

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Wilton Wind IV, LLC
99 MW Wind Energy Center – Burleigh County
Siting Application**

Case No. PU-11-646

**FINDINGS OF FACT, CONCLUSIONS OF LAW
AND ORDER AMENDING CERTIFICATE**

November 28, 2012

Appearances:

Commissioners Brian P. Kalk, Kevin Cramer and Bonnie M. Fetch.

Brian R. Bjella, Attorney at Law, Crowley Fleck PLLP, 400 East Broadway, Suite 600, Bismarck, North Dakota 58501, on behalf of the Applicant, Wilton Wind IV, LLC.

Mark Gruman, Legal Counsel, Public Service Commission, State Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Preliminary Statement

On February 15, 2012, the Commission adopted Findings of Fact, Conclusions of Law and Order issuing Certificate of Site Compatibility for a Energy Conversion Facility, Certificate No. 26, to Wilton Wind IV, LLC (“Wilton Wind”) to authorize construction of the Wilton IV Wind Energy Center consisting of up to 66 1.6 MW wind turbine generators and associated facilities in Burleigh County, North Dakota.

On September 13, 2012, Wilton Wind filed with the Commission an Application for an Amendment of the Certificate of Site Compatibility for the project. The reason for the amendment was that Wilton Wind desires to use a different wind turbine model for this project, either 1.6 or 1.7 MW, both of which have a larger rotor diameter of 328 feet (100 meters) versus 271 feet (82.5 meters) for the approved project. This new turbine technology requires adjustments to the spacing of certain turbines in order to meet manufacturer specifications while maintaining Commission, Burleigh County and Crofte and Ghylin Townships setback requirements.

On September 27, 2012, the Commission issued a Notice of Informal Hearing and Notice of Opportunity for Hearing (“Notice”) scheduling an informal hearing for October 24, 2012, at 1:30 p.m. in the Commission Hearing Room on the 12th Floor of the State Capitol. The Notice provided that comments and requests for hearing must be received by November 6, 2012. The Notice identified the following issues to be considered:

1. Will the location, construction, and operation of the proposed facilities produce minimal adverse effects upon the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On October 22, 2012, Wilton Wind filed an amendment to its Application, including updated exclusion and avoidance tables and an overall site plan.

On November 16, 2012, Wilton Wind filed with the Commission updated noise and sound flicker data.

On October 24, 2012, the Commission held the informal hearing as scheduled. No comments or requests for hearing were received. At the informal hearing, Mr. David Coleman, Chair of the Ghylin Township Board of Supervisors, appeared.

Having allowed all interested persons an opportunity to be heard, and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

Findings of Fact

1. The materials filed by Wilton Wind in its September 13, 2012, Application indicate, and as was confirmed at the informal hearing, that no exclusion or avoidance areas will be impacted by the requested turbine location changes.
2. The materials filed by Wilton Wind, and as were further discussed at the informal hearing, indicate that a Class III cultural resources survey has been completed for the project, and that any sites with potential cultural significance have been avoided in designing the project layout. Wilton Wind intends to have its report completed and submitted to the North Dakota State Historic Preservation Office (SHPO) by the end of November. SHPO concurrence that no historic properties are affected by the turbine locations changes is anticipated.
3. The turbine location changes are compatible with the environmental preservation and efficient use of resources, and will produce minimal adverse affects on the environment, natural resources and upon the welfare of the citizens of North Dakota, while ensuring continuing system reliability, integrity and ensuring that energy needs are met and fulfilled in an orderly fashion.
4. Of the originally approved turbine locations, 15 turbines did not move and the remainder has shifted between 7 and 698 feet. One planned turbine was completely eliminated, and a new turbine location was added. One former

alternate turbine location is now a planned turbine, and five formerly planned turbines are now alternates.

5. With respect to shadow flicker, the predicted impact for two occupied receptors is greater than 30 hours per year, with the maximum predicted impact at 36 hours, 23 minutes. When including the existing turbines from the Wilton I, Wilton II and Baldwin Wind Energy Centers, the predicted cumulative impacts for four occupied residences indicate shadow flicker hours over 30 hours per year; the maximum predicted impact does not change at 36 hours, 23 minutes at the same receptor. All of the receptors with a predicted impact over 30 hours per year are participating landowners. As noted in the Findings of Fact, Conclusions of Law and Order, dated February 15, 2012, while there are no established standards, the siting recommendation of the American Wind Energy Association is 30-40 hours per year, and these results fall within that range.

6. With respect to the acoustic assessment, the modeling indicates no potential exceedences of EPA noise guidelines for occupied receptors when the Wilton IV turbines are modeled alone. A cumulative noise assessment was conducted analyzing potential impacts of Wilton IV in association with adjacent existing Wilton I, Wilton II and Baldwin Wind Energy Centers. The results of the cumulative assessment shows there is a potential exceedence at one occupied receptor under maximum rotational wind speeds under moderate downwind conditions, and potential exceedences at two additional occupied receptors under maximum rotational wind speeds under anomalous conditions. All of these receptors are participating landowners, and were identified as exceedences for the same operational conditions in the original acoustic assessment.

7. With respect to applicable Commission, Burleigh County, Crofte and Ghylin Townships setbacks, the setback requirement based upon 1.1 times the turbine height changed from 440 feet to 469 feet; and the setback requirement based upon 1.1 times the turbine height plus 75 feet changed from 515 feet to 544 feet. The proposed turbine locations comply with these setback requirements.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over Wilton Wind and over the subject matter of the Application under North Dakota Century Code Chapter 49-22.
2. The location, construction and operation of the proposed wind energy center would produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

Order

The Commission orders:

1. Wilton Wind's request for amendment to Certificate of Site Compatibility for Energy Conversion Facility Certificate No. 26 is granted; and Wilton Wind is issued First Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 26 for the construction, operation and maintenance of a wind energy facility known as the Wilton IV Wind Energy Center.
2. The authorizations granted by First Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 26, are contingent upon receipt of SHPO concurrence that no historic properties are affected by the turbine location changes.
3. The authorizations granted by First Amended Certificate of Site Compatibility for Energy Conversion Facility, Certificate No. 26, are subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.
4. The amended turbine location changes hereby approved are subject to the terms and conditions stated in the Findings of Fact, Conclusions of Law and Order dated February 15, 2012; and are further subject to the terms and conditions of this Order.

PUBLIC SERVICE COMMISSION

Absent

Kevin Cramer
Commissioner

Brian P. Kalk

Brian P. Kalk
Chairman

Bonnie M. Fetch

Bonnie M. Fetch
Commissioner

PUBLIC SERVICE COMMISSION

STATE OF NORTH DAKOTA

Certificate of Site Compatibility for Energy Conversion Facility

First Amended Certificate Number 26

This is to certify that the Commission has designated an energy conversion facility site for Wilton Wind IV, LLC's Wilton IV Wind Energy Center consisting of up to 66 wind turbine generators totaling up to approximately 112 MW of generating capacity and associated facilities in Burleigh County, North Dakota.

The facility may be sited in this designated location in compliance with the energy conversion facility siting criteria. This certificate is issued in accordance with the Findings of Fact, Conclusions of Law and Orders of the Commission in Case No. PU-11-646 dated February 15, 2012 and November 28, 2012 and is subject to the conditions and limitations noted in those orders.

Bismarck, North Dakota, November 28, 2012.

ATTEST:

PUBLIC SERVICE COMMISSION



Executive Secretary



Commissioner