to the auditing of its books and records by the Public Staff in so far as those records relate to transactions with North Carolina electric power suppliers and agrees to provide the Public Staff and the Commission access to those books and records, wherever they are located, and access to the Facility.

8. A copy of this Application for Certificate of Public Convenience and Necessity and Registration has been served on Dominion North Carolina Power, the electric utility franchised for the location of the Facility.

WHEREFORE, PANTEGO WIND ENERGY LLC respectfully requests that the Commission:

- (i) issue a Certificate of Public Convenience and Necessity pursuant to G.S. § 62-110.1 and Commission Rule R8-63 for the Facility, as more specifically described herein; and
- (ii) accept the Registration of the Facility as a New Renewable Energy Facility pursuant to G.S. § 133.8 and Commission Rule R8-66.

Respectfully submitted this 2nd day of September, 2011.

By: 
Henry C. Campen, Jr.
N.C. State Bar No. 13346
Katherine E. Ross
N.C. State Bar No. 38468
Parker Poe Adams & Bernstein LLP
Wachovia Capitol Center
150 Fayetteville Street, Suite 1400
Raleigh, North Carolina 27601
Tel. 919-828-0564
Fax 919-834-4564
Email: henrycampen@parkerpoe.com
katherineross@parkerpoe.com

Attorneys for Pantego Wind Energy LLC

Pantego Wind Energy LLC CPCN Application Exhibit List

- Exhibit 1:** Application for Certificate of Authority for Pantego Wind Energy LLC
- Exhibit 2:** Invenenergy Wind North America LLC's Balance Sheet & Income Statement (*filed under seal*)
- Exhibit 3:** Collection Substation Representative Diagram
- Exhibit 4:** Proposed Project Area Location Map
- Exhibit 5:** Proposed Project Area Boundary Map
- Exhibit 6:** Proposed Site Layout
- Exhibit 7:** Estimated Construction Costs (*filed under seal*)
- Exhibit 8:** Matrix of Potentially Applicable Federal, State, and Local Approvals

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. EMP-61 SUB 0


BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of the Application of)
Pantego Wind Energy LLC For a)
Certificate of Public Convenience and)
Necessity to Construct a Wind Facility)
of up to 80 MW in Beaufort County)
and Registration as a New Renewable)
Energy Facility)

VERIFICATION

I, David Groberg, being duly sworn, do hereby declare that I am Vice President for Pantego Wind Energy LLC and am fully authorized to act on behalf of the Applicant, that I am familiar with the facts, have read the foregoing Application and Registration Statement, and, to my personal knowledge, the matters and statements contained therein are in compliance with North Carolina Utilities Commission Rules R8-63 and R8-66 and are true, except to those matters, statements and attachments made upon information and belief, and as to those, I believe them to also be true.

This 31st day of August, 2011.



David Groberg, Vice President
Pantego Wind Energy LLC

Sworn and subscribed to before me this 31st day of August 2011.

ELDINA BASAR
Notary Public, State of Maryland
Qualified in Montgomery County
Commission Expires 10/24/2012

[Notary Seal]



Notary Public [Signature of notary public]

ELDINA BASAR

[Name of notary public typewritten or printed]
My Commission expires 10.24.2012.

Pantego Wind Application Exhibit 1

Application for Certificate of Authority for Pantego Wind Energy LLC



NORTH CAROLINA
Department of the Secretary of State

FILED

SEP 02 2011

Clerk's Office
N.C. Utilities Commission

To all whom these presents shall come, Greetings:

I, Elaine F. Marshall, Secretary of State of the State of North Carolina, do hereby certify
the following and hereto attached to be a true copy of

APPLICATION FOR CERTIFICATE OF AUTHORITY

OF

PANTEGO WIND ENERGY LLC

the original of which was filed in this office on the 15th day of August, 2011.



IN WITNESS WHEREOF, I have hereunto set
my hand and affixed my official seal at the City
of Raleigh, this 16th day of August, 2011.

Elaine F. Marshall

Secretary of State

State of North Carolina
Department of the Secretary of State

**APPLICATION FOR CERTIFICATE OF AUTHORITY
FOR LIMITED LIABILITY COMPANY**

Pursuant to §57C-7-04 of the General Statutes of North Carolina, the undersigned limited liability company hereby applies for a Certificate of Authority to transact business in the State of North Carolina, and for that purpose submits the following:

1. The name of the limited liability company is Pantego Wind Energy LLC;

and if the limited liability company name is unavailable for use in the State of North Carolina, the name the limited liability company wishes to use is _____

2. The state or country under whose laws the limited liability company was formed is: DE

3. The date of formation was 8-10-11; its period of duration is: Perpetual

4. Principal office information: (Select either a or b.)

a. ☒ The limited liability company has a principal office.

The street address and county of the principal office of the limited liability company is:

Number and Street One S Wacker Drive Suite 1900

City, State, Zip Code Chicago IL 60606 County Cook

The mailing address, if different from the street address, of the principal office of the corporation is:

b. ☐ The limited liability company does not have a principal office.

5. The street address and county of the registered office in the State of North Carolina is:

Number and Street 176 Mine Lake Court, Suite 100

City, State, Zip Code Raleigh NC 27615 County Wake

6. The mailing address, if different from the street address, of the registered office in the State of North Carolina is:

7. The name of the registered agent in the State of North Carolina is: National Corporate Research, Ltd.

8. The names, titles, and usual business addresses of the current managers of the limited liability company are:
(use attachment if necessary)

Name	Business Address
Michael Polsky	One S Wacker Drive Suite 1900 Chicago IL 60606
James Murphy	One S Wacker Drive Suite 1900 Chicago IL 60606
James Shield	One S Wacker Drive Suite 1900 Chicago IL 60606
David Groberg	One S Wacker Drive Suite 1900 Chicago IL 60606
Joseph Condo	One S Wacker Drive Suite 1900 Chicago IL 60606

APPLICATION FOR CERTIFICATE OF AUTHORITY

Page 2

9. Attached is a certificate of existence (or document of similar import), duly authenticated by the secretary of state or other official having custody of limited liability company records in the state or country of formation. The Certificate of Existence must be less than six months old. A photocopy of the certification cannot be accepted.
10. If the limited liability company is required to use a fictitious name in order to transact business in this State, a copy of the resolution of its managers adopting the fictitious name is attached.
11. This application will be effective upon filing, unless a delayed date and/or time is specified: _____

This the 15 day of AUGUST, 2011

Pantego Wind Energy LLC

Name of Limited Liability Company

Signature of Manager

Michael Polsky

Type of Print Name

Notes:

1. Filing fee is \$250. This document must be filed with the Secretary of State.

CORPORATIONS DIVISION

P. O. BOX 29622

RALEIGH, NC 27626-0622

(Revised January 2002)

(Form L-09)

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "PANTEGO WIND ENERGY LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE FIFTEENTH DAY OF AUGUST, A.D. 2011.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "PANTEGO WIND ENERGY LLC" WAS FORMED ON THE TENTH DAY OF AUGUST, A.D. 2011.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE NOT BEEN ASSESSED TO DATE.

5022982 8300

110918994

You may verify this certificate online
at corp.delaware.gov/authver.shtml




Jeffrey W. Bullock, Secretary of State
AUTHENTICATION: 8968831

DATE: 08-15-11

Pantego Wind Application Exhibit 2

Invenergy Wind North America LLC's Balance Sheet & Income Statement
(filed under seal)

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SEP 02 2011

Clerk's Office
N.C. Utilities Commission

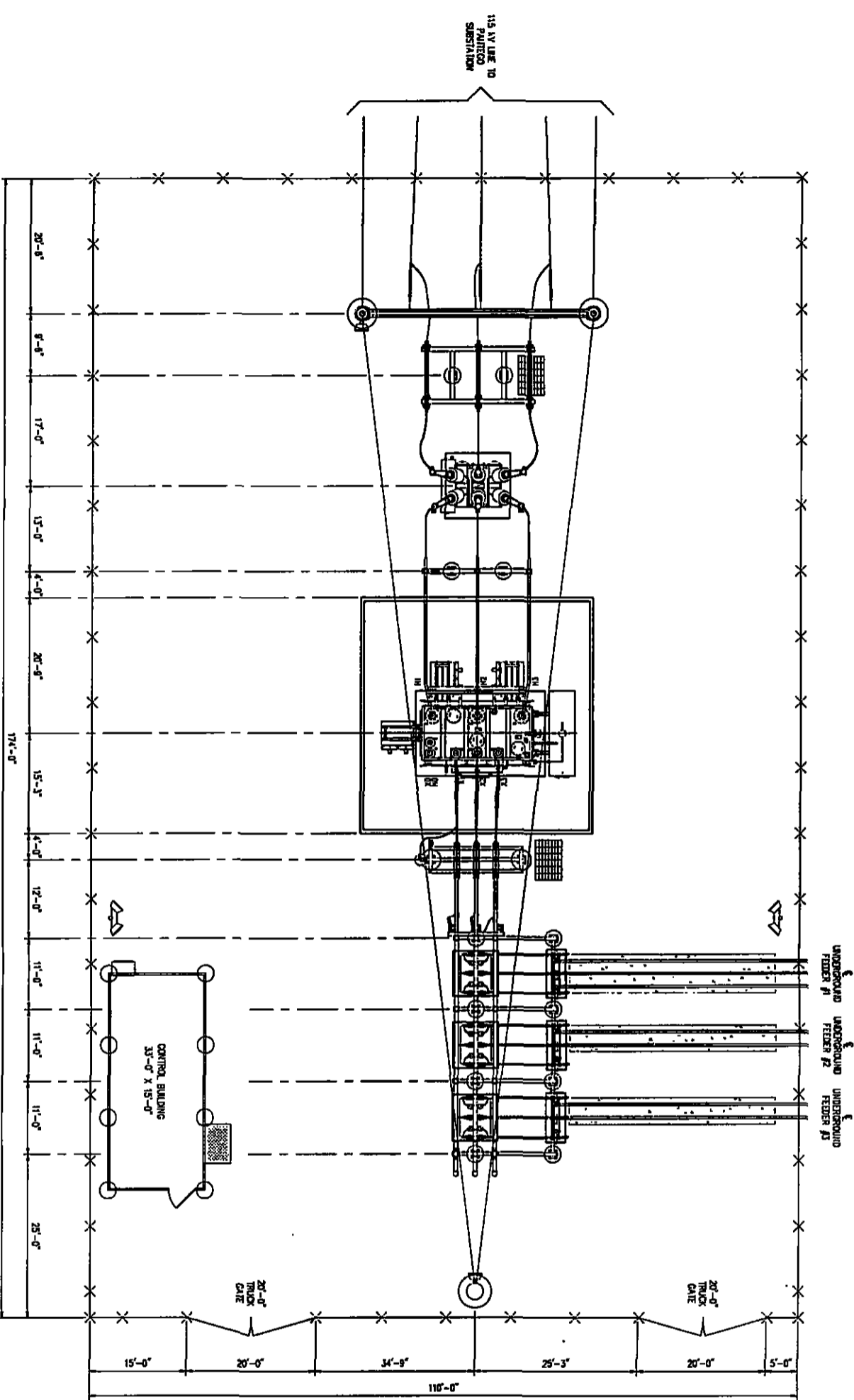
Pantego Wind Energy LLC's Application Exhibit 2

**Invenergy Wind North America LLC's
Balance Sheet & Income Statement
(filed under seal)**

Pantego Wind Application Exhibit 3

Collection Substation Representative Diagram

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SEP 02 2011
Clerk's Office
N.C. Utilities Commission



PRELIMINARY
NOT FOR CONSTRUCTION

NOTES
1.
LEGEND
Light (A/C)
Bus Coupler
Fence
4'-0" x 8'-0" Switch Operator Platform

STRUCTURE DESIGN CRITERIA
115 kV CLEARANCE (550 kV BL)
LINE PARTS: 115'-0" (BL)
TO GRADE: 12'-0" (BL)
25'-0" (BL)
34.5 kV CLEARANCE (200 kV BL)
LINE PARTS: 115'-0" (BL)
TO GRADE: 12'-0" (BL)
25'-0" (BL)

Engineering and Architecture
MECI ELECTRICAL CONSULTANTS, INC.

NO	ISSUED FOR APPLICATION	REVISION	DATE	BY	APP
A			8/31/11	BDJ	BDJ

Invenergy

DESIGNED	BY	DATE
BDJ	BDJ	8/31/11
CHECKED	BY	DATE
APPROVED	BY	DATE

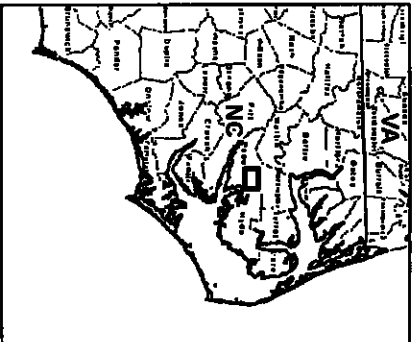
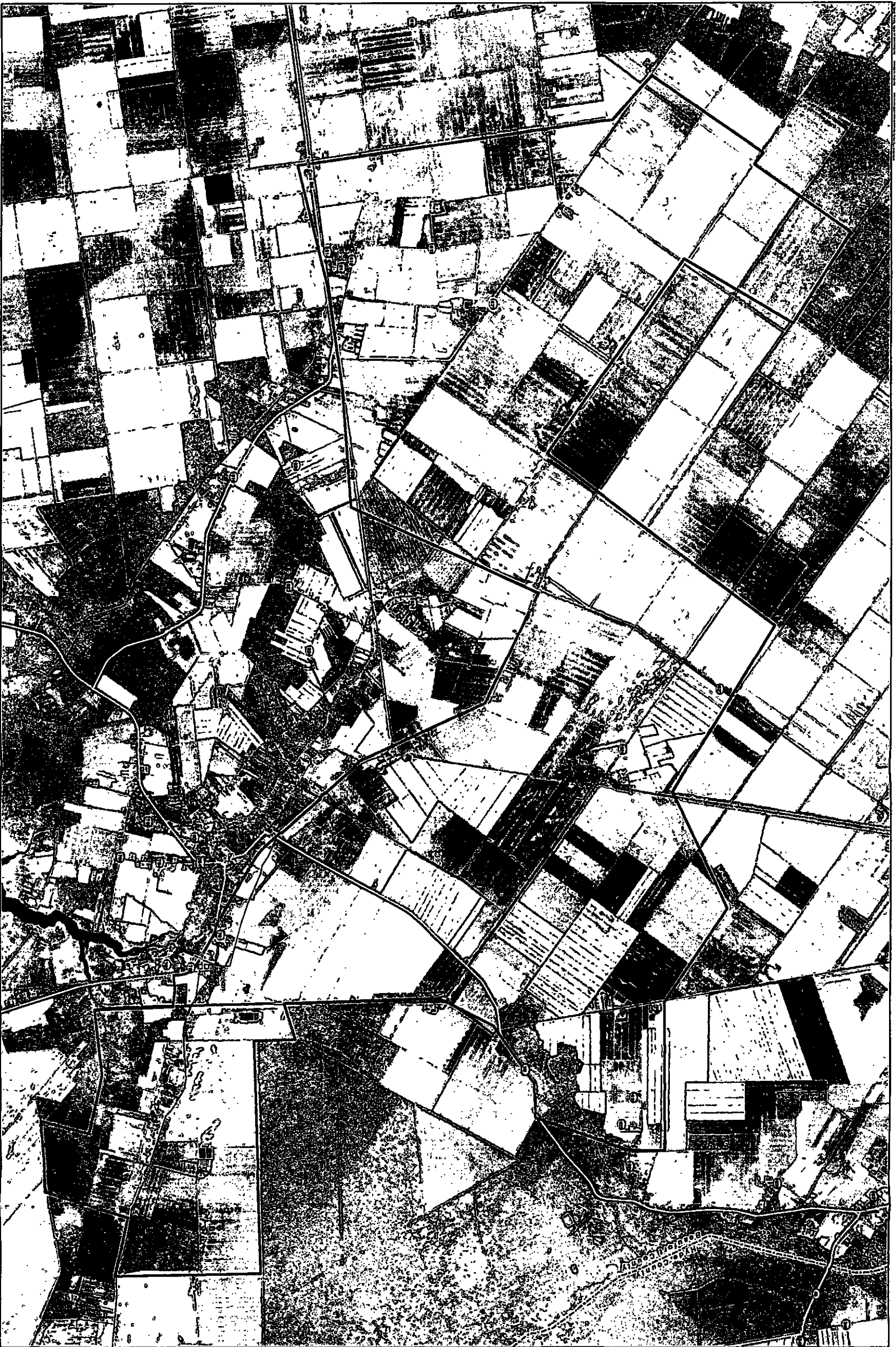
PANTEGO WIND PROJECT (WZ-022)
34.5-115 kV SUBSTATION
OVERALL GENERAL ARRANGEMENT
PAN-D-P003-1

Pantego Wind Application Exhibit 4

Proposed Project Area Location Map

Pantego Wind Application Exhibit 5

Proposed Project Area Boundary Map



- Legend**
- Dominion's Pangea Substation
 - Substation Location
 - Transmission Line (100 - 181 kV)
 - Primary Highway
 - Secondary Road
 - Local Road
 - Project Boundary
 - County Boundary

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N.C. Utilities Commission

Invenery

One South Wacker Drive Suite 1100
Chicago, Illinois 60606
(312) 224-1400

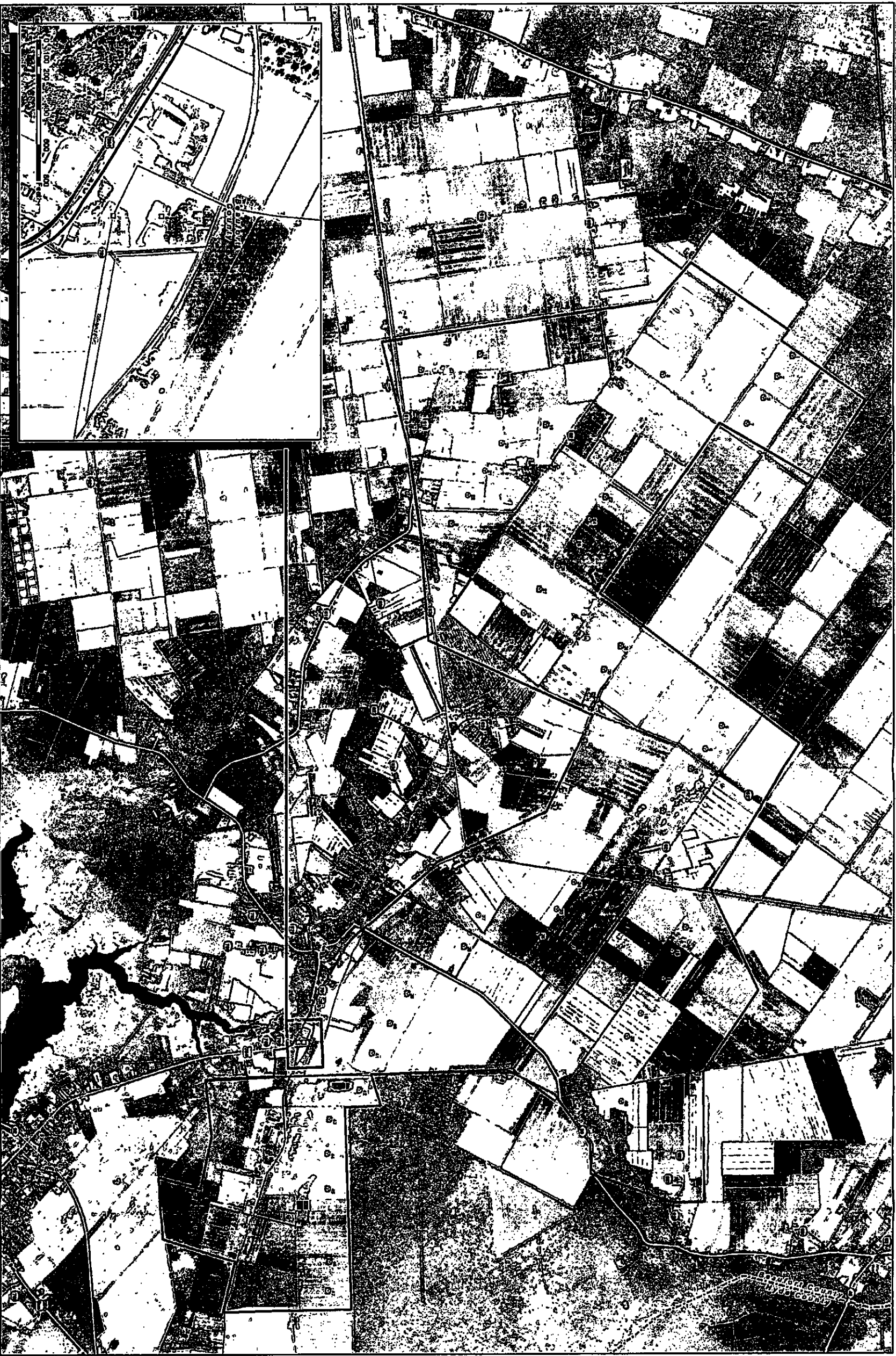
Project Area Map

Beaufort County, North Carolina

Rev. 00
August 23, 2011

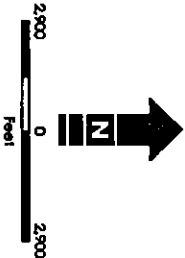
Pantego Wind Application Exhibit 6

Proposed Site Layout



Proposed Site Layout

Beaufort County, North Carolina



Legend

- Developer's Proposed Substation
- Turbine Location
- Substation Location
- Transmission Line (100 - 161 kV)
- Primary Highway
- Primary Road
- Secondary Road
- Land Road
- Potential Locations for Collection Substation and O&M Building
- Project Boundary
- County Boundary

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N.C. Utilities Commission

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Rev. 00
August 31, 2011

Pantego Wind Application Exhibit 7

Estimate Construction Costs (*filed under seal*)

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Pantego Wind Energy LLC's Application Exhibit 7

**Estimated Construction Costs
(filed under seal)**

Pantego Wind Application Exhibit 8

Matrix of Potentially Applicable Federal, State, and Local Approvals

**POTENTIALLY APPLICABLE PERMITS, CERTIFICATIONS, AND AUTHORIZATIONS
PANTEGO PROJECT, BEAUFORT COUNTY NORTH CAROLINA**

POTENTIAL FEDERAL REQUIREMENTS		
Permit/Authorization/Review	Responsible Agency	Status
Clean Water Act, Section 404 Permit	United States Army Corps of Engineers ("USACE"); potential for input by or coordination with United States Environmental Protection Agency	Initiated coordination with USACE in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011. Began to perform wetland fieldwork in the summer of 2011. The fieldwork will provide the data to assist in compliance with Section 404 of the Clean Water Act.
Endangered Species Act – coordination with USFWS	United States Fish and Wildlife Service ("USFWS") – USACE initiates consultation and determines actions, if required	Initiated coordination with USFWS in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in 2010.
Coastal Zone Management Act Consistency Determination (made as part of Section 404 Process)	North Carolina Department of Environment and Natural Resources ("NC DENR") – Division of Coastal Management, in coordination with USACE	Initiated coordination with Division of Coastal Management in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011.
National Environmental Policy Act ("NEPA") Review	USACE – as part of 404 permit process	NEPA process not yet initiated, will be conducted by USACE as necessary.

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Section 106 of the National Historic Preservation Act	State Historic Preservation Office and Office of State Archaeology – consultation and coordination as part of Section 404 process	Initiated coordination with Environmental Review Coordinator and regional Archaeologist in 2010. Ongoing discussions and meetings have developed scope of work and proposed work plan in anticipation of fieldwork beginning Fall 2011.
Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act – coordination with USFWS	USFWS	Initiated coordination with USFWS in 2010. Ongoing discussions and meetings.
Notice of Proposed Construction Form (Form 7460-1)	FAA	Expect to file in fall of 2011.
POTENTIAL NORTH CAROLINA STATE REQUIREMENTS		
Permit/Authorization	Responsible Agency	Status
Clean Water Act, Section 401 Water Quality Certification and/or State Isolated Waters/Wetlands Permit	NC DENR - Division of Water Quality – likely evaluated and issued in conjunction with Section 404 permit process	Initiated coordination with NCDENR, Division of Water Quality in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011.
National Pollutant Discharge Elimination System Stormwater Permit for Coastal Counties	NC DENR – Division of Water Quality	Initiated coordination with NCDENR, Division of Water Quality in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011.

Pantego Wind LLC's CPCN Application Exhibit 8

National Pollutant Discharge Elimination System Permit for Storm Water Runoff - Construction Sites	NC DENR - Division of Land Resources	Initiated coordination with NCDENR, Division of Water Quality in 2010, will coordinate with Division of Land Resources.
Tar Pamlico Nutrient Sensitive Waters Buffer Protection Rules	NC DENR - Division of Water Quality and/or North Carolina Environmental Management Commission	Ongoing discussions and meetings. Initiated coordination with NCDENR, Division of Water Quality in 2010. Ongoing discussions and meetings.
Coastal Area Management Act	NC DENR - Division of Coastal Management	Initiated coordination with NCDENR Division of Coastal Management in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011.
NC Environmental Policy Act Review (SEPA)	NC DENR, if necessary	Not yet determined if necessary. Likely satisfied, if necessary, by coordination of USACE NEPA document.
State Resource Agency Consultation	NC Wildlife Resources Commission ("NCWRC")	Initiated coordination with NCWRC in 2010. Ongoing discussions and meetings, including attendance at multi-agency meeting held in July, 2011.
POTENTIAL LOCAL REQUIREMENTS		
Permit/Authorization	Responsible Agency	Status
Building Permits	Beaufort County	Will be filed before construction begins.
Tar-Pamlico Nutrient Sensitive Waters (NSW) Stormwater Program	Beaufort County	Initiated coordination with Beaufort County. Ongoing discussion, will be sought when necessary.

Prefiled Testimony of David Groberg

PREFILED DIRECT TESTIMONY OF
DAVID GROBERG
ON BEHALF OF PANTEGO WIND ENERGY LLC

NCUC DOCKET NO. EMP - 61, SUB 0

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INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

A. My name is David Groberg. I am Vice President of Development for the Eastern Region of the United States for Invenergy LLC. My business address is 51 Monroe Street, Suite 1604, Rockville, Maryland 20850.

Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I have over 10 years of experience in the renewable energy and sustainable development fields. I joined Invenergy in 2004. I have a BA in English, cum laude, from Cornell University and an MBA from the University of Texas - Austin.

Q. PLEASE SUMMARIZE YOUR CURRENT EMPLOYMENT RESPONSIBILITIES.

A. My current responsibilities include managing all new project identification, project development and acquisition activities for Invenergy's wind energy business in the Eastern Region of the United States and Canada. This includes directing all development activity for the Pantego Wind Energy LLC ("Pantego Wind") project in Beaufort County, N.C. (the "Project" or "Facility").

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide the Commission with background information about Pantego Wind Energy LLC, Invenergy and the Project, and to expand on topics in Pantego Wind's application, including the regulatory and permitting process for the Project, the need for and impact of the Project, and Invenergy's technical and managerial capabilities.

THE APPLICANT

Q. PLEASE PROVIDE INFORMATION ABOUT PANTEGO WIND ENERGY LLC AND INVENERGY LLC.

A. Pantego Wind Energy LLC is a limited liability company registered to do business in North Carolina. Pantego Wind was organized for the development of the Project in Beaufort County, North Carolina, which is the subject of Pantego Wind's application to the Commission for a Certificate of Public Convenience and Necessity ("CPCN") to construct a merchant plant. The parent company of Pantego Wind is Invenergy Wind North America LLC ("INWA"), which is an affiliate of Invenergy LLC ("Invenergy"). Invenergy is headquartered in Chicago, Illinois.

Q. PLEASE DESCRIBE INVENERGY'S EXPERIENCE DEVELOPING WIND ENERGY FACILITIES.

A. Invenergy has placed in service twenty-six (26) wind facilities with a total operating capacity of 2,435 megawatts ("MW"). The company currently has wind projects totaling more than 15,000 MW in construction, under long-term contract to sell power and/or renewable credits or in development. By the end of 2012, Invenergy will have an operating wind power generation portfolio that exceeds 3,500 MW.

SITE AND FACILITY DESCRIPTION

Q. DESCRIBE THE PROPOSED LOCATION FOR THE FACILITY.

A. The Pantego Wind Project includes approximately 11,000 acres of privately-owned land in Beaufort County, North Carolina (the "Project Area"). The proposed Project is located near the communities of Terra Ceia and Pantego, and approximately 20 miles east of the City of Washington. The maps at Application Exhibits 4 and 5 accurately reflect the location of the proposed Project. The proposed Project Area is a large undeveloped area used primarily for agricultural and forestry purposes.

Invenergy and its affiliates have leased private land in the Project Area. These leases afford Invenergy and its affiliates the right to develop and use the property for wind energy purposes, including conversion of the wind resource, ingress and egress, the installation of wind measuring equipment and wind turbine generators, and other such activities required to develop, construct and operate the Facility.

Q. PLEASE DESCRIBE THE BASIC COMPONENTS OF THE FACILITY.

A. The proposed Project is a wind energy facility that will generate up to 80 MW of electrical power. The Facility will consist of wind turbine generators, an underground Electrical Collection System, a Collector Substation, an Operations and Maintenance ("O&M") Facility, access roads and a permanent Meteorological Tower. The proposed Site Layout, found at Application Exhibit 6, reflects a preliminary layout of all major components of the Project. The turbine vendor and actual generation capacity of the turbines that will be used for this Project have not been finalized at this time. The proposed Site Layout is based on forty-nine (49) 1.6 MW turbines. However, the number of turbines may vary based on turbine size. The proposed Site Layout includes

two potential locations for the O&M Facility and the Collection Substation. Invenergy has been in continuous conversation with Dominion regarding the Project. Final location of the Collection Substation will be made in consultation with Dominion as part of the PJM Interconnection process. The proposed Site Layout shown is subject to change based on final turbine selection, environmental studies and further conversations with the Department of Environment and Natural Resources ("DENR"), additional meteorological data, communications with other state and federal agencies and further negotiations with landowners in the Project Area. Regardless of changes to the proposed layout, the basic components of the Project will not change, and all permitting requirements will be satisfied.

Q. HOW WILL THE PROJECT BE INTERCONNECTED TO THE GRID?

A. The Facility will be interconnected with Dominion's 115 kV Pantego Substation. The electric energy produced by the wind turbines will be conducted through an underground cable system, known as the Electrical Collection System (the "ECS"). The ECS is routed to a new 34.5 kV Collection Substation, which will be constructed and owned by Pantego Wind. A transformer in the Collection Substation will step up the 34.5 kV from the ECS to 115 kV. Invenergy is in discussion with Dominion on the location and design of the Collection Substation. Regardless of the final location of the Collection Substation, a short 115 kV generator lead line will connect the proposed Collection Substation to Dominion's Pantego Substation.

Invenergy has been and continues to be in discussions with PJM Interconnection, LLC ("PJM") and Dominion on the design of the Project. PJM has completed the System Impact Study for the Project and the Facility Study is underway.

92 Invenergy anticipates entering an Interconnection Agreement during the 4th quarter of
93 2011.

94 **Q. WHAT IS THE PROJECT'S ANTICIPATED ELECTRICITY**
95 **PRODUCTION CAPABILITY?**

96 A. The maximum output of the Facility will be 74 MW when taking into
97 account losses in the collection system and the Project's SCADA System. Based on
98 wind data collected from the Project Area, it is anticipated that the net capacity factor
99 will be in the 25% - 36% range. The Project's estimated electrical production is
100 174,000 – 250,000 MWh per year.

101 **Q. WHAT ARE INVENERGY'S PLANS FOR THE SALE OF THE POWER**
102 **AND RENEWABLE ENERGY CERTIFICATES ("RECS") GENERATED BY THE**
103 **PROJECT.**

104 A. Invenergy is in discussions with North Carolina investor owned utilities,
105 electric cooperatives and municipal electric suppliers about the sale of the power and
106 RECs generated by the Facility.

107

108 **OUTREACH AND BENEFITS TO THE COMMUNITY**

109 **Q. WHAT OUTREACH EFFORTS HAS INVENERGY UNDERTAKEN IN**
110 **BEAUFORT COUNTY?**

111 A. Invenergy has met with Project Area landowners and community members
112 over the past year to discuss the Project and their interest in entering agreements
113 regarding wind turbines and related facilities. In July 2010, Invenergy held an
114 informational meeting at the Coastal Carolina Cotton Gin in Pantego. Local
115 landowners, farmers and members of the agricultural business community were in

attendance. This meeting introduced Invenergy as a company, provided general information on wind energy and how Invenergy develops, builds and operates a project. Conversations with landowners have continued and Invenergy has entered into leases for land in the Project Area. Invenergy has also held multiple meetings with Beaufort County officials and staff to present the Project and discuss opportunities for the community to benefit from the Project. County officials and landowners have favorably received the Project.

Invenergy has met several times with representatives of the Northeast Economic Development Commission ("Northeast EDC"). In June, 2011 Vann Rogerson of the Northeast EDC and Randell Woodruff, incoming Beaufort County Manager, along with others from North Carolina, visited Invenergy's Grand Ridge project in Marseilles, Illinois. The group toured the wind facility and had the opportunity to ask questions of Invenergy personnel. The group also toured Invenergy's Corporate Headquarters in downtown Chicago, and had the opportunity to meet with Invenergy's development, engineering, finance and construction personnel.

**Q. PLEASE DESCRIBE THE ANTICIPATED BENEFITS TO THE
BEAUFORT COUNTY COMMUNITY.**

A. The county will realize an increase in tax revenues as a result of the Facility being located in their jurisdiction. The Project is expected to be one of the largest taxpayers in Beaufort County, providing long-term, stable revenue to local government. In return, the Project will require minimal public services, thereby resulting in a substantial net tax benefit to Beaufort County. Landowners will receive lease payments for participation in the Project. In addition, the placement of the wind turbines will allow for the continued agricultural and forestry use of the land. Therefore, the

landowners participating in the Project will see additional income to support their current agricultural and farming activities. During operations, Invenergy estimates combined spending on local property taxes, landowner lease payments, salaries for full-time staff and local procurement of goods and services to exceed \$1,000,000 per year.

Construction of the Project will provide additional employment opportunities in the Beaufort County area and will result in an overall increase in demand for meals, lodging and other local services. When wages to construction employees from the region are added to the expected increase in revenues to businesses, Invenergy estimates the total direct construction revenues from the Project to the local and regional economy during construction will be approximately \$10,000,000. This figure *only includes direct spending and does not consider indirect and induced economic impacts* that can be expected to further amplify the positive economic impacts of the Project.

After construction, a team of employees, based out of a local operations center, will be responsible for the operation and management of the Facility. Invenergy estimates the Project will have 5 or more full-time employees, who will receive competitive salaries and benefits, as well as training in the operation and maintenance of utility-scale wind energy projects.

ANTICIPATED LOCAL, STATE AND FEDERAL PERMITS AND APPROVALS

Q. DESCRIBE THE PERMITS AND APPROVALS YOU ANTICIPATE WILL BE NECESSARY TO COMMENCE CONSTRUCTION OF THE FACILITY.

162 A. Invenergy has identified a number of local, state and federal permits and
163 approvals that may be necessary for the Facility. Application Exhibit 6 identifies all
164 known and likely permits and approvals required for the Facility.

165 **Q. WHAT STEPS HAS INVENERGY TAKEN TO DETERMINE THE**
166 **PERMITS AND APPROVALS THAT WILL BE REQUIRED?**

167 A. To determine what permits and approvals may be required specific to the
168 Pantego Wind Project, Invenergy has had numerous phone conversations and in-
169 person meetings with various state and federal agencies over the past 18 months. On
170 April 28, 2010, Invenergy representatives, including me and Invenergy's North Carolina
171 based consultants from Kimley Horn and Associates, Inc. and Circa, Inc., held an
172 interagency and scoping meeting with interested governmental entities, including
173 representatives of multiple Divisions of the North Carolina Department of Environment
174 and Natural Resources, several representatives from the U.S. Army Corp of Engineers,
175 the U.S. Fish and Wildlife Service, the N.C. Wildlife Resources Commission, and the
176 Marine Corps, including representatives from the Cherry Point Air Station.
177 Conversations with these agencies, and others, have continued since this meeting.
178 Invenergy has also engaged the Air Force, the Navy and North Carolina's State Historic
179 Preservation Office in discussions about the Project

180 In July, 2011, Invenergy held a group meeting with representatives of the N.C.
181 Wildlife Resources Commission, the U.S. Army Corp of Engineers, the Marine Corps,
182 the Navy, and the North Carolina Department of Environment and Natural Resources,
183 including representatives from the Division of Coastal Management and the Division of
184 Water Quality, to discuss the Project and to continue dialogue regarding what permits
185 and approvals will be necessary.

Invenergy has had extensive conversations with Beaufort County elected officials and staff regarding the Project and local permits and approvals that may be required. Invenergy will continue to work with federal and state agencies and Beaufort County, and will comply with all federal, state and local laws and regulations.

Q. DOES BEAUFORT COUNTY HAVE A WIND ENERGY ORDINANCE?

A. No, Beaufort County has no County zoning. However, Invenergy has had numerous discussions with the County, including representatives from the County Planner's Department, about the Project. As indicated earlier in my testimony, Beaufort County has responded favorably to the Project. Invenergy will continue to work closely with the County as the Project is permitted and developed.

Q. DESCRIBE INVENERGY'S COMMUNICATION WITH MILITARY BRANCHES ABOUT THE PROJECT.

A. Invenergy has been in contact with multiple branches of the military about the Project. As discussed above, representatives from multiple branches of the military have attended group meetings to discuss the Project. Invenergy representatives have had direct communications with the Air Force, Navy and Marine Corps about the Project. The Federal Aviation Administration ("FAA") has final jurisdiction over airspace and aeronautical impact. Invenergy will file an FAA Form 7460 (Notice of Proposed Construction) with the FAA for each wind turbine and for the permanent meteorological tower by the end of 2011. The FAA will conduct an Obstruction Evaluation Analysis to determine whether any of the turbines in the Project Area will interfere with military or civilian airspace use or navigation. Construction cannot begin on the Facility until the FAA has issued a Determination of No Hazard. Invenergy will obtain all necessary FAA approvals before commencement of construction.

NEED FOR THE FACILITY

Q. PLEASE EXPLAIN THE NEED FOR THE FACILITY.

A. Through the passage of Senate Bill 3, North Carolina adopted a Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") under which investor-owned utilities in North Carolina are required to meet up to 12.5% of their energy needs through renewable energy resources or energy efficiency measures by 2021. Rural electric cooperatives and municipal electric suppliers must meet a 10% REPS requirement by 2018. Under the REPS statute, wind qualifies as a renewable energy resource. Investor-owned utilities, electric cooperatives and municipal electric suppliers demonstrate compliance through the purchase of renewable energy certificates ("RECs"). The Facility will provide approximately 174,000 – 250,000 RECs, dependent on final turbine selection, for use by those entities that must comply with the REPS requirements.

In addition, Senate Bill 3 established that the development of the REPS was intended to diversify the resources used to reliably meet the energy needs of consumers in the State, provide greater energy security through the use of indigenous energy resources available within the State, encourage private investment in renewable energy and energy efficiency and provide improved air quality and other benefits to energy consumers and citizens of the State. The Project will help achieve all four of these goals. Allowing this Project to go forward will enable a new, clean, renewable energy resource with low environmental, health and safety impacts, and significant economic development benefits to meet the growing demand for electricity in the State and in the region.

MANAGERIAL AND TECHNICAL CAPABILITY

**Q. PLEASE DESCRIBE INVENERGY'S TECHNICAL AND MANAGERIAL
CAPABILITY TO CONSTRUCT AND OPERATE A WIND POWER PROJECT.**

**A. As an Invenergy subsidiary, Pantego Wind will have full access to the
managerial and technical capabilities of Invenergy to construct and operate the Project.
Invenergy brings the experience of developing 26 wind facilities. Invenergy originates
and develops the vast majority of its own wind projects from conception through
completion and long-term operation. On occasion, Invenergy acquires an early- or mid-
stage project from another developer. With this long-term perspective, Invenergy Wind
takes a proactive approach to building strong relationships with various project
stakeholders including landowners, host communities and power purchase customers.**

**Invenergy's success at building and operating wind projects starts with an
experienced and capable development team. Invenergy's developers understand that
relationships with local communities are the first step in building successful long term
projects, and they are the first to demonstrate Invenergy's commitment to local host
communities.**

**Invenergy's business model is to operate the wind farms it builds, and therefore,
it employs responsible and experienced onsite construction managers to ensure that
projects are built in a way that respects community and landowner concerns and results
in a high quality project that will operate smoothly for years to come. Invenergy
currently manages over 1,200 operating wind turbines. Day-to-day operation and
maintenance is the responsibility of on-site O&M teams that work out of Invenergy O&M
buildings located at the Project site. These teams are trained by Invenergy to perform**

257 routine maintenance and other tasks needed to maximize the hours that the turbines
258 are available to generate electricity.

259 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

260 A. Yes.

Prefiled Testimony of Steven Ryder

PREFILED DIRECT TESTIMONY OF
STEVEN RYDER
ON BEHALF OF PANTEGO WIND ENERGY LLC

NCUC DOCKET NO. EMP - 61, SUB 0

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Clerk's Office
N.C. Utilities Commission

INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

A. My name is Steven Ryder. I am Vice President of Finance for the Eastern Region of the United States for Invenergy LLC ("Invenergy"). My business address is 1 South Wacker Drive, Suite 1900, Chicago, IL 60606.

Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I have approximately 20 years of experience working in a technical and financial capacity in the field of large scale infrastructure, including energy, transportation and telecommunications. I have over 12 years of experience in the field of finance. I joined Invenergy in 2006. I have a Bachelor's Degree in Electrical Engineering from Tufts University and a Master's Degree in Public Affairs from Princeton University. I also hold the designation of a Chartered Financial Analyst.

Q. PLEASE SUMMARIZE YOUR CURRENT EMPLOYMENT RESPONSIBILITIES.

A. My current responsibilities include managing international and domestic project financings and corporate financings for Invenergy. This includes directing all financing activity for the Pantego Wind Energy LLC ("Pantego Wind") project in Beaufort County, NC (the "Project" or "Facility"). I also oversee Invenergy's existing financings for our portfolio of energy projects. In this capacity, I manage a team of 12 finance professionals.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide the Commission with background information about Invenergy's financial capabilities, and in particular the financing of the Pantego Wind Project.

FINANCIAL CAPABILITY

Q. PLEASE DESCRIBE THE APPLICANT'S FINANCIAL CAPABILITY TO OWN AND OPERATE THE PROJECT.

A. As discussed in the application, Pantego Wind is a limited liability company organized for the development and ownership of this Project. Pantego Wind's parent company is Invenergy Wind North America LLC ("IWNA"). IWNA is an affiliate of Invenergy LLC. IWNA has the financial capability and experience to build, own, and operate wind farms, including the Project in Beaufort County, North Carolina. The most recent audited balance sheet and income statement for IWNA, which is for the year ending December 31, 2010, has been provided, under seal, as Application Exhibit 2. As an affiliate of Invenergy, IWNA has the capability to arrange adequate assurances, guarantees, financing and insurance for the Project's development, construction and operation. Invenergy structures and arranges project financings through a dedicated, in-house staff of 12 finance professionals located in Chicago, IL.

Q. HOW WILL THE PROJECT BE FINANCED?

A. Consistent with its prior experience, Invenergy plans to use a combination of third-party debt and equity to finance the Project. Specifically, Invenergy will arrange

a group of lenders approximately six to nine months prior to commercial operations to provide a construction loan for the Project. The construction loan plus equity provided by Invenergy will be sufficient for the entire construction costs of the Project. The estimated construction costs have been provided, under seal, as Application Exhibit 7. Once a project achieves commercial operation, Invenergy often brings in an additional third-party to provide tax-equity financing which allows the Project to more efficiently utilize the federal tax benefits associated with renewable energy projects. Proceeds from the tax equity financing would offset a portion of the capital previously provided by Invenergy and its lenders.

Invenergy typically arranges its financing on a non-recourse basis, which is to mean that Invenergy as the parent company does not provide an explicit guarantee for repayment of the Project debt. As such, financing for the project is typically structured with several cash reserve accounts that can be used to mitigate certain risks of the Project.

Q. DESCRIBE INVENERGY'S EXPERIENCE WITH RAISING PROJECT FINANCING.

A. Invenergy is highly experienced in raising corporate and project level financing in support of developing, constructing and operating its energy projects. Since its inception in 2001, Invenergy has raised more than \$7 billion of financing and has worked with more than 60 financial institutions worldwide including the United States, Canada, Europe and Japan. Invenergy's financing relationships include such institutions as Wells Fargo, Union Bank of California, GE Capital, JP Morgan, Unicredit, Natixis, Dexia and Rabobank.

69 Invenergy's successful project financing efforts were recognizes when it was
70 awarded the Structured Power Finance 2005 Deal of the Year for its financing of
71 Invenergy Wind Finance Company – a portfolio of 260 MW of wind facilities, and the
72 North America Public Power 2007 Deal of the year for its financing of St. Clair – a 584
73 MW combined cycle natural-gas fired facility in Ontario, Canada.

74 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

75 **A. Yes.**