

June 27, 2024

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Steven Kahl
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480

**RE: Bowman Wind, LLC's Ten Year Plan for 2024-2034
Case No. PU-24-_____**

Dear Mr. Kahl:

Enclosed for filing are two copies of the following documents:

1. Bowman Wind, LLC's Ten Year Plan: 2024-2034;
2. Notice of Filing Ten Year Plan: 2024-2034; and
3. Certificate of Service.

Electronic versions of the above-referenced documents and this letter were filed with the Commission today via e-mail.

If you have any questions, please let me know.

Sincerely,



MOLLIE M. SMITH

MMS/82783950
Enclosures

cc: Brenna Gunderson (w/ encls. via e-mail)

TEN YEAR PLAN: 2024-2034

Bowman Wind, LLC

June 2024

In accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, Bowman Wind, LLC (“Bowman Wind”), submits the following Ten Year Plan for years 2024 through 2034.

- (1) *A description of the general location, size, and type of all facilities to be owned or operated by the utility during the ensuing ten years, as well as those facilities to be removed from service during the ten-year period.*

Bowman Wind is a Delaware limited liability company, authorized to do business in the State of North Dakota. Bowman Wind is developing a wind energy conversion facility known as the Bowman Wind Project (the “Project”). The Project will have a nameplate capacity of up to 208.7 megawatts (“MW”), with up to 200.1 MW delivered to the grid. The Project will be located southwest of the City of Bowman in Bowman County, North Dakota. The Project will interconnect to the grid at the Basin Electric Power Cooperative (“Basin Electric”) Rhame 230 kilovolt (“kV”) Substation, located in Bowman County, North Dakota. To interconnect the Project to the grid, Bowman Wind will construct a 230 kV generation interconnection line between the Project substation and the Rhame 230 kV Substation. The generation interconnection line will be less than one mile long and, therefore, will not be subject to the jurisdiction of the North Dakota Public Service Commission (“Commission”) as a “transmission facility.”

On July 7, 2022, Bowman County approved issuance of a Conditional Use Permit for the Project. On February 8, 2023, the North Dakota Public Service Commission (“Commission”) issued Findings of Fact, Conclusions of Law and Order granting Certificate of Site Compatibility No. 65 to Bowman Wind for the Project (see Case No. PU-21-121). Bowman Wind plans to begin constructing the Project as early as Fourth Quarter 2024 and plans for the Project to be commercially operational as early as Fourth Quarter 2025.

Other than the proposed Project, Bowman Wind does not have any transmission or generation facilities located in North Dakota. The Project will have an estimated life of greater than 10 years. As such, Bowman Wind does not have any plans to decommission any transmission or generation facilities within the timeframe of this plan.

- (2) *An identification of the location of the tentative preferred site for all energy conversion facilities and the tentative location of all transmission facilities on which construction is intended to be commenced within the ensuing five years and such other information as may be required by the commission. The site and corridor identification shall be made in compliance with the criteria published by the commission pursuant to section 49-22-05.1.*

As noted above, Bowman Wind is developing the above-referenced Project, and proposes to have the Project in-service as early as Fourth Quarter 2025. The proposed Project footprint is located southwest of the City of Bowman in Bowman County, North Dakota. The Project will

interconnect at Basin Electric's existing Rhame 230 kV Substation, located in Bowman County, North Dakota.

As set forth in the Commission's Orders (referenced above), the location of the Project complies with the Commission's siting criteria, including the exclusion and avoidance area criteria referenced in N.D.C.C. § 49-22-05.1 and identified in N.D.A.C. Section 69-06-08-01. Maps of the Project's site, and additional detail regarding the site, are provided in Case No. PU-21-121.

- (3) *A description of the efforts by the utility to coordinate the plan with other utilities to provide a coordinated regional plan for meeting the utility needs of the region.*

Apex has executed offtake agreements for the full output of the Project under long-term virtual power purchase agreements ("VPPAs"). Additionally, Bowman Wind has entered into a generator interconnection agreement with the Southwest Power Pool ("SPP") and Basin Electric Power to facilitate Project interconnection to the grid.

- (4) *A description of the efforts to involve environmental protection and land-use planning agencies in the planning process, as well as other efforts to identify and minimize environmental problems at the earliest possible stage in the planning process.*

Bowman Wind has designed a Project that optimizes the wind resource, minimizes the impact on land resources and potentially sensitive areas and follows the energy conversion facility siting criteria and transmission facility corridor and route criteria outlined in N.D.A.C. Ch. 69-06-08. Bowman Wind employed qualified environmental consulting firms to study and identify avoidance and exclusion areas within the Project site, in accordance with N.D.C.C. Ch. 49-22 and N.D.A.C. Section 69-06-08-01. As discussed above, Bowman County issued a Conditional Use Permit for the Project, and the Commission issued Certificate of Site Compatibility No. 65 for the Project. Throughout Project development, Bowman Wind has consulted with applicable local, state, and federal agencies and entities, and will continue to do so, as appropriate.

Additional information regarding Bowman Wind's agency and entity contacts, and efforts to identify and minimize any potential environmental issues, is provided in Case No. PU-21-121.

- (5) *A statement of the projected demand for the service rendered by the utility for the ensuing ten years and the underlying assumptions for the projection, with that information being as geographically specific as possible, and a description of the manner and extent to which the utility will meet the projected demands.*

As noted above, Apex has executed offtake agreements for the full output of the Project under long-term VPPAs. The Project is anticipated to help satisfy local, regional, and/or national renewable energy demands.

Locally, in 2021, the North Dakota Legislature enacted a statutory provision adopting a low-emission technology initiative, which establishes a goal that the “agricultural, forestry, natural resources, and working land of the United States should provide energy from low-emission technology and continue to produce safe, abundant, and affordable food, fuel, feed, and fiber.”¹ As used in this initiative, low-emission technology includes, among others, wind. Additional renewable resources will be needed to meet the low-emission technology initiative.

With improving technology and falling costs, utilities are beginning to include renewable energy projects in their resource plans as long-term economic energy and capacity resources. As noted above, in North Dakota, excellent wind resources create high capacity factor generation, reducing the cost/MWh, and in general, alternative energy sources provide lower costs per MWh than conventional sources.² Wind and solar costs have fallen 41 and 57 percent, respectively, over the last decade, making them the most affordable new electricity sources in most of the U.S.³ By the end of 2022, 27 states were generating at least 10 percent of electricity from wind, utility-scale solar, and small-scale solar.⁴

A need also exists for renewable energy produced in North Dakota to meet state renewable portfolio standards. Ten of the MISO states currently have either mandated or voluntary renewable portfolio standards or policies.⁵ Under current state standards, aggregate United States renewable portfolio standard demand more than doubles from 400 terawatt hours (“TWh”) in 2023 to 900 TWh in 2050.⁶ Given existing renewable energy capacity, roughly 300 TWh of additional clean electricity supply will be required by 2030 and 800 TWh by 2050.⁷ In addition, the regional transmission grid is being expanded to deliver wind generation in a cost-effective manner; specifically, MISO’s Multi-Value Project (“MVP”) Portfolio is expected to enable 41 million megawatt hours (“MWh”) of wind energy per year to meet renewable energy mandates and goals.⁸

¹ See N.D.C.C. § 17-01-01.

² Lazard, *Lazard’s Levelized Cost of Energy Analysis – Version 16.0* (April 2023), at 2.

³ American Clean Power, 2022 American Clean Power Annual Market Report (2022). Accessed online June 4, 2024. Retrieved from https://cleanpower.org/wp-content/uploads/2023/05/2022-ACP-Annual-Report_Public.pdf (“2022 ACP Market Report”).

⁴ 2022 ACP Market Report.

⁵ U.S. Energy and Information Administration, Renewable energy explained, Portfolio standards (last updated November 30, 2022). Accessed online June 4, 2024. Retrieved from <https://www.eia.gov/energyexplained/renewable-sources/portfolio-standards.php>.

⁶ See Lawrence Berkeley National Laboratory, U.S. State Renewables Portfolio & Clean Energy Standards, 2023 Status Update (June 2023), at 23. Accessed online June 4, 2024. Retrieved from https://eta-publications.lbl.gov/sites/default/files/lbnl_rps_ces_status_report_2023_edition.pdf.

⁷ See Lawrence Berkeley National Laboratory, U.S. State Renewables Portfolio & Clean Energy Standards, 2023 Status Update (June 2023), at 23.

⁸ MTEP18, MISO Transmission Enhancement Plan, at 42. Accessed online June 4, 2024. Retrieved from <https://cdn.misoenergy.org/MTEP18%20Full%20Report264900.pdf>.

In addition to traditional utility demand for wind energy, a growing number of corporations are turning to renewable energy to save money on energy and meet sustainability goals. Corporate customers either purchase renewable energy directly or obtain renewable benefits and cost savings through financially settled contracts, sometimes called virtual PPAs. In addition, many utilities are creating “green tariffs,” which allow customers to purchase up to 100 percent renewable energy from the utility.⁹

Beyond the growing demand from utilities, corporations such as Apple, Google and Facebook, along with many others, have recently set goals to obtain 100 percent of their energy from renewables. These clean energy goals fuel the demand for corporate renewables procurement and subsequent PPAs. According to Wood Mackenzie’s report titled an “*Analysis of Commercial and Industrial Wind Energy Demand in the United States*,” the United States is “at the beginning stage of a corporate renewables procurement boom,” with approximately “85 gigawatts of renewable energy demand” from the “largest U.S. companies” alone through 2030.¹⁰

In summary, the renewable energy produced by Bowman Wind’s proposed Project will be positioned to help meet local renewable energy initiatives/goals, the regional need for renewable energy, or national C&I customer demand.

⁹ U.S. Environmental Protection Agency – Green Power Partnership. Guide to Purchasing Green Power. Chapter 4. Accessed online June 4, 2024. Retrieved from https://www.epa.gov/sites/default/files/2016-01/documents/purchasing_guide_for_web.pdf.

¹⁰ Michelle Froese, *Corporates usher in new wave of US wind and solar growth* (Aug. 27, 2019). Accessed online June 4, 2024. Retrieved from <https://www.windpowerengineering.com/corporations-usher-in-new-wave-of-u-s-wind-and-solar-growth/>.

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**IN THE MATTER OF THE FILING OF A
TEN YEAR PLAN BY BOWMAN WIND,
LLC**

Case No. PU-24-___

**NOTICE OF FILING TEN YEAR PLAN
2024-2034**

PLEASE TAKE NOTICE that Bowman Wind, LLC, in accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, filed a Ten Year Plan for the years 2024 through 2034 with the North Dakota Public Service Commission on June 27, 2024, and the Bowman County Auditor on June 27, 2024.

Dated this 27th day of June, 2024.

FREDRIKSON & BYRON, P.A.



By _____

MOLLIE M. SMITH, ND Bar #06714
Attorney for Bowman Wind, LLC
60 South Sixth Street, Suite 1500
Minneapolis, MN 55402-4400
(612) 492-7270

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that a true and correct copy of the following document:

NOTICE OF FILING TEN-YEAR PLAN: 2024-2034

was served on the 27th day of June, 2024 by placing the same in the United States mail, postage prepaid, properly addressed to the following:

North Dakota Aeronautics Commission
P.O. Box 5020
Bismarck, ND 58502-5020

North Dakota Office of Attorney General
600 E. Boulevard Ave.
Dept. 125
Bismarck, ND 58505-0040

North Dakota Department of Agriculture
600 E. Boulevard Ave.
Dept. 602
Bismarck, ND 58505-0020

North Dakota Department of Health
600 E. Boulevard Ave.
Bismarck, ND 58505-0250

North Dakota Department of Human Services
600 E. Boulevard Ave.
Dept. 325
Bismarck, ND 58505-0250

North Dakota Department of Labor and Human Rights
600 E. Boulevard Ave.
Dept. 406
Bismarck, ND 58505-0340

North Dakota Department of Career and Technical Education
State Capitol, 15th Floor
600 E. Boulevard Ave., Dept. 270
Bismarck, ND 58505-0610

North Dakota Department of Commerce
1600 E. Century Ave., Suite 6
P.O. Box 2057
Bismarck, ND 58502-2057

Energy Infrastructure and Impact Office
North Dakota Department of Trust Lands
1707 North 9th Street
Bismarck, ND 58501

North Dakota Game and Fish Department
100 N. Bismarck Expressway
Bismarck, ND 58501-5095

North Dakota Industrial Commission
State Capitol, 14th Floor
600 East Boulevard Ave., Dept. 405
Bismarck, ND 58505-0840

Office of Governor Doug Burgum
State of North Dakota
600 E. Boulevard Ave.
Bismarck, ND 58505-0001

North Dakota Department of Transportation
608 E. Boulevard Ave.
Bismarck, ND 58505-0700

State Historical Society of North Dakota
612 E. Boulevard Ave.
Bismarck, ND 58505-0830

North Dakota Indian Affairs Commission
State Capitol Building
600 E. Boulevard Ave.
1st Floor - Judicial Wing, Rm. #117
Bismarck, ND 58505-0300

Job Service North Dakota
P.O. Box 5507
Bismarck, ND 58506-5507

North Dakota Department of Trust Lands
1707 North 9th Street
Bismarck, ND 58501

North Dakota Parks and Recreation Department
Liberty Memorial Building
604 E Boulevard Ave, Dept. 750
Bismarck, ND 58505

Natural Resources Conservation Service
North Dakota NRCS State Office
220 East Rosser Avenue
Federal Building
Bismarck, ND 58502-1458

North Dakota Department of Water Resources
1200 Memorial Highway, Dept. 770
Bismarck, ND 58504

United States Department of Defense
1400 Defense Pentagon
Washington, DC 20301-1400

United States Fish and Wildlife Service
North Dakota Ecological Services Field Office
3425 Miriam Avenue
Bismarck, ND 58501-7926

United States Army Corps of Engineers
North Dakota Regulatory Office
3319 University Drive
Bismarck, ND 58504

Federal Aviation Administration
United States Department of Transportation
800 Independence Ave. SW
Washington, DC 20591

North Dakota Transmission Authority
c/o North Dakota Industrial Commission
State Capitol 14th Floor
600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

North Dakota Pipeline Authority
c/o North Dakota Industrial Commission
State Capitol 14th Floor
600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

North Dakota Department of Environmental Quality
4201 Normandy Street
Bismarck, ND 58503-1324

North Dakota Geological Survey
600 East Boulevard Avenue,
Bismarck, ND 58505-0840

North Dakota Forest Service
State Headquarters - Molberg Center
307 - 1st Street East
Bottineau, ND 58318-1100

Federal Bureau of Land Management
Montana/Dakotas State Office
5001 Southgate Drive
Billings, MT 59101

Military Aviation and Installation Assurance Siting Clearinghouse
3400 Defense Pentagon, Room 5C646
Washington, DC 20301 – 3400

20th Airforce 91st Missile Wing
196 Missile Ave.
Minot AFB, ND 58705-5006

Minot Air Force Base
196 Missile Ave.
Minot AFB, ND 58705-5006

Grand Forks Air Force Base
757 Tuskegee Amn. Blvd.
Grand Forks Air Force Base, ND, 58205
Building 418, East Entrance

Bowman County Board of Commissioners
c/o Mindy Schumacher
Bowman County Auditor
104 1st St NW, Suite 1
Bowman, ND 58623



MOLLIE M. SMITH

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**IN THE MATTER OF THE FILING OF A
TEN YEAR PLAN BY BOWMAN WIND,
LLC**

Case No. PU-24-_____

CERTIFICATE OF SERVICE

Mollie M. Smith, being first duly sworn, does depose and state that on June 27, 2024, she served the following document:

Ten Year Plan: 2024-2034

by placing a true and correct copy of said document in an envelope addressed as follows:

Mindy Schumacher
Bowman County Auditor
104 1st St NW, Suite 1
Bowman, ND 58623

and depositing the same, with postage prepaid, in the United States mail at Minneapolis, Minnesota.



Mollie M. Smith