## Application for Conditional Use Permit for a Solar Energy Generating System, Battery Energy Storage System, and Associated Facilities

Flickertail Solar Project in Abercrombie Township, Richland County, North Dakota

> Flickertail Solar Project, LLC 422 Admiral Blvd, Kansas City, MO 64106

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#### I. INTRODUCTION

Flickertail Solar Project, LLC (Flickertail) submits this application (Application) for a Conditional Use Permit (CUP) to Abercrombie Township (Township) for Flickertail's proposed Flickertail Solar Project (Project). The Project includes an up to 300 megawatt (MW) alternating current (AC) solar energy generating system, a battery energy storage system (BESS) capable of up to 150 MW/600 MWh hours of storage (the battery can discharge up to 150 MW for four (4) hours), and associated facilities. The Project will be located in Abercrombie Township in Richland County, North Dakota. *See Figure 1*.

As part of the Project, Flickertail intends to construct a 230-kV gen-tie line that will be approximately 530 feet (0.1 mile) long to facilitate the Project's interconnection. The Project will interconnect to Minnkota Power Cooperative's (Minnkota) existing Frontier-Wahpeton 230 kV transmission line. The Project's 230-kV gen-tie line will run from the Project collector substation to a new switching station that will be permitted, constructed, and owned by Minnkota.

Flickertail Solar Project, LLC is a wholly-owned subsidiary of Savion, LLC (Savion). Savion is an affiliate of Shell Group, headquartered in Kansas City, Missouri. Since its founding in 2019, Savion has become one of the most experienced and technologically advanced utility-scale solar and energy storage project development companies in the U.S., with a vision for the transformation of the country's electricity supply to renewable resources. Savion's portfolio includes over 160 projects in various phases of development across 33 states, with over 35 gigawatts in operation, under construction, contracted, or in development.

As set forth in this Application, the Project satisfies all applicable requirements in the Abercrombie Township, Richland County, North Dakota Zoning Regulation (Ordinance).

#### **II. PROJECT DESCRIPTION**

#### A. Project Overview

The Project will be located on up to approximately 3,487.5-acres of privately-owned land (Project Area) under agreement with Flickertail in Abercrombie Township, Richland County, North Dakota. *See <u>Figure 1</u>*. The planned nameplate capacity for the solar energy generating system is up to 300 MW AC of solar energy capacity. The Project's facilities may include:

- photovoltaic (PV) solar panels and tracking racking systems;
- inverters;
- transformers;
- underground and aboveground electrical collection lines;
- security fencing and gates and equipment;
- new access roads, ingress/egress points, and improvements to existing roads (as needed);
- an operations and maintenance (O&M) facility;
- a collector substation;
- a 230-kV overhead gen-tie line;
- BESS;

- Supervisory Control and Data Acquisition (SCADA) system;
- control house for protective relay panels and site controllers;
- Meteorological equipment including, but not limited to, up to six (6) anemometer meteorological (MET) monitoring weather stations;
- Stormwater basins and/or other stormwater/drainage measures, as needed; and
- additional temporary facilities, including: laydown yard(s), improvements to public and private roads and driveways for delivery of materials and equipment, as needed.

#### **B. Project Location**

The Project will be located in Abercrombie Township, Richland County, North Dakota. See <u>Figure 1</u>. The Project Area is comprised primarily of agricultural land. Flickertail has provided a map showing existing land uses and current zoning district classification. See <u>Figure</u> <u>3</u>. Flickertail selected the specific Project Area based on significant landowner interest, transmission and interconnection suitability, optimal solar resource, and minimal impact on human and environmental resources. **Table 1, Project Area Location**, shows the Township, Range and Sections in the Project Area.

Table 1: Project Area Location			
Township Name	County	Range	Section
Abercrombie	Richland	134N-49W	03
Abercrombie	Richland	134N-49W	05
Abercrombie	Richland	134N-49W	08
Abercrombie	Richland	134N-49W	09
Abercrombie	Richland	134N-49W	10
Abercrombie	Richland	134N-49W	11
Abercrombie	Richland	134N-49W	12
Abercrombie	Richland	134N-49W	14
Abercrombie	Richland	134N-49W	15
Abercrombie	Richland	134N-49W	16
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#### C. Land Rights

Flickertail has secured voluntary lease agreements, easement agreements, or purchase options (Land Right Agreements) with landowners for the Project. The land under the Land Right Agreements creates the Project Area and are shown on <u>Figure 2</u> as the Project Area and are provided in <u>Appendix A</u>.

#### D. Project Interconnection

Flickertail intends to construct a 230-kV gen-tie line that is expected to be approximately 530 feet (0.1 mile) long to facilitate the Project's interconnection. The Project anticipates interconnecting to Minnkota's existing Frontier-Wahpeton 230 kV transmission line (which intersects the Project Area) via a short 230-kV gen-tie line (to be constructed by Flickertail) that will run from the Project substation to a new switching station that will be permitted, constructed,

and owned by Minnkota. Minnkota's new 230 kV three breaker ring bus switching station will cut into the existing Frontier-Wahpeton 230 kV transmission line.

Flickertail is in the process of negotiating a generator interconnection agreement and expects to sign the generator interconnection agreement in the Third Quarter of 2023.

#### E. Project Benefits

The Project will utilize North Dakota's strong solar resource to generate and distribute renewable energy. For example, the Project will generate enough energy to power up to approximately 59,000 homes annually. Additionally, the Project will provide meaningful economic benefits to landowners, local governments, and communities, including the following:

- Provides reliable income in the form of Land Right Agreements payments to landowners.
- Allows landowners to diversify their operations with minimal disruption to existing agricultural use.
- Creates up to approximately 300 temporary jobs, both skilled and unskilled, at the peak of Project construction.
- Creates up to 3 full-time jobs during operations.
- Provides significant and measurable indirect economic benefits to the general area, including increased retail and service activity at restaurants, gas stations, and local purchases of construction materials and supplies.
- Generates personal income by circulation and recirculation of dollars paid out by the Project as business expenditures and state and local taxes, as well as associated increases to the local tax base.
- Diversifies economic development in the Township.

In addition to direct payments to participating landowners, creation of jobs, and other economic activity, the Project will also generate significant direct economic benefits in the form of payments in lieu of property taxes paid to state and local taxing authorities. Based on the current statutory formula for payments in lieu of property taxes, which is based on the Project's nameplate capacity and production of electricity, Flickertail anticipates paying the following estimated taxes annually and over the life of the Project:

Table 2:* Production and Nameplate Capacity Tax Revenue Generated by the Project**			
<b>Taxing Authority/Recipient</b>	Approximate Amount	Approximate Amount	
	(average per year)	(over 35-year life of Project)	
North Dakota	\$8,200	\$286,800	
Richland County	\$257,800	\$9,024,400	
Richland School District***	\$303,800	\$10,634,200	
Abercrombie Township	\$89,200	\$3,121,900	
Abercrombie Fire District	\$22,300	\$780,500	
Total	\$681,400	\$23,847,900	

\* All information provided on economic benefits of the Project are estimates only subject to change due to factors including, but not limited to, modifications in tax rates, tax policy, project size, actual energy produced, and are contingent upon the Project being constructed. Nothing herein obligates Flickertail to construct or operate the Project.

\*\* These figures are based on a nameplate capacity of 300 MW and onsite meteorological data (i.e., anticipated weather conditions).

\*\*\* School districts in North Dakota are primarily funded through local tax revenue and North Dakota's state aid formal, the purpose of which is to ensure every student in North Dakota has the same amount of funding. A portion of all property taxes and payments in lieu of property taxes that are collected by a school district are either contributed to North Dakota's state aid formula or used to offset the amount of state aid a school district receives. As applied to the Project, the amount of state aid Richland School District receives will be offset by an amount equal to 75% of the payments in lieu of property taxes that are distributed to Richland School District. As a result, Richland School District will recognize an increase in revenue from the Project equal to 25% of the total amounts received from payments in lieu of taxes.

The Project would also generate increased revenue from a change in the classification and valuation of the land on which the Project is located from agriculture to commercial. Long-term beneficial impacts to the tax base of Abercrombie Township as a result of the construction and operation of the Project are expected to have a positive impact on the local economy in this area of North Dakota. The Project is designed to be socioeconomically beneficial to participating landowners, local governments, and communities.

#### F. Project Layout

In this Application, Flickertail is providing a Preliminary Site Plan depicting the proposed Project layout, which is subject to final field studies, micrositing, and engineering design. *See* **Figure 2**. The Preliminary Site Plan (**Figure 2**) shows the conceptual general footprint and layout of the Project, including proposed locations of facilities. The Project's gen-tie line, as well as Minnkota's existing and planned interconnection facilities are also shown on the Preliminary Site Plan. *See* **Figure 2**. The Project facilities are described in detail in **Section II.G below**.

Flickertail has coordinated and will continue to work diligently with its landowner-partners to ensure that the Project integrates successfully with the existing land use, facilities, and infrastructure. The Project layout depicted on the Preliminary Site Plan reflects Flickertail's effort to maximize the energy production of the Project, while complying with applicable setbacks, and minimizing and/or avoiding impacts to the land and environmental features. The Project's final

layout and ancillary facility locations will be sited so as to comply with the North Dakota Public Service Commission's (PSC) siting criteria and the Township's setback requirements. See **Section III** below for additional information on the Project's compliance with applicable requirements. The Project's updated layout will be provided to the Township prior to commencement of construction.

#### G. Project Components

Project components are described below. Preliminary locations for Project components are presented in <u>Figure 2</u>; locations are subject to change and final locations will be determined following final engineering and interconnection discussions. The final locations of Project components will be within the Project Area and will be provided to the Township prior to commencement of construction.

#### 1. Solar Panels

The Project will utilize PV panels with tempered glass varying in size approximately eight (8) feet long by four (4) feet wide, and two (2) inches thick. The panels will be installed on a tracking rack system that utilizes steel and aluminum for the foundations and frame with a motor that allows the racking to rotate from east to west throughout the day. Each tracking rack will contain multiple panels. On the tracking system, panels will be approximately 17 feet in height from the ground to the top of the panels when at a maximum tilt angle and approximately seven (7) feet when horizontal to the ground. Height may vary due to manufacturer, geotechnical results, topography, and vegetation constraints.

To limit reflection, solar PV panels are constructed of dark, light-absorbing materials. Today's panels reflect as little as two (2) percent of the incoming sunlight depending on the angle of the sun and assuming use of anti-reflective coatings. Flickertail anticipates the panels used for the Project will use an anti-reflective coating. The solar array will occupy most of the Project Area.

#### 2. Linear Axis Tracking System

A linear axis tracking system tracks the solar resource throughout the day. The panels are generally aligned in rows north and south and face east in the morning, perpendicular to the ground during mid-day, and then west in the afternoon. The panels are rotated by a small motor to slowly track with the sun throughout the day. The tracking rack system allows the Project to optimize the angle of the panels in relation to the sun throughout the day thereby maximizing production of electricity and the capacity value of the Project.

The tracking rack system is mounted on top of steel piles that are typically driven into the ground, without a need for excavation or concrete to install the piers. Geotechnical soil testing will determine the final installation process.

#### 3. Inverters and Transformers

Electrical wiring will connect the panels to inverters, which will convert the direct current (DC) output of the panels to AC, which is required for delivery to the electrical transmission grid.

The final number of inverters for the Project will depend on the inverter size, inverter and panel availability as well as the final panel configuration and facilities selected for construction. Inverters will be located within the interior portion of the fenced area of the Project Area. Inverter skids will be utilized at locations throughout the Project Area and include a transformer to which the inverters will feed electricity. These skids provide the foundation for the inverter, transformer, and SCADA system. The skids will be placed atop a concrete slab or pier foundations and typically measure approximately 9.5 feet wide by 20 feet long, with a structure height of approximately eight (8) feet above grade, depending on the final equipment procured and final engineering studies. The skids could be elevated via steel piles, or concrete foundations could be poured onsite or precast and assembled off-site.

#### 4. Electrical Collection System

After the inverter has converted the electricity from DC to AC, the electricity is steppedup via a transformer from low-voltage to medium voltage (up to 34.5 kV) and brought via the electrical collection system cables to the Project's collector substation. Electrical collection system cables will be placed underground at a typical depth of three (3) to four (4) feet below grade, where possible, dependent on geotechnical results. Portions of the electrical collection system may be located aboveground, depending on the manufacturer and site constraints.

#### 5. Access Roads

Permanent gravel access roads will be installed to facilitate operations and maintenance of the Project. Preliminary access road locations are included in the site plan. The final length and location of the access roads will depend on the equipment selected and final engineering. These roads are up to 16 feet wide and wider along curves. There are several access points to the Project from existing public roads as indicated on the site plan (**Figure 2**). Entrances to the Project will have locked gates.

Flickertail has designed access roads for effective and efficient access for operations and maintenance and for safe ingress and egress of employees, visitors, and emergency responders. Flickertail has minimized the amount of access roads for the Project, thereby minimizing the amount of ground disturbance and new impervious surfaces while still providing effective and efficient site access.

Some upgrades or other changes to the public roads may be required for construction or operation of the Project. Flickertail will work with the Township and other appropriate road authorities, as needed, to facilitate and pay for required upgrades to support such Project construction or operation that meet the required public standards. Upgrades or changes could include, but are not limited to, road improvements, addition of turning radiuses, additional aggregate, field access or driveway changes. Flickertail will obtain any required permits for this work from the appropriate road authorities, as applicable.

#### 6. SCADA System, Fencing, and Lighting

The Project will use a SCADA system, which allows remote control and monitoring of the status of the Project. The monitoring system provides status views of electrical and mechanical

data, operation and fault status, meteorological data, and grid station data.

Permanent security fencing will be installed along the perimeter of the solar arrays, the BESS, and collector substation. The fencing along the perimeter of the solar arrays will be an approximately seven (7) foot tall agricultural-style fence (non-chain link, without barbed wire). The fencing around the BESS and collector substation will be seven (7) feet above grade and may include one (1) foot or more of three (3) or more strands of barbed-wire at the top to comply with the National Electric Code. This fencing will be designed to prevent the public from gaining access to electrical equipment. All access points will have gates.

Minimal lighting will be utilized for the Project. Lighting will be used for safety and security purposes and placed at Project entrances, the O&M facility, and inverters. Lighting will be down lit, and switch and motion activated. Motion activation for lighting placed at the inverters ensures the lighting will only be used for maintenance activities or if a security risk is detected within the Project boundary. Lighting the Project in this manner will minimize nighttime visual impacts while ensuring safety and security and will be comparable to typical residential porch or workshop lighting.

#### 7. MET Stations

The Project will include up to six (6) anemometer MET stations up to approximately eight (8) feet in height. MET stations are not shown on the Preliminary Site Plan. Locations of the MET stations will depend on final engineering. All MET stations will be within the Project Area and will comply with applicable setback requirements.

#### 8. Collector Substation

The Project's collector substation will be a 34.5/230 kV step-up substation with metering and switching gear required to connect to the transmission grid. The collector substation is anticipated to include a control house for protective relay panels and site controllers. The collector substation will be designed and constructed in accordance with the applicable codes and standards, including but not limited to applicable National Electrical Code (NEC) and National Electric Safety Code (NESC) requirements. The substation's footprint will be approximately five (5) acres. The collector substation will comply with the applicable building height requirement in the Agricultural District. The substation will be fenced, as described above.

#### 9. BESS

The BESS will be capable of up to 150 MW/600 MWh of storage (the battery can discharge up to 150 MW for four (4) hours). The BESS will be located on approximately 20 acres and will be fenced. Within the fence, there will be up to 318 containers that are approximately 20 feet in length oriented in rows approximately 20 feet apart. These containers will be approximately 9.5 feet in height. The containers generally look like sleek groups of self-contained shipping containers or cabinets. The BESS design will utilize an outdoor containerized energy storage system with pad-mounted transformers connected to the collection bus in the Project substation. The BESS will include inverters that will be connected to containerized battery systems that include code-compliant safety and control features. The battery enclosures will be installed as a

group within the Project footprint along with the inverter skids.

The BESS will be completed as a surplus interconnection service, allowing Flickertail to increase the gross generating capability at the same point of interconnection of without increasing the total amount of interconnection service at the point of interconnection. The surplus interconnection service filing for the BESS cannot be filed until the Project's solar energy generating system is under construction or is in service. Accordingly, construction and commencement of operations of the BESS could occur after the solar energy generating system.

#### 10. Gen-Tie Line

The Project's 230 kV overhead gen-tie line is expected to be approximately 530 feet (0.1 mile) in length and will extend from the Project's collector substation to a new switching station which will be permitted, constructed, and owned by Minnkota.

#### 11. O&M Facility

An O&M facility may be constructed to provide workspace and storage for Project maintenance and operations personnel and would be located on approximately two (2) acres within the Project Area. The buildings typically used for this purpose are approximately 2,000 to 4,000 square feet and house certain equipment to assist in operating and maintaining the Project. A gravel parking area will be located adjacent to the O&M building and will comply with Section 6.1 of the Ordinance. This will accommodate parking for full time employees and will meet the minimum off-street parking requirements. The O&M facility may require a septic system and may use rural water service or a new private well water supply. All applicable permits will be obtained.

#### 12. Stormwater/Drainage Measures

The Project may include stormwater basins and/or other stormwater/drainage control measures. Flickertail will conduct further analyses to determine the appropriate stormwater basin and/or other stormwater/drainage measures required for the Project. Final stormwater basins and/or other stormwater/drainage control measures will be determined following the results of Flickertail's further analyses and final engineering. Flickertail will comply with all applicable regulations, including obtaining coverage under the North Dakota Pollutant Discharge Elimination System (NDPDES) General Stormwater Permit, which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP). Details will be provided to the Township prior to commencement of construction.

#### 13. Temporary Laydown Areas

Temporary laydown areas will serve as a parking area for construction personnel and staging areas for Project components. The laydown areas will be temporary in nature and will be revegetated and stabilized following completion of construction. Flickertail will not locate any laydown areas in Section 26-134N-49W.

#### H. Construction, Operation & Decommissioning

#### 1. Project Construction

A variety of activities must be completed to carry the Project through construction. Preconstruction, construction, and post-construction activities for the Project are expected to include:

- Pre-construction:
  - Environmental and natural resource surveys;
  - Geotechnical, and hydrologic evaluation/analysis;
  - Underground utility and oil and gas facility discovery;
  - Design solar array, access roads, and operations and maintenance facility
  - Design gen-tie line, electrical collection system, substation, and battery storage system; and
  - Procure all necessary facility components.
- Construction:
  - Site preparation, grubbing, and minimal grading, as necessary;
  - Construct laydown areas and set up temporary construction management facility;
  - Construct fencing;
  - Civil construction of access roads;
  - Install PV mounting posts;
  - Install collection system;
  - Install electrical enclosure/inverter;
  - Tracker installation;
  - PV panel installation;
  - Construct collector substation;
  - Construct O&M facility;
  - Construct gen-tie line; and
  - Construct BESS.
- Post-Construction:
  - Restore all disturbed areas not intended for permanent above ground facilities;
  - Seed permanent vegetation;
  - Test facility; and
  - Begin commercial production.

Haul road permits will be acquired from appropriate road authorities, as necessary. Flickertail will also acquire all permits needed to cross/bore state, county and township roads and install its gen-tie and/or collection lines. Flickertail will negotiate a road use and maintenance agreement with Abercrombie Township and, if needed, other relevant road authorities.

#### 2. Commissioning

Upon completion of the construction phase, the Project will undergo inspection and testing procedures before being commissioned. Inspection and testing will occur for each component of the solar array, as well as the associated communication, meteorological, collection, and SCADA systems.

#### 3. Operation and Maintenance

Following commissioning and commercial operation, the care, custody, and control of the facility transfers from the construction team to the operations staff. The operations staff will have full responsibility for the facility to ensure operations and maintenance are conducted in compliance with approved permits, prudent industry practice and the equipment manufacturer's recommendations. The Project will be maintained and operated by Flickertail, an affiliate, or contractor. Primary tasks include scheduled annual inspection(s) of electrical equipment, vegetation management, and snow removal on access drives.

Once construction is complete, the Project will generally see one (1) to two (2) trucks on site daily, and at intervals associated with the maintenance schedule described below during normal operations. The generating facility will be operated through a real-time control system for most operations functions.

#### 4. Decommissioning

The expected service life of the Project is 35 years. At the end of the Project's useful life, Flickertail must comply with the North Dakota Solar Facility Decommissioning Guidelines (North Dakota Administrative Code (NDAC) Chapter 69-09-10). Unless waived by the PSC, these actions will include the following:

- Dismantling and removal of all panel racking, photovoltaic modules, supports, anchors, towers, fencing, overhead cables, inverters, transformers, substations, and other equipment;
- Removal of underground cables to a depth of twenty-four inches;
- Removal of pilings and anchors, foundations, buildings, and ancillary equipment to a depth of four feet.
- Site restoration and reclamation to the approximate original topography that existed prior to construction of the facility with topsoil respread over the disturbed areas at a depth similar to that in existence prior to the disturbance; and
- Grading and restoring topsoil of areas disturbed by the facility, and reseeding according to natural resource conservation service recommendations.

In accordance with NDAC Section 69-09-10-06, Flickertail will submit a decommissioning plan to the PSC prior to the commencement of operation of the Project. Flickertail will comply

with the PSC's financial assurance requirements. For example, Flickertail must provide financial assurance to the PSC in accordance with NDAC Section 69-09-10-08:

- Prior to commencement of construction of a facility, the owner shall provide financial assurance equal to five percent of the estimated cost of construction of the facility that may be used to decommission the facility in the event it is abandoned prior to operation. The PSC will return or release this construction phase financial assurance after receiving (1) written notice from the owner that the facility is commercially operational and (2) the operational financial assurance discussed below.
- Prior to commencement of operation of a facility, the owner shall provide financial assurance that is acceptable to the PSC and sufficient to ensure complete decommissioning.
- Financial assurance may be in the form of a performance bond either as, or combination of:
  - cash escrow held by a federal insured financial institution,
  - a surety bond,
  - irrevocable letter of credit,
  - guarantee,
  - parent guarantee, or
  - another form of financial assurance that is acceptable to the PSC to cover the anticipated costs of decommissioning.

#### I. Project Schedule

The proposed Project schedule is as follows:

- Land Acquisition. Complete. Flickertail has secured voluntary Land Right Agreements with landowners for the Project.
- **Conditional Use Permit**. Flickertail is filing this Application on June 30, 2023. Flickertail anticipates that, if approved, the Township will issue the CUP by the fall of 2023.
- **PSC Certificate[s] of Site Compatibility.** Flickertail anticipates filing an application for a Certificate[s] of Site Compatibility in the First or Second Quarter of 2024, and anticipates that the Certificate[s], if approved, will be issued by the PSC in the Fourth Quarter of 2024.
- **Other Permits**. Flickertail will acquire all other permits necessary for construction of the Project prior to conducting the work for which the permit is required.
- **Construction**. Project construction is anticipated to be completed in phases. Construction of the solar energy generating system and associated gen-tie line is anticipated to begin as early as the Third or Fourth Quarter of 2025 and be completed

in the Fourth Quarter of 2027. Construction on the BESS is anticipated to begin after commencement of construction and/or operation of the solar energy generating system.

• **Commercial Operations**. Flickertail anticipates full commercial operation to occur by the end of 2027.

#### **III. COMPLIANCE WITH ORDINANCE**

Pursuant to Section 5.1.3.17 of the Abercrombie Township Zoning Regulation (Ordinance), "utilities" (as defined in Section 6.6.2.1) located in the Agricultural District are a conditionally permitted use requiring a CUP. Additionally, Section 6.6.2.2 of the Ordinance provides that all new utilities are considered conditional uses and must conform to the provisions of Section 8.2 of the Ordinance. The term "utilities" includes "electric power generating systems (including, but not limited to, solar energy generating systems and battery energy storage systems)." Ordinance Section 6.6.2.1. Since the Project includes a solar energy generating system, battery energy storage system, and associated facilities, and is located in the Agricultural District, the Project may be authorized through approval of a CUP. Accordingly, Flickertail must obtain a CUP for the Project.

#### A. Compliance With Ordinance Section 5.1 and Other Applicable Setbacks

The table below identifies setbacks applicable to the Project (see **Table 3**, **Project Setbacks**). Section 5.1 of the Ordinance outlines a number of general provisions for uses in the Agricultural District including but not limited to: lot area and lot width, yard requirements, building height, and parking requirements. The Project will meet or exceed all applicable Township provisions and setback requirements. Additionally, the Project will comply with the PSC's siting criteria. Setbacks are measured from the perimeter fence to the applicable feature.

Table 3: Project Setbacks			
North Dakota Public Service Commission			
Solar Energy Generating System and	Distance	Project Compliance	
Utility-Scale Energy Storage (Battery			
Energy Storage System) Setback			
The geographic center of an ICBM	Areas within 1,200 feet of the	N/A	
launch facility or launch control	geographic center		
facility			
Direct line between on ICBM lounch	Areas within 30 feet (9.14	N/A	
facility and a missile electron launch	meters) on either side of a		
control facilities to avoid microwave	direct line between an ICBM		
interference	launch facility and a missile		
Interference	alert or launch control facility		
Inhabited rural residence	500 feet*	The Project will comply	
		with this setback or	
		obtain a waiver	

Table 3: Project Setbacks				
Abercrombie Township				
Setback	Distance	Project Compliance		
All buildings and structures shall be placed at least 100 feet from county and state highway rights-of-way	100 feet from county and state highway rights-of-way	Aboveground Project components will comply with this setback		
All buildings and structures shall be placed at least 75 feet from the township road rights-of-way	75 feet from the township road rights-of-way	Aboveground Project components will be located at least 100 feet from township road rights-of-way		
Tree plantings and shelterbelts	120 feet from center of N and W roads; 100 feet from the center of S and E roads	The Project will comply with this setback		
The minimum front yard, measured from the front lot line	75 feet for properties abutting township roads; 100 feet for properties fronting on other rights-of-ways	Aboveground Project components will comply with this setback requirement		
The minimum rear yard, measured from the rear lot line	50 feet	Aboveground Project components will comply with this setback requirement		
The minimum side yard, measured from the side lot line	50 feet	Aboveground Project components will comply with this setback requirement		
Voluntary Commitments				
Village of Galchutt	1 mile	The Project Area will be at least 1 mile from the northern boundary of the SW ¼ of Section 26-134N-49W		
* As set forth in NDCC Section 49-22-05.1(3), the setback may be waived by the owner.				

### B. Compliance with Ordinance Section 6.6.2

Section 6.6 of the Ordinance sets forth requirements for utilities such as the Project. **Table 4, General Requirements for Utilities**, sets forth the applicable requirements and addresses the Project's compliance with each requirement.

Table 4: General Requirements for Utilities			
Ordinance	Requirement	Compliance	
Section(s)	All underground pipelines, natural gas.	The Project's underground	
0.0.2.0	petroleum pipelines and other energy	electric collection and	
	transfer lines shall be placed deep enough in	communication lines/cables	
	the ground so as to not interfere with or	will be installed in trenches or	
	operations	of at least three (3) feet and	
		will not interfere with or	
		become hazardous to normal	
		farming operations.	
6.6.2.4	Excavation for tunneling of any pipelines	N/A – the Project will not	
	under roads, farm drains, group drains and	include installation of any	
	owning or leasing said pipelines and the cost	pipennes.	
	of said excavation and damages to be born		
	by the said company.		
6.6.2.5	The utility company will coordinate with	Flickertail will coordinate	
	each applicable road authority to obtain any	with applicable road	
	permits or authorizations required to modify/improve or haul oversize/overweight	authorities to obtain any	
	loads on state or local roadways during	required to modify/improve	
	construction.	or haul oversize/overweight	
		loads on state or local	
		roadways during	
		construction, as needed.	

#### C. Compliance With Ordinance Section 8.2

Section 8.2.4 of the Ordinance (incorporating by reference Section 8.1.3) sets forth specific data submission requirements for a CUP application. **Table 5, CUP Application Data Submission Requirements** outlines the required information and identifies where in this Application each requirement is met.

Table 5: CUP Application Data Submission Requirements			
Requirement	Section(s) in Flickertail CUP		
	Application		
Petition for CUP	Application and accompanying		
	documentation		
Legal description of the area proposed [for the	<u>Appendix A</u>		
conditionally permitted use], the mile of the site.			
A map showing the existing land uses and zoning	Figure 3		
district classification of the area.			
A site plan showing buildings and uses in the [area	Figure 2		
proposed for the conditionally permitted use].			
A fee shall be paid in accordance with the schedule	Application fee (\$200/MW): Check		
established by the Township Board of Supervisors.	for \$60,000.00 provided under		
	separate cover.		

Section 8.2.6 of the Ordinance provides standards for the issuance of a CUP. Compliance with each of these criteria is discussed in **Section IV** of this Application.

#### IV. COMPLIANCE WITH ORDINANCE SECTION 8.2.6: CUP STANDARDS

#### 1. That the establishment, maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

The Project will not be detrimental to or endanger public health, safety, morals, comfort, or general welfare. Solar energy is a clean, economical, and sustainable form of energy that creates positive impacts on the economic base of the areas in which it is developed and is compatible with agricultural land uses. As discussed throughout this Application, the Project will comply with all applicable federal, state, and local regulations. For instance, as discussed above, both the PSC and the Township have adopted setback requirements that protect the public's health, safety, comfort, and general welfare. Flickertail has sited the Project so as to meet or exceed the PSC and the Township setback requirements.

Flickertail plans to coordinate with local emergency management and the local fire department to develop an emergency response plan. Further, during Project operations, the Project operator will coordinate with local emergency management and the local fire department regarding emergency response procedures and training.

Additionally, as discussed above, the Project will meet growing domestic energy demands, provide a clean source of energy, and create substantial local economic benefits.

2. That the uses, values and enjoyment of other property in the neighborhood for purposes already permitted shall be in no foreseeable manner substantially impaired or diminished by the establishment, maintenance or operation of the

#### conditional use.

As evidenced in this Application, the uses, values and enjoyment of other property in the neighborhood for purposes already permitted will not be substantially impaired or diminished by the establishment, maintenance or operation of the Project.

Solar energy and battery energy storage are compatible with the existing land uses in areas surrounding the Project. The Ordinance specifically provides that utilities (including solar energy generating systems and battery energy storage systems) are a conditionally permitted use in the Agricultural District. See Ordinance Sections 5.1.3.17 and 6.6.2. The Project will be located on and adjacent to agricultural land, and Flickertail has designed the Project to minimize agricultural impacts. The Project is not anticipated to impact agricultural activities and other existing land uses on properties adjacent to the Project Area. Additionally, the Agricultural District's purpose is to provide for preservation and protection of agricultural lands. The majority of the Project Area will not be cleared or graded during Project and will remain vegetated throughout the life of the Project. Additionally, the lands hosting facilities will be allowed to "rest" during the Project's operating life, allowing the opportunity for soil nutrients to be restored. At the end of the Project's useful life, the Project will be decommissioned in accordance with the North Dakota Solar Facility Decommissioning Guidelines, as discussed above. Following decommissioning, the land will be able to return to agricultural uses, if the landowners so choose. Thus, the Project is consistent with the Township's goal of providing long-term agricultural opportunities. Additionally, Flickertail will develop a vegetation management plan in coordination with the local Natural Resources Conservation Service (NRCS) office and the Richland County Soil Conservation District. Further, as detailed throughout this Application, the proposed Project will comply with all applicable state and Township requirements, which will minimize potential impacts on adjacent properties and other property in the Agricultural District.

The Project is also not expected to have negative effects on the value of the property adjacent to the Project. Multiple studies have shown that property values are not impacted by the presence of a solar energy generating system. Other regulatory bodies have analyzed the issue and found no impacts to property values.

Flickertail is conducting environmental, wildlife, cultural, geotechnical, and other surveys of the Project Area and will coordinate with state and federal agencies as appropriate. Based on the results of these studies, and in coordination with such agencies, the Project facilities will be refined to avoid and minimize potential impacts to natural features, wildlife, and existing land uses.

# 3. That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The Project will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

As discussed above, the Project is compatible with the existing land uses in areas surrounding the Project and existing agricultural uses and activities may continue on surrounding

properties during the life of the Project. Additionally, the Ordinance specifically provides for utilities (including solar energy generating systems and battery energy storage systems) as a conditionally permitted use in the Agricultural District. The Project does not conflict with the existing development plans of state, local, or private entities because the Project avoids developed areas.

# 4. That adequate utilities, access roads, drainage and other necessary site improvements have been or are being provided.

Adequate utilities, access roads, drainage, and other site improvements already exist or can be constructed within the Project Area.

As discussed above, the Project has or will have adequate access points and roads. Access to the Project will be via existing state, county, and/or township roads. With the limited possible exception of minor field access or driveway changes depending on final design, changes to existing roadways are not anticipated. Flickertail will coordinate with the Township and Richland County, as needed, on anticipated road use and the need for improvements and/or driveway/access changes prior to construction.<sup>1</sup> Flickertail will coordinate with the appropriate road authorities and will obtain all applicable permits, including road use and driveway/access permits.

Flickertail will avoid and/or minimize impacts to drainage. As needed, drainage systems and culverts will be installed or modified in accordance with all federal, state, and local regulations. In addition, Flickertail will comply with U.S. Environmental Protection Agency regulations regarding storm water runoff, obtaining coverage under the NDPDES General Stormwater Permit, which requires preparation of a SWPPP.

Finally, improvements required for the Project will be constructed within the Project Area as discussed above.

# 5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic impact on the area.

As discussed above, the Project has or will establish adequate access points and roads. Flickertail will coordinate with the Township on anticipated road use and the need for improvements and/or driveway/access changes prior to construction.

Flickertail's road use is expected to have a minimal effect on existing road infrastructure and will comply with all applicable federal, state, and local requirements. During the construction phase, temporary impacts are anticipated on some public roads within the vicinity of Project, primarily through additional traffic and the potential for slow-moving construction vehicles. Construction traffic will use the existing public roadway system to access the Project facilities and deliver construction materials and personnel. Increased traffic during the construction phase may be perceptible to area residents, but the slight increase in volume is not expected to affect traffic

<sup>&</sup>lt;sup>1</sup> Flickertail commits to not utilizing the portions of Galchutt Drive, 172 ½ Avenue SE, Galchutt Street, or Galchutt Avenue located within Section 26 for construction traffic.

function. Slow-moving construction vehicles may cause delays on smaller roads, similar to the impact of farm equipment during planting or harvest. However, these delays should be minimal for the relatively short construction delivery period. Overweight or oversized loads are unlikely. If they are required, Flickertail will obtain the appropriate approvals. As needed, Flickertail will coordinate with the applicable road authorities regarding selection and use of haul roads as part of the road use and maintenance agreement(s). After construction is complete, traffic impacts during the operations phase of the Project will be negligible. A small maintenance crew driving through the area in pickup trucks on a regular basis will monitor and maintain the facilities as needed, but traffic function will not be impacted as a result.

# 6. That the conditional use shall substantially conform to all applicable regulations of the district in which it is located.

The Project will comply with all applicable regulations of the Agricultural District. As discussed above, the Project is a conditional use in the Agricultural District (*see* Ordinance Sections 5.1.3.17 and 6.6.2.2). In addition, as discussed above, the Project will meet the applicable setbacks in the Agricultural District (*see* Ordinance Sections 3.8 and 5.1.5). The Project will also comply with the applicable building height requirement in the Agricultural District (*see* Ordinance Section 5.1.6.3), as well as the applicable parking and sign requirements (*see* Ordinance Sections 5.1.7 and 6.1, and 5.1.8 and 6.2, respectively).

#### V. CUP TERM

Pursuant to Ordinance Section 8.2.7.2, an approved CUP "shall become null and void within 12 (twelve) months of the date of the Board of Supervisors action unless the use is commenced, construction is underway, or the current owner possesses a valid building permit." As noted above, Project construction is anticipated to be completed in phases, with construction of the solar energy generating system and associated gen-tie line occurring prior to construction of the BESS. Flickertail will comply with Ordinance Section 8.2.7.2 by either commencing construction of the Project or by possessing a valid building permit for the Project within 12 months of approval of the CUP.

#### VI. CONCLUSION

As discussed above, the Project will comply with the applicable requirements set forth in the Township Ordinance. Therefore, Flickertail Solar Project, LLC respectfully requests that the Township Board of Supervisors:

1. Approve and issue a CUP to Flickertail Solar Project, LLC authorizing the use of the Project Area for the Project.