

## APPENDIX C – TEN YEAR PLAN

**TEN YEAR PLAN: 2024-2034**  
**Flickertail Solar Project, LLC**

**June 2024**

In accordance with N.D.C.C. § 49-22-04 and N.D.A.C. Ch. 69-06-02, Flickertail Solar Project, LLC (“Flickertail”), 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.*

Flickertail is proposing to develop and construct an up to 300 megawatt (“MW”) alternating current solar energy generating system and associated facilities in Abercrombie Township in Richland County, North Dakota (“Project”). The Project will include solar arrays, inverters, transformers, access roads, an electrical collection system, an operations and maintenance facility, a substation, security fencing, meteorological towners, and other associated facilities.

On November 20, 2023, Abercrombie Township issued a conditional use permit to Flickertail for the Project. Furthermore, on March 19, 2024, Abercrombie Township issued a Building Permit to Flickertail for the Project. Flickertail plans to submit an application for a Certificate of Site Compatibility with the North Dakota Public Service Commission (“Commission”) in 2024.

The Project will interconnect to the grid via an approximately 530-foot long 230 kilovolt (“kV”) gen-tie line extending from the Project’s substation to the point of interconnection, a new switching station at Minnkota Power Cooperative’s (“Minnkota”) existing Frontier-Wahpeton 230 kV transmission line. The gen-tie line will be less than one mile long and, therefore, is not subject to the jurisdiction of the Commission as a “transmission facility.”

Other than the proposed Project, Flickertail 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, Flickertail 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 electric energy conversion facilities and the tentative location of all electric 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.*

The Project will be located in Abercrombie Township in Richland County, North Dakota. The Project will interconnect to Minnkota’s Frontier-Wahpeton 230 kV transmission line. A map of the proposed site for the Project is provided in **Exhibit A**, attached hereto. Flickertail anticipates the Project will be in-service by the end of 2028.

The Project will be designed so as to comply with the exclusion and avoidance areas referenced in N.D.C.C. § 49-22-05.1 and identified in N.D.A.C. Ch. 69-06-08.

- (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.*

Flickertail has identified potential offtakes and is currently negotiating to sell the Project or the Project's power to commercial and industrial customers, utilities, and/or municipalities. Energy produced by the Project may help local or regional utilities to meet applicable renewable energy needs. On August 29, 2023, Flickertail executed a large generator interconnection agreement and Flickertail has negotiated and plans to execute the facility construction agreement no later than July 31, 2024.

- (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.*

Flickertail engaged the services of 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 noted above, Abercrombie Township issued a conditional use permit on November 20, 2023, and a building permit on March 19, 2024 for the Project. Additionally, Flickertail has consulted with applicable local, state, and federal agencies and entities in connection with siting and development of the Project. Flickertail will continue to work with agencies and entities, as appropriate, throughout the development, construction, and operation of the 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.*

As discussed above, Flickertail is in the process of identifying an offtaker for the Project's output. Flickertail is actively marketing the project to a number of potential off-takers and may sell the power in the form of a power purchase agreement ("PPA"), or the Project could be owned directly by a utility. As an independent power producer, Flickertail is able to bid into a variety of markets. Utilities and other customers seeking to diversify and build their energy generation portfolios are attracted to solar energy projects because of their ability to offer high-capacity value and long-term contracts at a fixed and competitive price while simultaneously providing the associated environmental benefits to meet existing and future renewable energy procurement and sustainability goals and mandates. In general, renewable energy sources provide lower costs per megawatt hour than conventional sources.<sup>1</sup> Thus, the Project could help satisfy local, regional, or even national renewable energy demands.

---

<sup>1</sup> Lazard, *Lazard's Levelized Cost of Energy Analysis – Version 16.0* (April 2023), at 2. Accessed online May 28, 2024. Retrieved from <https://www.lazard.com/media/typdgxmm/lazards-lcoeplus-april-2023.pdf>.

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>2</sup> As used in this initiative, low-emission technology includes, among others, solar. Additional renewable resources will be needed to meet the low-emission technology initiative.

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.<sup>3</sup> 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.<sup>4</sup> Given existing renewable energy capacity, roughly 300 TWh of additional clean electricity supply will be required by 2030 and 800 TWh by 2050.<sup>5</sup> In addition, the regional transmission grid is being expanded to deliver renewable energy generation in a cost-effective manner.<sup>6</sup> North Dakota’s available land and good insolation, along with newly constructed transmission lines, create an ideal environment for solar energy projects to meet regional renewable and solar standards or policies.

With improving technology and falling costs, utilities are beginning to include solar projects in their resource plans as long-term economic energy and capacity resources. In North Dakota, peak solar generation has a high correlation with the MISO’s coincident peak, which determines the reserve margins MISO utilities must maintain for reliability and reserve sharing purposes. Recent solar pricing has shown that utility scale solar provides electricity during daylight hours at a cost per MW-hour on par, or less than, many gas-fired electric generators. New solar energy facilities are less expensive to construct than new conventional energy sources, even without government subsidies.<sup>7</sup> In general, renewable energy sources provide lower costs per megawatt hour than conventional sources.<sup>8</sup>

In addition to traditional local and regional utility demand for solar energy, a growing number of corporations are turning to renewable energy to save money on energy and meet

---

<sup>2</sup> See N.D.C.C. § 17-01-01.

<sup>3</sup> U.S. Energy and Information Administration, *Renewable energy explained, Portfolio standards* (last updated November 30, 2022). Accessed online May 24, 2024. Retrieved from <https://www.eia.gov/energyexplained/renewable-sources/portfolio-standards.php>.

<sup>4</sup> See Lawrence Berkeley National Laboratory, U.S. Renewable Portfolio Standards, *2023 Annual Status Report* (June 2023), at 23. Accessed online May 24, 2024. Retrieved from [https://eta-publications.lbl.gov/sites/default/files/lbnl\\_rps\\_ces\\_status\\_report\\_2023\\_edition.pdf](https://eta-publications.lbl.gov/sites/default/files/lbnl_rps_ces_status_report_2023_edition.pdf).

<sup>5</sup> See Lawrence Berkeley National Laboratory, U.S. Renewable Portfolio Standards, *2023 Annual Status Report* (June 2023), at 23.

<sup>6</sup> MTEP 18 MISO Transmission Enhancement Plan, at 42. Accessed online May 24, 2024. Retrieved from <https://cdn.misoenergy.org/MTEP18%20Full%20Report264900.pdf>.

<sup>7</sup> Lazard, *Lazard’s Levelized Cost of Energy Analysis – Version 16.0* (April 2023), at 6. Accessed online May 24, 2024. Retrieved from <https://www.lazard.com/media/typdgxmm/lazards-lcoeplus-april-2023.pdf>.

<sup>8</sup> Lazard, *Lazard’s Levelized Cost of Energy Analysis – Version 16.0* (April 2023), at 2. Accessed online May 24, 2024. Retrieved from <https://www.lazard.com/media/typdgxmm/lazards-lcoeplus-april-2023.pdf>.

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>9</sup> 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.<sup>10</sup>

In summary, the renewable energy produced by Flickertail’s proposed Project will be positioned to help meet local renewable energy initiatives/goals, the regional need for renewable energy, or national commercial and industrial customer demand.

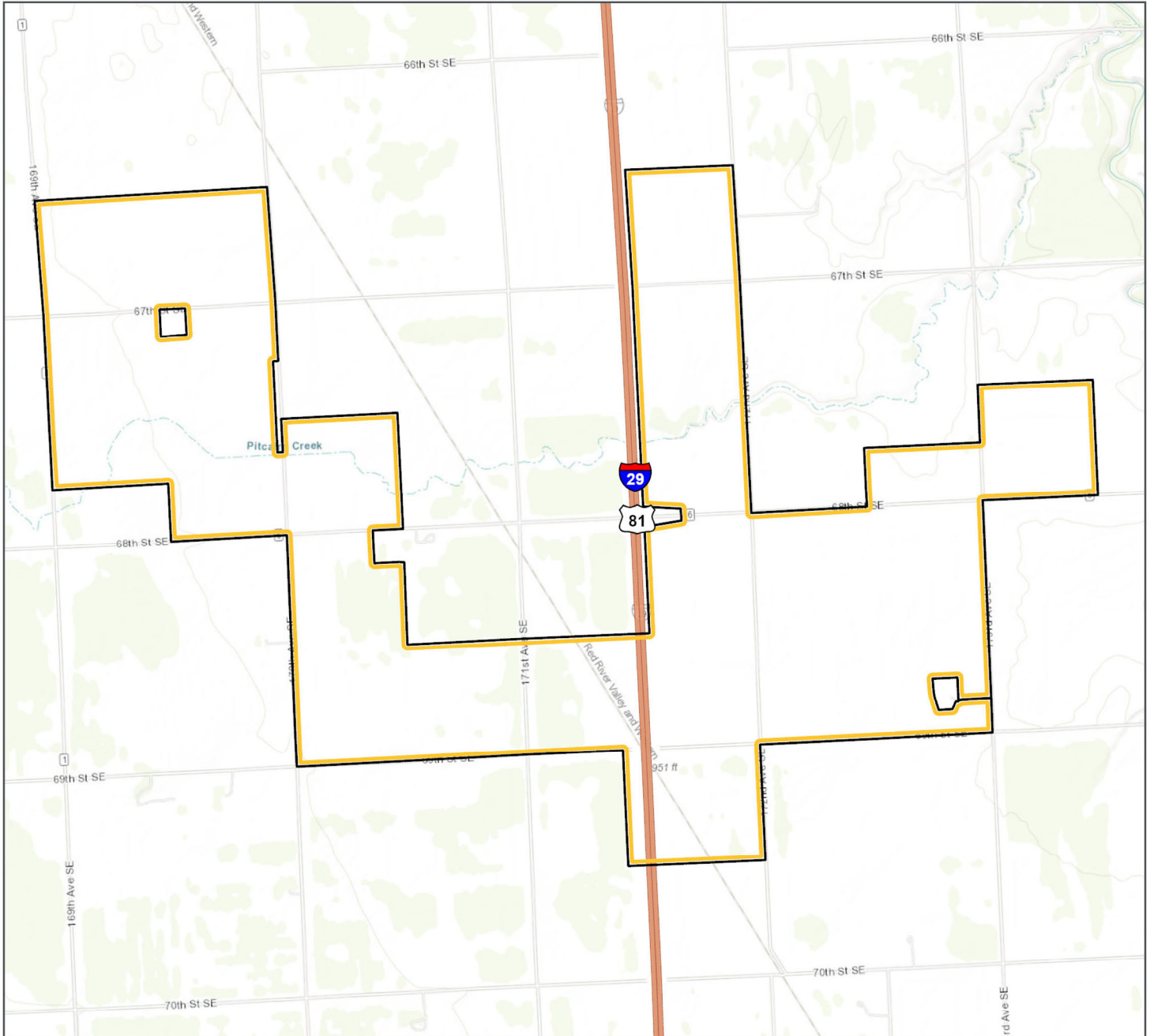
---

<sup>9</sup> U.S. Environmental Protection Agency – Green Power Partnership. *Guide to Purchasing Green Power*. Chapter 4 at 4-5. Accessed online May 24, 2024. 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).

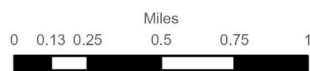
<sup>10</sup> Michelle Froese, *Corporates usher in new wave of US wind and solar growth* (Aug. 27, 2019). Accessed online May 24, 2024. Retrieved from <https://www.windpowerengineering.com/corporations-usher-in-new-wave-of-u-s-wind-and-solar-growth/>.

# EXHIBIT A

## FLICKERTAIL SOLAR PROJECT, LLC



Project Boundary

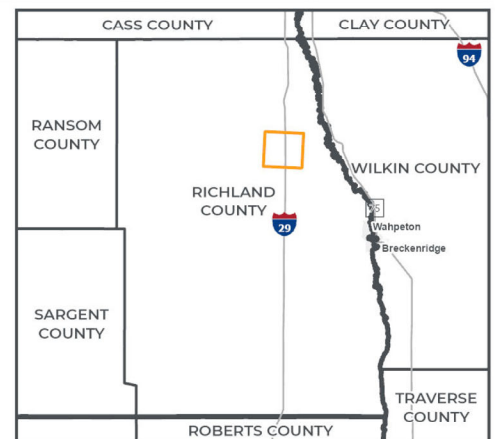


Scale 1:39,000

Coordinate System:  
NAD 1983 StatePlane North Dakota South FIPS 3302  
Feet

The following companies and organizations provided data that contributed to the production of this map.

CoreLogic, Inc.  
Environmental Systems Research Institute (ESRI)  
ReGrid, Loveland Technologies  
U.S. Department of Agriculture (USDA)  
U.S. Federal Aviation Administration (FAA)  
U.S. Geological Survey (USGS)  
WhiteStar Corporation  
Ventyx, Inc., An ABB Company  
Imagery © 2024 Hexagon and data partners.



Site Location