

June 30, 2022

**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: M-Power One, LLC's Ten Year Plan for 2022-2032  
Case No. PU-22-\_\_\_\_\_**

Dear Mr. Kahl:

Enclosed for filing are two copies of the following documents:

1. M-Power One, LLC's Ten Year Plan: 2022-2032;
2. Notice of Filing Ten Year Plan: 2022-2032; 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/bd/76479672

Enclosures

cc: Lloyd Anderson (via e-mail, w/ enclosure)  
Beth Berge (via e-mail, w/ enclosure)

1 PU-22-272 Filed 06/30/2022 Pages: 14  
2022 - 2032 Ten Year Plan  
M-Power One, LLC  
Mollie Smith, Fredrikson&Byron, P.A.

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF THE FILING OF A  
TEN YEAR PLAN BY M-POWER ONE,  
LLC**

**Case No. PU-22-\_\_\_\_**

**CERTIFICATE OF SERVICE**

Mollie M. Smith, being first duly sworn, does depose and state that on June 30, 2022, she served the following document:

**M-Power One, LLC's Ten Year Plan: 2022-2032**

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

Emily Wigen  
Steele County Auditor  
201 Washington Ave W  
P.O. Box 275  
Finley, ND 58230-0275

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



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Mollie M. Smith

**TEN YEAR PLAN: 2022-2032**

**M-Power One, LLC**

**June 2022**

In accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, M-Power One, LLC (“M-Power One”), submits the following Ten Year Plan for years 2022 through 2032.

- (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.

M-Power One is a North Dakota limited liability company and a wholly owned subsidiary of M-Power, LLC. M-Power One plans to develop an energy conversion facility in Steele County, North Dakota, that will be known as the Luverne Northfield Extension Wind Energy Project (“Project”). The Project will be adjacent to and north of the existing Luverne Wind Farm, which is located in Griggs and Steele Counties, North Dakota. The maximum potential wind energy capacity for the area currently under wind development easements is estimated to be 151.8 megawatts (“MW”). The final developed capacity will depend upon the ultimate selection of specific turbines.

A generation-outlet transmission facility (230 kilovolt (“kV”) or less) may need to be constructed in order to interconnect the Project to the grid. The necessity for, location of and design details regarding such a transmission facility will be determined at a future date, pending the selection of the final transmission interconnection option.

M-Power One does not have any plans to construct, own or operate any generation or transmission facilities other than the Project and associated generation-outlet transmission facility. M-Power One does not currently own or operate any facilities. As such, M-Power One does not own or operate any facilities that will be removed from service during the next ten years.

- (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, M-Power One plans to pursue development of the Project in Steele County, North Dakota. M-Power One also plans to construct a generation-outlet transmission facility, and specific details regarding the facility location will be determined upon selection of the final interconnection point.

A qualified environmental consulting firm, familiar with the Project Area, has assisted M-Power One in evaluating the site selected for the proposed Project so as to ensure compliance with the exclusion and avoidance area criteria referenced in N.D.C.C. § 49-22-05.1 and identified in N.D.A.C. Ch. 69-06-08. A map depicting the study area for the Project is attached as **Exhibit A**.

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

M-Power One has commissioned studies to determine which regional utilities may have a need for the wind energy capacity produced by the Project, and to identify various options for transmitting the Project's output from the Project site to the identified utilities' respective loads. The studies will assist M-Power One in identifying potential off-takers, as well as in its efforts to coordinate selection of the best option(s) for delivering the Project's output to the destination(s) designated by the ultimate off-taker(s). M-Power One is also analyzing options for interconnecting the Project to the transmission grid. When plans are finalized, M-Power One will apply to the applicable transmission system operator for further study of the intended interconnection.

- (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.

As noted above, a qualified environmental consulting firm has assisted M-Power One with identifying avoidance and exclusion areas within the potential Project site, in accordance with N.D.C.C. Ch. 49-22 and N.D.A.C. Ch. 69-06-08. To date, no environmental or siting concerns have been identified that would preclude development within the footprint.

M-Power One has been in contact with the United States Fish and Wildlife Service, the Federal Aviation Administration ("FAA"), the North Dakota Game and Fish Department, and township officials, among others, regarding the proposed Project. Riverside and Greenville Townships granted Conditional Use Permits for the Project on March 17, 2015, and April 15, 2015, respectively. M-Power One received Determinations of No Hazard from the FAA on a preliminary turbine array. As further environmental studies are completed, M-Power One will engage in further consultation with federal, state and local agencies and governmental units regarding the proposed Project.

- (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.

M-Power One plans to sell the energy produced by its proposed Project to one or more utilities that need additional renewable energy in order to comply with state and/or, if applicable, federal renewable energy goals and objectives.

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.”<sup>1</sup> 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.

Also, in 2010, the North Dakota Department of Commerce, EmPower ND Commission, published the Comprehensive State Energy Policy 2010-2025, which recommended a capacity of wind generation up to 5,000 MW by 2020.<sup>2</sup> The state had a total of 3,989 MW of installed wind capacity at the end of 2020.<sup>3</sup> 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. In North Dakota, excellent wind resources create high capacity factor generation, reducing the cost/megawatt hour (“MWh”). In general, alternative energy sources provide lower costs per MW-hour than conventional sources.<sup>4</sup>

A need also exists for renewable energy produced in North Dakota to meet state renewable portfolio standards. Eleven of the MISO states currently have either mandated or voluntary renewable portfolio standards or policies.<sup>5</sup> Under current state standards, total United

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<sup>1</sup> See N.D.C.C. § 17-01-01.

<sup>2</sup> North Dakota Department of Commerce. Undated. EmPower North Dakota. Comprehensive State Energy Policy 2010-2025. Accessed online June 17, 2022. Retrieved from <https://www.commerce.nd.gov/sites/www/files/documents/ED%26F/Energy/empower%20state%20energy%20report.pdf>.

<sup>3</sup> U.S. Department of Energy. 2021. Land-Based Wind Market Report. Accessed online June 17, 2022. Retrieved from [https://www.energy.gov/sites/default/files/2021-08/Land-Based%20Wind%20Market%20Report%202021%20Edition\\_Full%20Report\\_FINAL.pdf](https://www.energy.gov/sites/default/files/2021-08/Land-Based%20Wind%20Market%20Report%202021%20Edition_Full%20Report_FINAL.pdf).

<sup>4</sup> Lazard, *Lazard’s Levelized Cost of Energy Analysis – Version 15.0* (October 2021), at 2. Accessed online June 17, 2022. Retrieved from <https://www.lazard.com/media/451905/lazards-levelized-cost-of-energy-version-150-vf.pdf>.

<sup>5</sup> National Conference of State Legislatures, State Renewable Portfolio Standards and Goals (Aug. 13, 2021), <https://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>; MTEP18 MISO Transmission Enhancement Plan, at 182. Accessed online June 17, 2022. Retrieved from <https://cdn.misoenergy.org/MTEP18%20Full%20Report264900.pdf>.

States renewable portfolio standard demand will increase from 310 terawatt hours (“TWh”) in 2019<sup>6</sup> to 630 TWh in 2030.<sup>7</sup> Given existing renewable energy capacity, an additional 250 TWh increase in renewable resources will be required to meet demand through 2030.<sup>8</sup> 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.<sup>9</sup>

Given the geographic proximity of M-Power One’s proposed Project to the Minnesota market, energy from the proposed Project may be utilized to meet the existing renewable energy needs of one or more utilities in the MISO region, as well as other utilities located in adjacent Regional Transmission Organizations/Independent System Operators, such as the Southwest Power Pool.

In addition to traditional local and regional 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.<sup>10</sup>

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

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<sup>6</sup> See Lawrence Berkeley National Laboratory, U.S. Renewable Portfolio Standards 2019 Annual Status Report (July 2019), at 24. Retrieved from [https://eta-publications.lbl.gov/sites/default/files/rps\\_annual\\_status\\_update-2019\\_edition.pdf](https://eta-publications.lbl.gov/sites/default/files/rps_annual_status_update-2019_edition.pdf).

<sup>7</sup> Lawrence Berkeley National Laboratory, U.S. Renewable Portfolio Standards, 2021 Status Update (February 2021), at 25. Retrieved from [https://eta-publications.lbl.gov/sites/default/files/rps\\_status\\_update-2021\\_early\\_release.pdf](https://eta-publications.lbl.gov/sites/default/files/rps_status_update-2021_early_release.pdf).

<sup>8</sup> Lawrence Berkeley National Laboratory, U.S. Renewable Portfolio Standards, 2021 Status Update (February 2021), at 27.

<sup>9</sup> MTEP 18 MISO Transmission Enhancement Plan, at 42.

<sup>10</sup> U.S. Environmental Protection Agency – Green Power Partnership. Guide to Purchasing Green Power. Chapter 4. Accessed online June 17, 2022. Retrieved from [https://www.epa.gov/sites/default/files/2016-01/documents/purchasing\\_guide\\_for\\_web.pdf](https://www.epa.gov/sites/default/files/2016-01/documents/purchasing_guide_for_web.pdf).

2030.<sup>11</sup> Another Wood Mackenzie report titled “*US Corporate Procurement of Wind and Solar 2020*” lists 2019 as “the largest year for megawatts of annual wind and solar [commercial and industrial (“C&I”)] capacity additions and the largest year on record for new wind and solar C&I PPAs signed.” These growth trends are expected to continue, and 2020-2021 saw an immense demand for C&I renewable energy PPAs.<sup>12</sup> Similarly, according to a 2019 research report, corporate contracts accounted for 22 percent of 2018 PPAs for renewables in the United States.<sup>13</sup> Further, the buyers are not just large corporations; smaller companies are entering into aggregated purchasing models and further driving additional market expansion.<sup>14</sup>

In summary, the renewable energy produced by M-Power One’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.

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<sup>11</sup> Wood Mackenzie, *Corporates usher in new wave of US wind and solar growth* (Aug. 20, 2019). Accessed online June 17, 2022. Retrieved from <https://www.woodmac.com/our-expertise/focus/Power--Renewables/corporates-usher-in-new-wave-of-u.s.-wind-and-solar-growth/>.

<sup>12</sup> See, e.g., Jared Anderson, *US Corporate Renewable Power Buyers Procure 10.6 GW of Capacity in 2020* (Feb. 10, 2021). Accessed online June 17, 2022. Retrieved from <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/coal/021021-us-corporate-renewable-power-buyers-procure-106-gw-of-capacity-in-2020>; Michael Copley, *Corporate Renewable Energy Deals Soared in 2021, Smashing Previous Record* (Jan. 31, 2022). Accessed online June 17, 2022. Retrieved from <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/corporate-renewable-energy-deals-soared-in-2021-smashing-previous-record-68659987>.

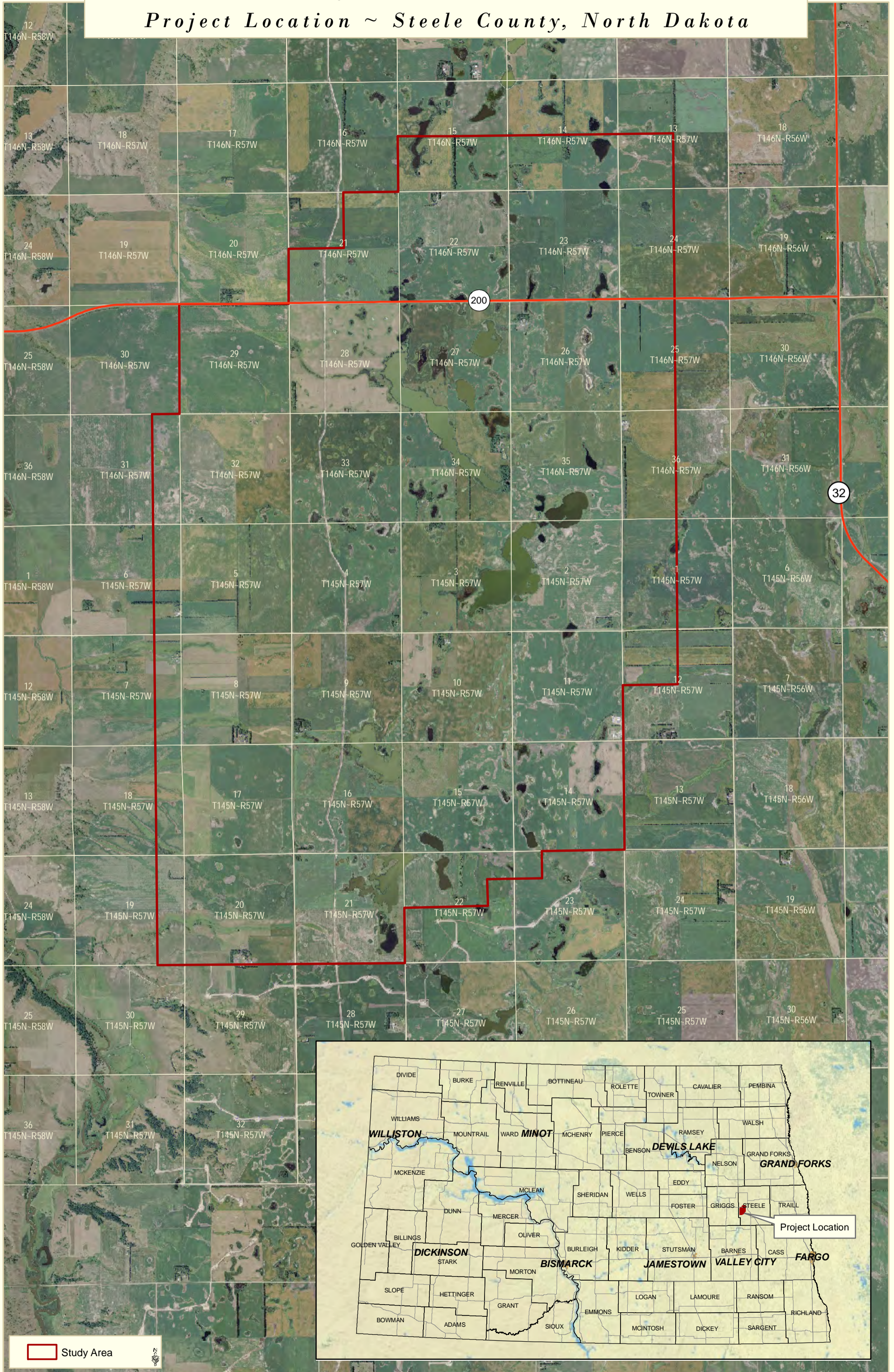
<sup>13</sup> Emma Foehringer Merchant, *Corporate Renewables Procurement Accounted for Nearly a Quarter of All Deals in 2018* (Feb. 5, 2019). Accessed online June 17, 2022. Retrieved from <https://www.greentechmedia.com/articles/read/corporate-renewables-procurements-quarter-ppa-2018>.

<sup>14</sup> See Emma Foehringer Merchant, *2018 Was Record Year for Corporate Clean Energy Contracts* (Jan. 31, 2019). Accessed online June 17, 2022. Retrieved from <https://www.greentechmedia.com/articles/read/reports-confirm-a-record-year-for-corporate-clean-energy-contracts#gs.nxat51>.

# Luverne Northfield Extension Wind Farm

## Project Location ~ Steele County, North Dakota

Exhibit A



Study Area

EXHIBIT A

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF THE FILING OF A  
TEN YEAR PLAN BY M-POWER ONE,  
LLC**

Case No. PU-22-\_\_\_\_

**NOTICE OF FILING TEN YEAR PLAN  
2022-2032**

**PLEASE TAKE NOTICE** that M-Power One, 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 2022 through 2032 with the North Dakota Public Service Commission on June 30, 2022, and the Steele County Auditor on June 30, 2022.

Dated this 30th day of June, 2022.

FREDRIKSON & BYRON, P.A.



By \_\_\_\_\_

MOLLIE M. SMITH, ND Bar #06714  
*Attorney for M-Power One, LLC*  
200 South Sixth Street, Suite 4000  
Minneapolis, MN 55402-1425  
(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: 2022-2032**

was served on the 30th day of June, 2022 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

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 58505-0200

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 2  
P.O. Box 2057  
Bismarck, ND 58503

Energy Infrastructure and Impact Office  
North Dakota Department of Trust Lands  
1707 North 9th Street  
P.O. Box 5523  
Bismarck, ND 58506-5523

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  
P.O. Box 5523  
Bismarck, ND 58506-5523

North Dakota Parks and Recreation Department  
Century Center  
1600 E. Century Ave., Suite 3  
PO Box 5594  
Bismarck, ND 58506-5594

Natural Resources Conservation Service  
North Dakota NRCS State Office  
220 East Rosser Avenue  
Federal Building, Room 270  
Bismarck, ND 58501

North Dakota State Water Commission  
900 E. Boulevard Ave., Dept. 770  
Bismarck, ND 58505-0850

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

United States Fish and Wildlife Service  
North Dakota 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

20<sup>th</sup> Airforce 91<sup>st</sup> Missile Wing  
c/o Colonel Christopher Menuey  
Minot AFB, ND 58705-5006

Minot Air Force Base  
c/o Laura E. Seabeneck, Community Planner  
445 Peacekeeper Place  
Minot AFB, ND 58705-5006

Grand Forks Air Force Base  
319th Air Base Wing Public Affairs Office  
701 Eielson St, Bldg 607 Rm 211  
GFAFB ND 58204

Steele County Board of Commissioners  
c/o Emily Wigen, Steel County Auditor  
201 Washington Ave W  
PO Box 275  
Finley, ND 58230-0275

A handwritten signature in cursive script that reads "Mollie M. Smith".

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MOLLIE M. SMITH