### KANE COUNTY DEVELOPMENT DEPARTMENT

Zoning Division, Kane County Government Center 719 S. Batavia Avenue

Geneva, Illinois 60134 Office (630) 444-1236 Fax: (630) 232-3411

Received Date

## APPLICATION FOR ZONING MAP AMENDMENT AND/OR SPECIAL USE

### Instructions:

To request a map amendment (rezoning) for a property, complete this application and submit it with all required attachments to the Subdivision and Zoning Division.

When the application is complete, we will begin the review process.

# The information you provide must be complete and accurate. If you have a question please call the subdivision and zoning division, and we will be happy to assist you.

11-07-200-004
11-07-400-004
Street Address (or common location if no address is assigned):
00N958 Illinois Route 47, Elburn, IL 60119
The state of the s

2. Applicant Information:	Name TPE IL KN07, LLC	Phone 301-3799-9996
	Address 3720 S Dahlia St Denver, CO 80237	Fax
		Email amendelson@tpoint-e.com

3. Owner of record information:	Name Deerpath Associates LLC	Phone 630-660-4484	
	Address 18 S Fifth St Geneva, IL 60134	Fax	
		Email skrill@krillandkrill.com	

<b>Loning and Use Information:</b>	
Agriculture, Proposed Open Space, and Resource Management	
Current zoning of the property: F - Farming District	
Current use of the property: Farmland	
Proposed zoning of the property: F-Farming District Special Vse for Sul Proposed use of the property: 5 MW ground mounted solar energy farm	1
Proposed use of the property: 5 MW ground mounted solar energy farm	1
If the proposed Map Amendment is approved, what improvements or construction is planned? (An accurate site plan may be required)  Construction of a 5 MW ground mounted solar energy farm, including gravel access road, metal pile foundations, solar panel array, electric cables and poles, security fencign and gate, as well as a vegetative buffer for screening.	
Attachment Checklist	Commission of the Control of the Con
Plat of Survey prepared by an Illinois Registered Land Surveyor.  Legal description  Completed Land Use Opinion (Available in pdf form at <a href="www.kanedupageswed.org/luo.pdf">www.kanedupageswed.org/luo.pdf</a> ), as required by state law, mailed to: The Kane Dupage Soil and Water Conservation District, 545 S. Randall Road, St. Charles, IL 60174.  Endangered Species Consultation Agency Action Report (available in pdf form at <a href="http://dnr.illinois.gov/ecopublic/">http://dnr.illinois.gov/ecopublic/</a> ) to be filed with the Illinois Department of Natural Resources.  (* This report may best be accessed with Internet Explorer on some computers, per the State)  List of record owners of all property within 250 feet of the subject property  Trust Disclosure (If applicable) N/A  Findings of Fact Sheet  Application fee (make check payable to Kane County Development Department) to follow via online portal per County Planning	,
I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.	
9-12-22	
Record Owner DEER PATH ASSOCIATES LLC Date By: Scott Ceici, is Manager August 12, 2022	
Applicant or Authorized Agent Date	

Date

### Deerpath Associates, LLC (TPE IL KN07, LLC)

Special Use in the F-District Farming to allow a solar energy farm

**Special Information:** The petitioner is seeking a Special Use to allow a solar energy farm to be constructed on the southwesterly portion of the property. The Special Use area would be on approximately 35 acres of the 104 acre property. Access for the facility would be at the northwest corner of the property off Keslinger Road.

**Analysis:** The Kane County 2040 Land Resource Management Plan designates this area as Resource Management.

### Staff recommended findings of fact:

1. The Special Use would allow the construction of the solar energy farm at this location.

Attachments:

Location Map Township Map

Petitioner's finding of fact sheet

## Findings of Fact Sheet - Map Amendment and/or Special Use

- The Kane County Zoning Board is required to make findings of fact when considering a rezoning. (map amendment)
- You should "make your case" by explaining specifically how your proposed rezoning relates to each of the following factors.

TPE IL KN07, LLC	8/12/2022
Name of Development/Applicant	Date

1. How does your proposed use relate to the existing uses of property within the general area of the property in question?

The proposed Project site is in a rural portion of Kane County in the Farming District, adjacent to the Village of Elburn, which was contacted prior to initiating the zoning process with Kane County. The proposed site is located near a sportsman club, metal stamping facility, and an auto parts store, as well as a few rural dwellings; however, many of the other properties in the area are used for agriculture. A solar farm is a complementary use to agriculture as it is a temporary use, and can also integrate well with commercial and industrial uses which typically consume larger amounts of electricity. It will not have any detrimental effects upon the surrounding properties. By siting the community solar farm to the Southwest portion of the parcel, the Project preserves the frontage along Keslinger Road and South Main Street for future use, thereby Project's useful life, the site will be returned to farm ground.

- 2. What are the zoning classifications of properties in the general area of the property in question?

  North (incorporated into Elburn): B-2 (General Business) and CM (Commercial/Manufacturing); West: F (Farming District) and Special Use; South: F (Farming District); East: F (Farming District) and one parcel incorporated into Elburn with B-2
- 3. How does the suitability of the property in question relate to the uses permitted under the existing zoning classification?

The existing zoning classification allows for siting of hydraulic power plants and other public utilities in the Farming District, and small structure or tower mounted wind turbines are permitted in any zoning district. Since public utilities are allowed in the Farming District, a solar farm (where solar power is generated and distributed through the public utility) is also permitted via Special Use. In addition, a solar farm is a complementary use to agricultural uses in that it is only temporary and allows the soil to rest and re-charge before returning the land to planting of row crops.

4. What is the trend of development, if any, in the general area of the property in question?

Existing development in the area includes industrial and open space recreational uses, based on the metal stamping facility to the north and the shooting club to the west. While there is an auto parts business to the east, with the presence of the shooting club to the west, this area will likely trend more towards industrial applications or continue with other agricultural uses. Analysis of the Village of Elburn Comprehensive Plan suggests the frontage along Keslinger Road and South Main Street is of use preserves.

Section 2.9 of the Kane County 2040 Land Use Plan, Sustainability and Energy, encourages a brave path forward for Kane County "to be a leader and role model in the area of energy conservation, energy efficiency, reduction of greenhouse gas emissions and use of renewable resources within Kane County and the region" (Objective 2). The Project will generate clean, renewable energy for hundreds of Kane County homes in a manner that respects the surrounding environment and greatly reduces greenhouse gas emissions, as further detailed in the Project Narrative. Additionally, both during and after construction, the Project will generate jobs and increase tax revenue, contributing directly to Objective 5 by promoting economic development and workforce opportunities to build the infrastructure of Kane County's renewable energy future. While the Project will not be contributing to agricultural production during its operations, upon the end of its useful life, it will be available for a return to agricultural land, and the land will have been allowed to rest and re-charge during the Project's operational life. The Project will remain in a natural state and available to wildlife, though it is closed off to the public with a security fence. The panels are raised off the ground and the lack of enclosed or permanent structures leaves the majority of the site open. The ground will be planted with native, pollinator-friendly vegetation that will provide ecosystem services. The Project also helps meet the goals of resource conservation since it is using the sun to produce electricity, contributing to a more robust electric system and not relying on water or sewer for Project operations.

## Findings of Fact Sheet - Special Use

Special Use Request	Date

- The Kane County Zoning Board is required to make findings of fact when considering a special use.
- Special Uses shall be considered at a public hearing before the Zoning Board of Appeals. In its report of findings of facts, recommendations shall be made to the County Board following the public hearing. The Zoning Board will not recommend a special use unless the following items are addressed:
- 6. Explain how the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

The property will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare to the community. Solar components do not have any moving parts and can be refer to IDNR's response to the Project's EcoCat submission. The Project will comply with all local, state, and federal regulations and will be operated in a safe manner at all times. In addition, electricity. Also, the community would benefit from the significant economic benefit without stressing community infrastructure - no new children in schools, no use of water and sewer systems, limited use of roads, little to no need for police or fire departments.

 Explain how the special use will not be injurious to the use, enjoyment and value of other property in the immediate vicinity.

The Project will fully comply with all setbacks as specified in the Kane County Zoning Code Section 7.5, and will fully comply with all performance standards listed in the Kane County Zoning Code, Illinois State law (including noise standards) and the special use permit. The Project will also include a landscape buffer to the East and South to reduce the visual impact on neighbors and drivers who live nearby. Moreover, as indicated by the property value impact study, the existence of the Project will have no impact on neighboring property values, and therefore will not diminish or impair property values within the neighborhood of the Project. The ConnReznick General Impact Study Report indicates that solar facilities located in similar areas, with similar land uses, do not appear to cause any negative impacts to adjacent real estate, based on a review of academic studies, CohnReznick's own paired sales data, and interviews with County Assessors and other Market Participants. The report details how solar facilities are generally harmonious with surrounding uses. In addition, the Project will not emit any air pollution, smoke, odors, light, glare, or vibrations that will impact neighboring parcels, and any noise emissions generated by the Project will comply with limits imposed by the Illinois Pollution Control Board.

8. Explain how the special use will not impede the normal, orderly development and improvement of the surrounding property.

The Project will have little to no impact on neighboring properties or the future development of the community. The Project does not generate any odor, or emit any air pollution and, in fact, provides a net environmental benefit. There will be no tree clearing. In converting noxious weeds.

The setback will be planted with a double row of evergreens coordinated with a licensed landscape architect, and the balance of the buffer will include native and pollinator-friendly species. Upon construction completion, traffic to the solar facility would be required only a few times a year to conduct maintenance, because the solar facility is remotely monitored for performance. By utilizing an existing access onto development of the Project parcel nor adjacent parcels.

 Will adequate utility, access roads, drainage and other necessary facilities be provided? Please explain:

The Project will have adequate utility interconnections. The Project received a pre-application report by ComEd providing evidence that the electric infrastructure in the area is capable of hosting a project of this scale. The Project has submitted a utility interconnection application and is currently in the Feasibility Study phase. The Project does not require water or sewer facilities to operate. The Project will also build roads and entrances necessary to access its facilities. A drain tile survey will be completed prior to construction and foundation design will work around or reroute any identified drain tiles to ensure proper drainage. The Project will also be designed in a manner that will not a net positive for stormwater. Per the Minnesota Rural Water Association, solar installations with native pollinator-friendly ground cover quality. This report is included in **Appendix N**. The Project will be designed to account for all existing features, environmental features, the Kane County Zoning Ordinance, and the Kane County Natural Resources Inventory findings. Please refer to **Appendix B** for the Zoning Site Plan.

10. Will adequate measures be provided for ingress and egress and so designed to minimize the traffic and congestion? Please explain:

The Project will be designed to include all roads and road entrances necessary to provide adequate ingress and egress to its facilities. Construction traffic will include approximately 25 work trucks per day and utilize the existing access from Keslinger Road. Considering the low number of work trucks visiting the Project site over the construction phase, traffic patterns in the vicinity of the Project will not be impacted.

The Project will have minimal traffic upon completion of construction. Landscape maintenance and maintenance to the Project components are anticipated to occur only a few times a year. Existing traffic patterns will not be impacted in the post-construction phase.

11. Will the special use conform to the regulations of the district in which it is located? Please explain:

The Project will comply with the applicable regulations for the F zoning district as well as the Ordinance. The Project will also comply with all other County requirements, and State and Federal requirements as well.

### SPECIAL USE AREA LEGAL DESCRIPTION

COMMENCING AT THE NORTHWEST CORNER OF THE EAST ½ OF SECTION 7, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL

MERIDIAN; THENCE NORTH 89°5502" EAST ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 7, A DISTANCE OF

1027.83 FEET TO A POINT ON THE WESTERLY LINE OF LANDS NOW OR FORMERLY OF DEERPATH ASSOCIATES LLC; THENCE SOUTH 0°19'31"

WEST ALONG SAID WESTERLY LINE A DISTANCE OF 48.13 FEET, TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED SPECIAL USE AREA;

THENCE THROUGH THE SAID LANDS NOW OR FORMERLY OF DEERPATH ASSOCIATES LLC THE FOLLOWING SEVEN COURSES AND DISTANCES:

- 1. THENCE SOUTH 89°46'00" EAST A DISTANCE OF 91.78 FEET TO A POINT:
- 2. THENCE SOUTH 0°11'50" EAST A DISTANCE OF 1056.19 FEET TO A POINT;
- 3. THENCE SOUTH 89°54'30" EAST A DISTANCE OF 168.12 FEET TO A POINT:
- 4. THENCE SOUTH 0°05'30" WEST A DISTANCE OF 142.38 FEET TO A POINT;
- 5. THENCE NORTH 89°49'58" EAST A DISTANCE OF 733.44 FEET TO A POINT;
- 6. THENCE SOUTH 0°05'40" WEST A DISTANCE OF 704.63 FEET TO A POINT:
- 7. THENCE SOUTH 0°05'30" WEST A DISTANCE OF 1023.18 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID LANDS NOW OR FORMERLY

OF DEERPATH ASSOCIATES LLC, AND BEING 330 FEET SOUTH OF THE NORTH LINE OF THE SOUTHEAST ¼ OF SAID SECTION 7:

THENCE ALONG THE SAID SOUTHERLY LINE OF LANDS OF DEERPATH ASSOCIATES LLC NORTH 89°44'22" WEST A DISTANCE OF 1010.54 FEET

TO THE SOUTHWEST CORNER OF SAID LANDS NOW OR FORMERLY OF DEERPATH ASSOCIATES LLC:

THENCE ALONG THE SAID WESTERLY LINE OF LANDS NOW OR FORMERLY OF DEERPATH ASSOCIATES LLC NORTH 0°19'31" EAST A DISTANCE

OF 2920.33 FEET TO THE POINT OR PLACE OF BEGINNING.

BEING 43.08 ACRES OR 1876803 SQUARE FEET BEING THE SAME MORE OR LESS.

### RECORD LEGAL DESCRIPTION

THAT PART OF THE EAST 1/2 OF SECTION 7, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS

FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF THE EAST 1/2 OF SAID SECTION 7; THENCE SOUTH 89 DEGREES 46

MINUTES 06 SECONDS EAST, 1027.83 FEET FOR THE POINT OF BEGINNING; THENCE SOUTH 00 DEGREES 38 MINUTES 24 SECONDS

WEST, PARALLEL WITH THE WEST LINE OF SAID EAST 1/2, 2968.46 FEET TO A LINE DRAWN PARALLEL WITH AND 330.0 FEET SOUTH OF.

MEASURED AT RIGHT ANGLES, THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE SOUTH 89 DEGREES 25

MINUTES 29 SECONDS EAST, PARALLEL WITH SAID NORTH LINE OF THE SOUTHEAST 1/4, 1614.85 FEET TO THE EAST LINE OF SAID

EAST 1/2 OF SECTION 7; THENCE NORTH 00 DEGREES 32 MINUTES 15 SECONDS EAST, ALONG SAID EAST LINE, 2978.11 FEET TO THE

NORTHEAST CORNER OF SAID SECTION 7; THENCE NORTH 89 DEGREES 46 MINUTES 06 SECONDS WEST, ALONG THE NORTH LINE OF

SAID EAST 1/2 OF SECTION 7, A DISTANCE OF 1609.56 FEET TO THE POINT OF BEGINNING (EXCEPTING THEREFROM THAT TRACT

CONVEYED TO THE STATE OF ILLINOIS DESCRIBED AS PARCEL NO. 0006 IN CONDEMNATION CASE NO. 70-ED-10325 AND THAT TRACT

CONVEYED TO THE STATE OF ILLINOIS BY WARRANTY DEED RECORDED AS DOCUMENT NO. 94K087533 ON DECEMBER 2, 1994), ALL IN

BLACKBERRY TOWNSHIP, KANE COUNTY, ILLINOIS.



### Operations & Maintenance ("O&M") Plan TPE IL KN07

### O&M Plan / O&M Practices and Services

The O&M plan is structured to both maximize system performance and meet all permitting requirements. Regional O&M staff and seasonal staff will be assigned to perform: 1. Preventative maintenance, 2. Corrective maintenance, and 3. Support of monitoring and asset management services. A summary scope of work for each is as follows:

### **Preventative Maintenance**

- Industry standard of care to ensure and maintain solar production levels
- Regular maintenance on project components per manufacturer recommendations and industry best practices and standards of care
- Module cleanings are not expected given the average monthly rainfall in the area. If cleaning is required, modules will be cleaned to ensure project performance.
- Vegetation abatement as required to ensure project performance
- Primary component inspection on an annual basis (panels, inverter, high voltage equipment)
  - Array & balance of system inspection
  - Module visual inspection
  - o Data Acquisition System (DAS) & Meteorological (MET) station inspection
  - Inverter full inspection
  - High voltage equipment inspections
- Mechanical & electrical maintenance on an annual basis including inverter maintenance per manufacturer warranty requirements and standards of care
- Yearly inspection and maintenance as needed for roads, storm water, and other site civil features

### **Corrective Maintenance**

- Remote problem diagnosis & qualification via the project SCADA system
- On-site technician dispatch: Trained, qualified and insured service techs for rapid response
- Warranty submittal/claims notification, tracking of replacement parts' arrival/storage/ installation, etc.
- Maintenance ticket updates and closure identifying root cause/problem resolution reporting to owner

### Monitoring

- Remote equipment monitoring (24x7x365) via SCADA system
- Remote dispatch per customer/owner requirements
- Ticketing: Create and dispatch automated ticketing with issue resolution notifications and root cause reporting
- Problem tracking and ensured resolution reporting included within monthly report
- Identify potential and actual underperformance issues; recommend remedies



- Customized data analysis and alerts for customer:
  - Collection and hosting of system monitoring data
  - o Owner access to online portal monitoring and production with weather data
  - Operator to host site communication and fees for monitoring

Monitoring and asset management services are provided by the late-stage development company's remote operation center and central services staff.

### Plan and Timeline for Responding to Loss of Major Plant Components

O&M personnel will be notified of any loss of major plant component or related failures by the 7x24 remote operations center. This center will dispatch onsite technicians for system critical failures (inverter, transformer, or tracker motor failure). The plan for such losses is to:

- Remove and replace the failed equipment with spare parts, nearby parts in inventory or emergency delivery of parts from manufacturer as rapidly as possible.
- Diagnose reason for failure.
- Work with general contractor and/or manufacturers for any warranty or related claims.

### **Compliance with Prudent Utility Practices**

"Prudent Utility Practices" are defined as the practices, methods and acts (including the generally accepted practices, methods and acts engaged in or approved by the operators of similar electric generating facilities) that, at the time of such practice, method or act is employed and in the exercise of reasonable judgment in light of the facts known at such time, would be expected to accomplish the desired result in a workmanlike manner, consistent with applicable laws and other governmental requirements and reliability, safety and environmental protection. However, Prudent Utility Practices shall not require the use of the optimum practice, method or act, but shall only require the use of acceptable practices, methods or acts generally accepted in the United States in performing obligations in accordance with Prudent Utility Practices.

All O&M practices follow Prudent Utility Practices with the utmost focus on safety. As a part of all O&M contracts with vendors, contractors, and sub-contractors, our team will ensure that these companies are responsible for the safe performance of work and for the safety of its, and it's subcontractors', employees, representatives, agents and invitees of contractor or its subcontractors at and around the project site, or any other person who enters the project site for any purpose. To facilitate this, all contractors must provide a safety plan whereby contractor maintains responsibility for maintaining all safety precautions and measures for areas on and around the project site. As part of 3 this safety plan, contractor must provide a safe working environment at the project site during the performance of the work, and shall, among other requirements, seek to minimize the number of safety-related incidents during the performance of the work (with both TPE's and contractor's mutual objective of zero lost time accidents). Such safety plan shall include requirements for the safety prequalification of each subcontractor and a drug and alcohol program (which shall include a drug testing policy). Furthermore, the safety plan shall meet the requirements of applicable laws and applicable standards.

After the commencement of work, TPE and contractor shall periodically review safety compliance, particularly in light of any injuries or near-miss incidents that may arise through the performance of the



work, and cooperate jointly to develop necessary changes to the safety plan in light of such circumstances, if any.

The safety plan shall apply to all individuals accessing the project site and performing work on the project. As part of the safety plan, a safety representative will be identified with the necessary qualifications and experience to supervise the implementation of, and monitoring of compliance with, the safety plan. The safety representative shall make routine inspections of the project site and shall hold regular safety meetings with contractor's personnel, subcontractors and others.

Each staff member undergoes personal background checks, qualifies as possessing safety and related solar skills training required, or shall gain this training from an approved O&M training program prior to starting work on the job site.

The contractor shall make the site safety plan available to local authorities having jurisdiction/permitting authorities (AHJs) during the construction process, upon request. The safety plan should include provisions for the management of site access, traffic management, road maintenance, and site security.

### **Emergency Response**

The site owner shall provide an emergency response plan to the AHJs prior to commercial operation of the facility, if required by the local AHJs. The site owner shall provide an education training session to county representatives and first responders prior to commercial operation of the facility, if required by the local AHJs. The site owner shall provide a means and procedure for site access in coordination with the local AHJs.

### **Equipment Manufacturer Recommendations**

The O&M plan referenced above complies with or exceeds all standard utility-scale PV equipment manufacturer recommendations. We can provide copies of all major equipment O&M recommendations prior to formal procurement as needed.

### **Mowing and Weed Management**

Regular maintenance will include vegetation control, fence inspection and physical inspection of all system components. A mowing schedule shall be established based on the plant species in the seed mix that is properly timed to balance avoiding the disturbance of wildlife and native pollinator-friendly vegetation with the need to avoid the establishment of weeds. Vegetation underneath and between the solar panels should be well maintained in the defined lease area to keep vegetation below the low edge of the solar panels at maximum tilt angle. Management should comply with any local ordinances or conditions of approval. Mowing and weed whacking schedules will be adjusted from time to time to allow for flexibility based on rainfall and vegetation growth. While appropriate mowing and weed whacking should ensure that weeds are removed before they spread, chemical control shall be used in accordance with Illinois noxious weed regulations, including the Illinois Noxious Weed Law.

### **Buffer Management**

Vegetative Buffers will be properly established and inspected during maintenance visits to ensure compliance with local ordinances and conditions of approval. Tree health and growth should be assessed and promoted to ensure compliance with local ordinances and the maintenance and promotion of persistent improvement in screening quality and native plantings are maintained at heights that are both appropriate to the surrounding environment and other pollinator friendly planting buffers in the Jurisdiction.



### Warranties

All warranties are managed and handled at the project company level and are the responsibility of the late-stage development company that will operate and own the project over its useful life. Manufacturers of major equipment including modules, inverters, racking and transformers provide equipment warranties for the life of their products.

### **Outage Schedules**

All planned shutdown of equipment for routine maintenance will be planned and coordinated with the local utility. When possible, these outages will occur in non-solar producing hours (nighttime). As such, no planned outages are scheduled.

### **Spare Parts**

As part of the installation of the project, spare parts may be procured and stored with the O&M service provider for faster access to parts when necessary. This may include spare modules, inverters, parts, tracker components, fuses, wire and related inventory. Additionally, along with the warranty of the equipment, we expect to gain committed response intervals from manufacturers to address equipment replacement requirements. Spare parts will not be stored on site, rather, they will be stored off site in the O&M provider's facilities.

### Start-up / Ramp-up Requirements / Times

The PV solar plant starts up as the sun rises in the morning and ramps down as the sun sets in the evening. We can provide specific historical times for the location of our solar array as a means of working to optimize this generation asset.



### TPE IL KN07, LLC Community Solar Facility Decommissioning Plan

TPE IL KN07, LLC has prepared the following plan to fulfill local requirements and assumes that the Facility will be constructed in accordance with all permits and approvals.

### 1.0 Facility Description

The TPE IL KN07 Community Solar Facility is an approximately 5 MW AC solar farm located on the parcels 11-07-200-004 and 11-07-400-004, at the southwest corner of the intersection of Keslinger Road and South Main Street in Kane County, IL (the "Project"). The Project is to be constructed on approximately 104 acres. The purpose of the Project is the generation of renewable solar electricity. The Project will be interconnected to the Commonwealth Edison ("ComEd") electric distribution grid near the site entrance, just off Keslinger Rd.

The estimated useful Project lifetime is 25-35 years, or more. The following list is a summary of the Project features:

- Approximately 5 MW AC total solar array consisting of silicon solar panels
- Driven post or ground screw foundations and steel and aluminum racking system
- 7' Security fence surrounding the array perimeter
- 1 Central Inverter
- 1 Transformer
- 1 Concrete equipment pad for inverters and switchgear
- Copper and aluminum wire
- Underground conduit at the array location
- Overhead poles and wires from the array location to utility poles
- Gravel access roads
- Metal security gates at array location
- Miscellaneous electrical equipment

### 2.0 Decommissioning Plan

The Project consists of numerous materials that can be resold or recycled for significant scrap value, including steel, aluminum, glass, copper and plastics. (Often, current market salvage values of a Project exceed estimated decommissioning and site restoration expenses.) The Project has an anticipated operation life of 25 to 35 years or longer if maintenance is continued. At the end of its operational life, the Project will be safely dismantled using conventional construction equipment, rather than being demolished or otherwise disposed of.

Decommissioning shall include stabilization of the site and the removal of all solar collectors, cabling, electrical components, fencing and any other associated equipment.



### 2.1 Temporary Erosion Control

Temporary erosion and sedimentation control best management practices will be used during the decommissioning phase of the Project. Control features will be regularly inspected during the decommissioning phase and removed at the end at the process. All decommissioning activities will conform with local and state regulations.

### 2.2 Material Removal Process

The decommission process will consist of the following general steps:

- 2.2.1 Project shall be disconnected safely from the power grid and all equipment shall be switched to off position
- 2.2.2 PV modules shall be disconnected, packaged, and returned to manufacturer or appropriate Project for recycling or resold for use in other projects
- 2.2.3 Above and underground cabling shall be removed and sent to an appropriate recycler
- 2.2.4 Inverters will be disconnected from racking and shipped intact to an approved electrical equipment recycler
- 2.2.5 Racking materials shall be dismantled, removed, and recycled off-site at an approved recycler
- 2.2.6 Fencing will be dismantled, removed, and recycled off-site and an approved recycler
- 2.2.7 Grade slabs will be broken and removed and disposed of in compliance with local and state regulations
- 2.2.8 All remaining electrical and support equipment will be dismantled and recycled or disposed of in compliance with local and state regulations
- 2.2.9 Site access roads will be removed and recycled. Once the road material is removed, the compacted soil beneath and surrounding the access road shall be scarified to a depth of a minimum 18-inches.
- 2.2.10 The site shall be re-stabilized once all utilities, equipment, and site features have been removed from the site

### 2.3 PV Module Removal

Solar photovoltaic modules used in the Project are manufactured within regulatory requirements for toxicity based on Toxicity Characteristic Leaching Procedure (TCLP). The solar panels are not considered hazardous waste. The panels used in the Project will contain silicon, glass, and aluminum, which have value for recycling. Solar panels have a warranty of 20 – 25 years and useful life of 35 – 50 years. The most realistic outcome for solar modules is re-use in other generation



projects. Modules will be sold for re-use or dismantled and packaged per manufacturer or approved recyclers specifications and shipped to an approved off-site recycler.

### 2.4 Electric Wire Removal

Electric wire made from copper or aluminum has value for recycling. DC wiring can be removed manually from the panels to the inverter. Underground wire in the array will be pulled and removed from the ground. Overhead cabling for the interconnection will be removed from poles. All wire will be sent to an approved recycling facility.

### 2.5 Electrical Equipment Removal

Inverters, panels, transformers, switchgear and other electrical equipment will be dismantled, packaged, and removed from the site per manufactures specifications for removal, decontamination, disposal or recycling. Any dielectric fluids present in transformer, or other electric equipment will be removed, packaged, and set to an approved waste facility.

### 2.6 Racking and Fencing Removal

All racking and fencing material will be broken down into manageable units and removed from the Project and sent to an approved recycler. All racking posts driven into the ground will be pulled and removed.

### 2.7 Concrete Slab Removal

Concrete slabs used as equipment pads will be broken and removed. Clean concrete will be crushed and disposed of off-site and or recycled and reused either on or off-site.

### 2.8 Final Site Walkthrough

A final site walkthrough will be conducted to remove debris and/or trash generated within the site during the decommissioning process, and will include removal and proper disposal of any debris that may have been wind-blown to areas outside the immediate footprint of the Project being removed.

### 2.9 Site Stabilization

The areas of the Project that are disturbed (during decommissioning) will stabilized in compliance with local and state codes. The gravel access road will remain intact and shall not be removed.



## Proposed 5 Megawatt AC Ground-Mount Community Solar Facility Kane County, IL

TPE IL KN07, LLC c/o TurningPoint Energy, LLC 3720 South Dahlia Street Denver, CO 80237

August 12, 2022

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### 1.0 INTRODUCTION

### 1.1 Project Overview

TurningPoint Energy, LLC d/b/a TPE Development through its affiliated entity TPE IL KN07, LLC (the "Applicant") submits this application for a Special Use Permit for the proposed development of a 5-megawatt AC solar photovoltaic system on two parcels of land at the intersection of Keslinger Road and South Main Street, Kane County, IL (the "Project"). The Project will consist of a single axis tracking ground-mounted solar array, associated electrical equipment, an access driveway and fence covering approximately 43 acres of the combined parcel area of 104 acres (11-07-200-004 and 11-07-400-004). The Project intends to participate in the Illinois Adjustable Block Community Solar Program and will power the equivalent of approximately 1,050-1,150homes. Community Solar allows residents of Illinois to purchase locally generated clean electricity at a discount to current electric rates without having to install panels on their roof.

The Project's host parcels are located in the Farming (F) zoning district. Kane County's zoning code allows for the construction and operation of Solar Farms by special use permit in the F District. All setbacks prescribed in the Kane County Solar ordinance ("Ordinance") will be complied with to ensure a sufficient buffer is maintained between the panels and neighboring property lines and rights-of-way. Additional plantings have been proposed in areas with nearby residential abutters to screen the array from neighboring residences.

If approved, the Project would bring significant and consistent benefits to Kane County and the community surrounding the Project. The Project would create approximately 50-75 jobs during the approximately 4 to 8 -month construction period, generating property tax revenue of more than \$700,000 over 30 years. Unlike nearly all other forms of development (residential, commercial, or industrial), the community would benefit from the significant economic benefits mentioned above without stressing community infrastructure – no new children in schools, no use of water and sewer systems, extremely limited use of roads, and little to no need for police or fire departments.

### 1.2 About Turning Point Energy

Formed in 2014, TPE is a privately held, independent company transforming our energy future by creating freedom to choose a smarter, cleaner, more flexible way forward through community solar. As a privately held and independent company, TPE customizes projects to the unique needs of each client. Our team has financed and/or built over 2 Gigawatts (GW) of the solar projects operating in the U.S. today. Since 2017, TPE has focused these services on the expanding community solar market in states including Maine, Maryland, Delaware, Pennsylvania, Texas, and Rhode Island. TPE's development and investment portfolio now includes over 60MW community solar projects in construction or operation, with more than 600MW under development.

TPE is a "triple bottom line" company; we believe that our business should create financial, environmental, and community value in every project we create. Our intent is to be long term community members. Upon successful permitting and utility interconnection, TPE typically makes donations to local charities and non-profits doing good work in the communities we work in.

### 2.0 SITE LOCATION & EXISTING CONDITIONS

TPE, in coordination with its engineering consultant, Kimley-Horn, has prepared and compiled information from many sources to form the basis of design for the proposed Project. A summary of existing conditions and the design elements that avoid and/or minimize impact to the environment and surrounding community is presented below.

### 2.1 Existing Conditions

The proposed Project is located on a parcel comprised of approximately 104 acres of farmland, in rural western Kane County in Blackberry Township. The project will occupy approximately 43 acres of the parcel. There is a residence within the Project boundary in the northeast corner, but it does not interfere with the proposed layout for the Project's solar panels and other infrastructure. Throughout the entire project location, there is a 12-foot elevation change from 808-820 feet. Per the Natural Resources Conservation Services, the onsite soils consist of type B, C, B/D, C/D.

### 2.2 Natural Resources and Consultations with State and Federal Authorities

### 2.2.1 Land Use Opinion Report ("LUO")

Kimley-Horn submitted the Land Use Opinion (LUO) packet on 07/20/2022 to the Kane County Soil and Water Conservation District ("SWCD"). The LUO report has not been received yet. A copy of the report will be included as **Appendix H** when received. See **Appendix N** for the beneficial effects of a solar farm.

### 2.2.2 Wetlands and Floodplain

The Project will be designed to avoid impacts to USACE jurisdictional waters. A Level 1 Wetland Delineation has been completed and identified nine wetlands on the property. The wetlands are scattered around the exterior of the site. Please see **Appendix D** for additional information. Wetlands were identified to ensure the Project would comply with all federal regulations governing wetlands. The Project will not adversely impact wetlands when constructed.

Per FEMA FIRM Map Panel 17089C0250J, the development is in Zone X, which is considered an area of minimal flood hazard. Refer to **Appendix P** for a copy of the FEMA FIRM Map.

### 2.2.3 U.S. Fish & Wildlife Service ("USFWS")

The Project will be designed such that no federally listed species will be significantly impacted. Solar projects typically impose only minimal impacts on wildlife species. The Project's potential to impact federally protected species was evaluated as part of an Environmental Constraint Memorandum, which is included as **Appendix E**. The assessment indicated that four federally listed species should be considered in an effects analysis for the Project, including the federally endangered Rusty Patched Bumble Bee (Bombus-affinis), the federally threatened northern long-eared bat (Myotis septentrionalis), , the federally threatened eastern prairie fringed orchid (Platanthera leucophaea), and the federal candidate monarch butterfly (Danaus plexippus). Prior to construction, consultation with the USFWS will occur to confirm a "No Effect" determination.

### 2.2.4 Illinois Department of Natural Resources (IDNR) State Ecological Review

The Applicant consulted with IDNR for potential impacts to state threatened or endangered species. This consultation is conducted pursuant to IDNR's Ecological Compliance Assessment Tool ("EcoCAT"). The Applicant submitted an EcoCAT review request to IDNR in July 2022. The review concluded that adverse effects are unlikely and therefore the consultation was terminated. In other words, pursuant to 17 III. Adm. Code Part 1075, the IDNR consultation is terminated. Refer to **Appendix F** for a copy of the IDNR EcoCAT.

### 2.2.5 Illinois State Historic Preservation Office

Under the Illinois State Agency Historic Resources Protection Act, the State Historic Preservation Office ("SHPO") division at IDNR is responsible for studying possible Project effects on archaeological and/or architectural (cultural) resources. Agencies requiring SHPO evaluation concurrent with their review include the Illinois Environmental Protection Agency ("IEPA"), IDNR, and the USACE. According to the Illinois SHPO database, no surveys, archeological sites, or historic buildings are listed on or within 0.5 miles of the site. The Applicant submitted a SHPO Project Review Form for agency review on 07/22/2022. A response letter has not yet been received. Once their findings become available, they will be provided to the County and it will be included as **Appendix G**. The SHPO project review form has been included as part of this package.

### 2.2.6 Illinois Department of Agriculture (IDOA)

The Illinois Renewable Energy Facilities Agricultural Impact Mitigation Act (505 ILCS 147/1 et seq.)) requires the owner of a commercial solar energy facility to have an Agricultural Impact Mitigation Agreement (AIMA) in place within 45 days prior to the commencement of Project construction. The intent of the AIMA is to preserve and/or restore the integrity of affected agricultural land during construction and decommissioning activities. The Project will enter into an AIMA in advance of 45 days before construction commencing.

### 2.3 Community Outreach & Benefits

TPE likes to proactively engage the communities in which we work early in the process to determine what questions and concerns potential neighbors might have and give us adequate time to educate and address them prior to the public process.

We typically place calls, send letters and door knock on adjacent properties to our planned solar site as well as meet with local officials.

Community Solar projects such as KN07 enable residents to receive power savings from signing up to participate in a community scale solar project without installing solar on their rooftops.

In 2018, the State of Illinois enacted a statute that imposes a standardized, state assessment of a fair cash value for solar energy projects covering both the improvements and the land. As a result, once constructed this Project will pay property taxes of more than \$700,000 over 30 years split between the County, Blackberry Township, and applicable school, fire and other taxing authorities.

The Project would create approximately 50-75 jobs during the approximate 4 to 6-month construction process. A regional operations and maintenance firm will service the facility over its working life cycle.

Unlike nearly all other forms of development (residential, commercial, or industrial), the community would benefit from the significant economic benefits mentioned above without stressing community infrastructure – no new children in schools, no use of water and sewer systems, limited use of roads, and little to no need for police or fire departments.

### 3.0 PERFORMANCE STANDARDS AND SOLAR SITING CONSIDERATIONS

### 3.1 Project Description & Design Standards

The Project will consist of a ground-mounted solar array constructed in the Southwest portion of the parcels. The solar array will consist of solar panels attached to single axis trackers structures attached to driven steel pier foundations or ground screw foundations, depending on the subsurface composition. An Illinois licensed engineer will certify the foundation and design of the solar racking system is suitable to meet local soil and climate conditions.

The Project will be constructed by a licensed Engineering, Procurement, and Construction ("EPC") Contractor. The design and construction process will comply with all National, State, and local applicable building, electrical and fire codes, as well as the National Electrical Code ("NEC"). The EPC Contractor shall also possess all professional and trade licenses required by the state and local authorities.

The EPC Contractor will create and maintain a health and safety manual in accordance with OSHA requirements which establishes appropriate rules and procedures concerning workplace safety.

Noise from construction activities will be in accordance with all applicable local, state and federal regulations.

The inverter and transformers will be located on one or more concrete pads or piles. Power and communication lines will connect the solar array to the point of interconnection. Utility poles at the point of interconnection will be above ground. The Project footprint area covers approximately 43 acres. Specifications for solar panels, inverters, and racking system proposed for the Project are included as **Appendix I**.

The panels will have a maximum height of 15' and the array will be surrounded by a 7-foot high fence for safety and security purposes. Entry into the fenced areas will be through gates with Knox Boxes for emergency access.

The Project design and planning has focused on minimizing any potential impacts to the surrounding neighborhood. The Project will produce electricity without requiring any combustion of materials; as a result, the community solar array will not cause or emit odors, dust, gas, smoke, or fumes. In addition, the Project will have very few moving parts and will generate electricity primarily in a passive manner – collecting the sun's rays and converting energy associated with the rays into electricity – so the Project will not produce material vibrations which would impact surrounding properties. The array was designed to meet all required setbacks from neighboring residential properties in compliance with the Ordinance and incorporate vegetative screening to the East and South that will grow in over time for the benefit of nearby residences, as outlined in **Section 3.8**.

A warning sign shall be provided at the facility entrance and along the perimeter fence including the facilities 911 address and a 24-hour emergency contact number. No outdoor storage is planned for the Project at this time. In the event this were to change the Project would apply for the necessary approvals

for the contemplated storage.

The scope of work for Project construction includes but is not limited to:

- Improvement of existing access road onto Keslinger Road per Kane County DOT
- Construction of project equipment pads
- · Construction of a temporary staging area
- Installation of solar panels and associated support equipment and structures
- Installation of buried and overhead collector lines

### 3.2 Noise

The Project will operate in accordance with the applicable noise standards of the Illinois Pollution Control Board. The only components in the array that generate noise are the inverters and transformers. The inverters are rated at 65 dBA at 1 meter as indicated in the manufacturer's specification sheet in Appendix I. Sound waves diminish with distance in accordance with mathematical principles of sound level drop. The inverters have been purposely located away from the nearest residences and commercial buildings and final inverter pad design will make sure that any noise emitting equipment on the inverters will be oriented towards the interior of the Project and directed away from neighboring parcels.

### 3.3 Vibration

There will be no vibrations generated by the solar panels or racking during the operating period of the Project. There may be de minimis vibrations produced by the inverter. Our comprehensive maintenance plan includes routine inspections to assess and correct any malfunctioning equipment.

### 3.4 Air pollution reduction

According to the EPA Clean Energy Equivalencies Calculator, by providing clean energy, the Project is estimated to avoid the environmental equivalent of 8,070 metric tons of carbon annually, which is comparable to:

- Carbon sequestered by 9,551 acres of forest
- 908,122 gallons of gasoline consumed each year
- 1,739 passenger vehicles removed from our streets

A commitment to wildlife-sensitive building and management practices during and after construction will allow for increased local biodiversity. TPE proposes to use pollinator friendly ground cover underneath the Project and native plantings around the perimeter. Clover and grass species that promote the establishment and long-term health of bee populations will give bee and small mammal populations a new pollinator friendly habitat. The Project will not use any pesticides for vegetation management.

#### 3.5 Toxic substances

There are no toxic substances in the panels. The Project will incorporate Tier 1 silicon-based PV panels, which have been analyzed as follows by North Carolina State University:

Well over 80% (by weight) of the content of a PV panel is the tempered glass front and the aluminum frame, both of which are common building materials. Most of the remaining portion are common plastics, including polyethylene terephthalate in the backsheet, EVA encapsulation of the PV cells, polyphenyl ether in the junction box, and polyethylene insulation on the wire leads. The active, working components of the system are the silicon photovoltaic cells, the small electrical leads connecting them together, and to the wires coming out of the back of the panel. The electricity generating and conducting components makeup less than 5% of the weight of most panels. The PV cell itself is nearly 100% silicon, and silicon is the second most common element in the Earth's crust. The silicon for PV cells is obtained by high-temperature processing of quartz sand (SiO2) that removes its oxygen molecules. The refined silicon is converted to a PV cell by adding extremely small amounts of boron and phosphorus, both of which are common and of very low toxicity.

Please see Appendix N for the full report.

### 3.6 Fire and explosive hazards

The solar panels and racking, which comprise the majority of the Project's equipment, are not flammable. Tempered glass offers protection from heat and the elements, and the panels are designed to absorb heat as solar energy. From a study by North Carolina State University:

...Concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer backsheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight.

Please see Appendix N for the full report.

### 3.7 Glare and heat

As explained in the fire and explosive hazards Section 3.6, there is no heat generated by the Project.

A glare study was performed by TPE using ForgeSolar software to assess the possible effects of reflectivity created by the Project. ForgeSolar software incorporates GlareGauge, the leading solar glare analysis tool which meets Federal Aviation Administration ("FAA") standards and is used globally for glare analysis. It is based on the Solar Glare Hazard Analysis Tool licensed from Sandia National Laboratories.

A model of the Project was input into the software along with (3) Route Receptors along roadways in vicinity of the site. Height was assessed at 5' above ground to emulate passengers in cars. Further, (9) Observation Receptors were modeled at specific dwellings located around the perimeter of the solar array. Heights were modeled at 10-15' above ground to emulate residents on the 1st and 2nd floors of dwellings, depending on the structure typology, and evaluate the worst-case glare impact.

A direct line of sight between the Project and the designated Route Receptors and Observation Receptors is required to produce any discernible glint/glare, so if there is existing or proposed vegetation between the receptor and the project, any glint/glare would be eliminated.

The model assumes the sun is shining 100% of the time it is above the horizon (during daylight hours). That is, it does not account for cloudy or overcast conditions when the sun is not shining. The results, therefore, would be the maximum expected glint and glare during any single year. Existing topography is taken into account in the simulation based on LIDAR ("Light Detection and Ranging") data. Existing and planned vegetation are not considered in the simulation. The model assumed zero vegetation that may screen the Project, so this must be considered when interpreting the study results.

To reduce glare in the east and west directions during low sun periods, a 5-degree tracker resting angle was implemented during these times, which eliminates the main source of glare for solar projects. This lower angle will position the panels in a near flat position, so they face upwards and do not reflect light from the rising or setting sun towards nearby buildings or cars.

Based on the above inputs/assumptions, no potential for glint or glare was identified in the analysis at any of the Route Receptors or neighboring Observation Receptors. While excluded from the analysis, existing and planned vegetation will further shield the view of the project from nearby properties and roadways. No additional mitigation measures are recommended since no glint or glare is anticipated based on the ForgeSolar GlareGauge results.

Please see **Appendix M** for a more detailed analysis of the Forge Solar results and a copy of the Forge Solar Assessment.

### 3.8 Setback Compliance, Landscape & Buffering Plan

The Project proposes to conform with all applicable County setbacks from neighboring properties and public rights-of-way. The Eastern and Southern side of the array where the closest residential neighbors are located will incorporate a vegetated buffer. The Eastern buffer will consist of staggered rows of naturalized or native evergreen trees/shrubs, large deciduous shrubs, and ornamental trees with varied spacing and species. The Southern buffer will span 50' in order to encourage pollinators and comply with the Illinois Solar Pollinator Habitat Scorecard, a "best practices" guide for plantings around solar arrays. The buffer area in between these plantings and the road will be seeded with a native pollinator friendly seed mix and areas underneath the solar arrays will be stabilized with a low-height, pollinator-friendly mix. Both pollinator seed mixes are intended to provide food and shelter for wildlife and will attract a variety of pollinators and songbirds. The wildflowers and grasses in the mix will provide an attractive display of color from spring to fall and will provide nectar and food for pollinators and their larva. A final landscape plan will be designed by a landscape architect in accordance with the Kane County Ordinance prior to issuance of a Building Permit.

### 3.9 Viewshed

TPE conducted a viewshed analysis and prepared photo simulations of the proposed site from nearby public roads and residential property owners. The model is used to provide a mock-up of what portion of the solar array may or may not be visible. The viewshed analysis was conducted from six representative points around the property perimeter, depicting the viewshed at the time of landscape planting as outlined in **Section 3.8**, and after 5 years of growth. The viewshed analysis combines a digital model of the terrain, derived from online Google earth terrain data, and incorporates the height and position of Project components, existing vegetation and proposed new plantings and the eye-level of a theoretical observer into input data for a computer model. The model provides a view between the Project and the modeled observer. These viewsheds have been included in **Appendix O**.

### 3.10 F.A.A. Filing

The Project filed using the Notice Criteria Tool with the Federal Aviation Administration (F.A.A.) and the results indicated the project did not exceed the Notice Criteria. As a result, no additional filings are required with the F.A.A. Please See **Appendix M** for copies of the filings which were entered at the four corners of the Project array location.

### 3.11 Safety and Security

The solar arrays will be enclosed by a 7-foot high security fence and locked gates, as required by the Ordinance and the National Electrical Code (NEC). Emergency access to the fenced areas will be through Knox-Boxes in order to provide the required 24-hour access. The gravel drives have been designed to allow emergency vehicle access, including fire trucks.

Emergency responders will be provided with the key/code for the Knox-Boxes.

### 3.12 Interconnection

The proposed Project will interconnect to an existing 12 kV ComEd feeder on the distribution system, which connects to the substation that is directly adjacent to the Project. The local electric utility will install approximately 150' of 12kV line extension along with multiple poles for metering and pole-top equipment. The Project pre-application indicated that there was capacity at a substation to interconnect the community solar array. Evidence of submission for Interconnection is included as a redacted copy of the Feasibility Study Agreement. The Feasibility Study Agreement for the Project is included as **Appendix L**.

### 3.13 Operation and Maintenance

The Operation and Maintenance Plan including a comprehensive vegetative management plan for the Project is included as **Appendix J**. Preventive maintenance will be conducted on a schedule based on manufacturer's recommendations and industry best practices and standards of care. Regular maintenance will include vegetation control, fence inspection and physical inspection of all system components. A mowing schedule shall be established based on the plant species in the seed mix that is properly timed to balance avoiding the disturbance of wildlife and native pollinator-friendly vegetation with the need to avoid the establishment of weeds. Vegetation underneath and between the solar panels should be well maintained in the defined lease area to keep vegetation below the low edge of the solar

panels at maximum tilt angle. Management should comply with any local ordinances or conditions of approval. Mowing and weed whacking schedules will be adjusted from time to time to allow for flexibility based on rainfall and vegetation growth. Chemical control shall be used in accordance with Illinois noxious weed regulations. The Project will be monitored continuously for system failures via a Supervisory Control and Data Acquisition (SCADA) system. Qualified and insured technicians will be dispatched to address any system failures, including inverter, transformer, or tracker motor malfunctions.

### 3.14 Decommissioning Plan

The Decommissioning Plan for the Project is included as **Appendix C** and includes removal of all structures (including equipment, fencing and roads) and foundations, restoration of soil and vegetation. The decommissioning plan shall be accompanied by a decommissioning form of financial security to provide certainty to the County that the financial resources will be available to fully decommission the site. At the end of operational life of the Project, the Project will be safely dismantled using conventional construction equipment. The Project consists of numerous materials that can be resold or recycled for significant scrap value, including steel, aluminum, glass, copper and plastics. The solar panels are not considered hazardous waste. The panels used in the Project will contain silicon, glass, and aluminum, which have value for recycling. Often, current market salvage values of a Project exceed estimated decommissioning and site restoration expenses.

The site will be restored and reclaimed to approximately the pre-construction condition in conformance with the site lease agreement and the Agricultural Impact Mitigation Agreement (AIMA). It is assumed that the site will be returned to agricultural use after decommissioning, and appropriate measures will be implemented to achieve said use.

### 4.0 APPROVAL CRITERIA

### 4.1 Findings of Facts - Special Use

a) How does the proposed use relate to the existing uses of property within the general area of the property in question?

The proposed Project site is in a rural portion of Kane County in the Farming District, adjacent to the Village of Elburn, which was contacted prior to initiating the zoning process with Kane County. The proposed site is located near a sportsman club, metal stamping facility, and an auto parts store, as well as a few rural dwellings; however, many of the other properties in the area are used for agriculture. A solar farm is a complementary use to agriculture as it is a temporary use, and can also integrate well with commercial and industrial uses which typically consume larger amounts of electricity. It will not have any detrimental effects upon the surrounding properties. By siting the community solar farm to the Southwest portion of the parcel, the Project preserves the frontage along Keslinger Road and South Main Street for future use, thereby eliminating any impact on alternative plans for the parcel suggested by the Village of Elburn 2020 Comprehensive Plan Update. At the end of the Project's useful life, the site will be returned to farm ground.

b) What are the zoning classifications of properties in the general area of the property in question?

North (incorporated into Elburn): B-2 (General Business) and CM (Commercial/Manufacturing)

West: F (Farming District) and Special Use

South: F (Farming District)

East: F (Farming District) and one parcel incorporated into Elburn with B-2 zoning

c) How does the suitability of the property in question relate to the uses permitted under the existing zoning classification?

The existing zoning classification allows for siting of hydraulic power plants and other public utilities in the Farming District, and small structure or tower mounted wind turbines are permitted in any zoning district. Since public utilities are allowed in the Farming District, a solar farm (where solar power is generated and distributed through the public utility) is also permitted via Special Use. In addition, a solar farm is a complementary use to agricultural uses in that it is only temporary and allows the soil to rest and re-charge before returning the land to planting of row crops.

d) What is the trend of development, if any, in the general area of the property in question?

Existing development in the area includes industrial and open space recreational uses, based on the metal stamping facility to the north and the shooting club to the west. While there is an auto parts business to the east, with the presence of the shooting club to the west, this area will likely trend more towards industrial applications or continue with other agricultural uses. Analysis of the Village of Elburn Comprehensive Plan suggests the frontage along Keslinger Road and South Main

Street is of importance to the expansion of commercial/industrial corridors at the Project site, the possibility for which the proposed Special Use preserves.

e) How does the projected use of the property relate to the Kane County 2040 Land Use Plan?

Section 2.9 of the Kane County 2040 Land Use Plan, Sustainability and Energy, encourages a brave path forward for Kane County "to be a leader and role model in the area of energy conservation, energy efficiency, reduction of greenhouse gas emissions and use of renewable resources within Kane County and the region" (Objective 2). The Project will generate clean, renewable energy for hundreds of Kane County homes in a manner that respects the surrounding environment and greatly reduces greenhouse gas emissions, as further detailed in the Project Narrative. Additionally, both during and after construction, the Project will generate jobs and increase tax revenue, contributing directly to Objective 5 by promoting economic development and workforce opportunities to build the infrastructure of Kane County's renewable energy future. While the Project will not be contributing to agricultural production during its operations, upon the end of its useful life, it will be available for a return to agricultural land, and the land will have been allowed to rest and re-charge during the Project's operational life. The Project will remain in a natural state and available to wildlife, though it is closed off to the public with a security fence. The panels are raised off the ground and the lack of enclosed or permanent structures leaves the majority of the site open. The ground will be planted with native, pollinator-friendly vegetation that will provide ecosystem services. The Project also helps meet the goals of resource conservation since it is using the sun to produce electricity, contributing to a more robust electric system and not relying on water or sewer for Project operations.

f) That the establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The property will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare to the community. Solar components do not have any moving parts and can be disposed of in a non-hazardous landfill. Numerous studies have shown them not to have a negative environmental impact. Please refer to **Appendix N** for a copy of these studies. Also, please refer to IDNR's response to the Project's EcoCat submission. The Project will comply with all local, state, and federal regulations and will be operated in a safe manner at all times. In addition, the Project will promote the general welfare of Kane County by creating new jobs, generating new tax revenue and the generation of new sustainable, clean, pollution-free renewable electricity. Also, the community would benefit from the significant economic benefit without stressing community infrastructure — no new children in schools, no use of water and sewer systems, limited use of roads, little to no need for police or fire departments.

g) That the special use will not be injurious to the use and enjoyment of other property in the immediate vicinity.

The Project will fully comply with all setbacks as specified in the Kane County Zoning Code Section 7.5, and will fully comply with all performance standards listed in the Kane County Zoning Code, Illinois State law (including noise standards) and the special use permit. The Project will also include a landscape buffer to the East and South to reduce the visual impact on neighbors and drivers who live nearby. Moreover, as indicated by the property value impact study, the existence of the Project will have no impact on neighboring property values, and therefore will not diminish or impair property values within the neighborhood of the Project. The CohnReznick General Impact Study Report indicates that solar facilities located in similar areas, with similar land uses, do not appear to cause any negative impacts to adjacent real estate, based on a review of academic studies, CohnReznick's own paired sales data, and interviews with County Assessors and other Market Participants. The report details how solar facilities are generally harmonious with surrounding uses. In addition, the Project will not emit any air pollution, smoke, odors, light, glare, or vibrations that will impact neighboring parcels, and any noise emissions generated by the Project will comply with limits imposed by the Illinois Pollution Control Board.

h) That the establishment of the special use will not impede the normal and orderly development and improvement of the surrounding property.

The Project will have little to no impact on neighboring properties or the future development of the community. The Project does not generate any odor, or emit any air pollution and, in fact, provides a net environmental benefit. There will be no tree clearing. In converting the property from a farm field to a solar facility, pesticides will not be utilized unless mandated by state or local laws for the control of noxious weeds.

The setback will be planted with a double row of evergreens coordinated with a licensed landscape architect, and the balance of the buffer will include native and pollinator-friendly species. Upon construction completion, traffic to the solar facility would be required only a few times a year to conduct maintenance, because the solar facility is remotely monitored for performance. By utilizing an existing access onto Keslinger Road and preserving road frontage for future development, the solar farm will neither impede the normal and orderly development of the Project parcel nor adjacent parcels.

 That adequate utilities, access roads, drainage, or necessary facilities have been or will be provided.

The Project will have adequate utility interconnections. The Project received a pre-application report by ComEd providing evidence that the electric infrastructure in the area is capable of hosting a project of this scale. The Project has submitted a utility interconnection application and is currently in the Feasibility Study phase. The Project does not require water or sewer facilities to operate. The Project will also build all roads and entrances necessary to access its facilities. A drain tile survey will be completed prior to construction and foundation design will work around or reroute any identified drain tiles to ensure proper drainage. The Project will also be designed in a

manner that will not materially modify existing water drainage patterns around its facilities. Moreover, the replacement of row crops with a pollinator seed mix is a net positive for stormwater. Per the Minnesota Rural Water Association, solar installations with native pollinator-friendly ground cover achieve positive impacts similar to soil conservation projects, which reduce soil erosion, reduce soil quality degradation, and improve water quality. This report is included in **Appendix N**. The Project will be designed to account for all existing features, environmental features, the Kane County Zoning Ordinance, and the Kane County Natural Resources Inventory findings. Please refer to **Appendix B** for the Zoning Site Plan.

j) That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

The Project will be designed to include all roads and road entrances necessary to provide adequate ingress and egress to its facilities. Construction traffic will include approximately 25 work trucks per day and utilize the existing access from Keslinger Road. Considering the low number of work trucks visiting the Project site over the construction phase, traffic patterns in the vicinity of the Project will not be impacted.

The Project will have minimal traffic upon completion of construction. Landscape maintenance and maintenance to the Project components are anticipated to occur only a few times a year. Existing traffic patterns will not be impacted in the post-construction phase.

k) That the special use will conform to the applicable regulations of the district in which it is located.

The Project will comply with the applicable regulations for the F zoning district as well as the Ordinance. The Project will also comply with all other County requirements, and State and Federal requirements as well.

TPE IL KN07, LLC

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UNUMER SKITT KLAY LOAN, O TO 2 PEPCENT SLOPES	0/6
MAYVILE SLT LOAM, 0 TO 5 PERCENT SLEPES	U
MILISPODE SUT LOAN, 0 TO 2 PERCENT SLEPES	60
BIRMBECK SLT LOAM 0 TO 2 PERCENT SLOPES	u
FOX SILT LOAM, 2 TO 4 PERCENT SLOPES	9
FOX SILT LOAM, 4 TO 6 PERCENT SLOPES, ERCOED	8
PEDITINE SILTY CLAY LOAN, D TO 2 PERCENT SLOPES	e/5
WINGATE SLT LOAM, 2 TO 5 PEPEENT SLOPES	0
ELPASO SILIY CLAY LOAM, 0 TO 2 PERCENT SLOPES	9/10
DANASPOCK SULLOAM, 2 TO 5 PERCENT SLOPES	2
AIDAMI SET LDAM, 2 TO A PERCENT SLOPES	0
KIDAMI LOAM, 4 TO 5 PERCENT SLOPES, ERDOED	
ADAM LOAK, 8 TO 12 PERCENT SLOPES, ENDOCO	0
OCTACON 3LT LOAM, 4 TO 8 PERCENT 3LOPES, EPROFED	2
BARDAY SUT LOAM, 2 TO 5 PERCENT SUPPRY	0
SOMEWALK SLT LOAM, 2 TO 5 PERCENT SLOPES	v
WATER	N/A

DANABE	AIDA	KID44FI	KIDAUI	OCTACON :	SARO.	SOMEN	
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9.38	MAYVILE SLT LOAM, 0 TO 5 PERCENT SLOPES	U
19.k	WILLIGHOOM SILT LOAN 0 TO 2 PERCENT SLOPES	80
334	BIRMBECK SLT LOAM 0 TO 2 PERCENT SLOPES	u
9,18	FOX 9LT LOAM, 2 TO 4 PERCENT SLOPES	
702	FOX SLT LOAM, 4 TO 8 PERCENT SLOPES, ERCOLD	
NOA.	PEDITINE SILTY CLAY LOAM, D TO 2 PERCENT SLOPES	6,5
8	WINGATE SLT LOAM, 2 TO 5 PERCENT SLOPES	U
×××	ELPASO SILIY CLAY LOAM, 0 TO 2 PERCENT SLOPES	8,75
128	DANABROCK SHIT LOAM, 2 TO 5 PERCENT SCOPES	v
378	AUDAMI SET LDAM, 2 TO A PERCENT SLOPES	0
75.2	KIDAMI LOAM, 4 TO 5 PERCENT SLOPES, ERDDED	0
707	ALDAMI LUAM, 8 TO 12 PERCENT SLOPES, ENCOCO	0
239	OCTACON DLT LOAM, 4 TO 8 PERCENT 3LOPES, ERCRED	2
92	BARDNY SILT LOAM, 2 TO 5 PERCENT SCOPES	u
9	SCARGMAUK St.7 LOAM, 2 TO 5 PERCENT SLOPES	0
	NAME OF THE PARTY	N/A

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-1	OF THIS PLAN IS FOR SPECIAL USE PERMIT REVIEW AND APPRITAL BY NAME CICUITY TO CONSTRUCT A SOLAR ENERGY	

- CONTRACTOR SHALL CALL AT LEAST 72 HOURS PROF TO BECHANNE ANY LOCAL UTLITES THAT PROMOE THERE OWN LOCATOR SERVICES

(13179 w (13179 w (1-87-186-679 (10-87-186-679







Kimley»Horn

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LEGEND	PROPERTY LINE	SPECIAL USE AREA	RIGHT OF WAY	SK TBACK	RESIDENCE SCHOLCK	ROAD LABEL	I'v MEII	EX. OVERHEAD ELECTRIC	EX UTLITY POLE	EX RESIDENCE ASTRUCTURE	EN WETLAND (PER LEVEL 1 DELINEATION)	ER FLOW (DRECTION AND 9LOPE)	Ex 900,5	PR. SECURITY TENCE	PR. PAKEL LIMITS	PR. URLITY POLE	PR. LOUPWENT PAD	PR. SOLAR APRAY	PR. OVERHEAD ELECTRYS	PN UNDERGROUND ELECTRIC	PR GRAVEL ACCESS POND	EX. FEWA FLOOD ZONE AE	





















































SOILS DATA TABLE

STATE ROUTE 47 120' R.O.W.

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