

**Decommissioning Plan for Alexander Farm Solar  
KaneSolar02 LLC  
Submitted to Kane County, Sept 6<sup>th</sup>, 2023**

**Detailed Decommissioning Plan:**

**Required Permitting:**

Prior to the initiation of site restoration, a Kane County Stormwater Management Permit will be obtained.

**Decommissioning and Reclamation:**

Upon the expiration of the site permit, or the end of commercial operations, KaneSolar02 will be responsible for removing solar facilities at the site as detailed in this plan, and to restore and reclaim the site to pre-construction topography and topsoil quality to the extent feasible. KaneSolar02 reserves the right to extend the Project instead of decommissioning. If KaneSolar02 seeks to extend the life of the Project, KaneSolar02 will decide whether to continue operation with existing equipment or to retrofit solar panels and power system with upgrades based on new technologies.

Decommissioning includes removing the solar panels, solar panel racking, steel foundation posts and beams, inverters, transformers, overhead and underground cables and lines, equipment pads and foundations, equipment cabinets, and ancillary equipment to a depth of forty-eight (48) inches. The civil facilities, access road, security fence, and any drainage structures are included in the decommissioning scope, unless requested by the site landowner to remain and upon approval by Kane County. Standard decommissioning practices would be utilized, including dismantling and repurposing, salvaging/recycling, or disposing of the solar energy improvements. After all equipment is removed, any holes or voids created by poles, concrete pads and other equipment will be filled in with soil to the surrounding grade and seeded with an approved seed mix. All access roads and other areas compacted by equipment will be decompact to a depth of eighteen (18) inches from finished grade prior to fine grading and seeding. This may include re-vegetation as native prairie, returning the site to agricultural use consistent with the landowners' desires, or re-development of the land for other beneficial uses (upon approval of any jurisdiction and in compliance with all relevant laws).

**Timeline**

Decommissioning is estimated to take three to four weeks to complete and the decommissioning crew will ensure that all equipment and materials are recycled or disposed of properly. Decommissioning and restoration activities at each site will be completed within 150 days after the date the site ceases to operate, per the County Code.

**Removal and Disposal of Site Components**

The removal, resale and/or disposal details of the site components are listed below:

**Modules:** Modules will be inspected for physical damage, tested for functionality, disconnected and removed from racking for resale. Modules will be packed and stored in an offsite facility

pending their reuse or resale by KaneSolar02. Any non-functioning modules will be packed, palletized and shipped to the manufacturer or a third party for recycling.

Racking: Racking and racking components will be disassembled and removed from the steel foundation posts, sorted for resale, or processed to appropriate size to be sent to a metal recycling facility.

Steel Foundation Posts: All structural foundation steel posts will be pulled out, processed to appropriate size, and shipped to a recycling facility. During decommissioning the area around the foundation posts may be compacted by equipment and, if compacted, the area will be de-compacted in a manner to adequately restore the topsoil and sub-grade material to a density consistent with native prairie or agricultural uses.

Overhead and Underground Cables and Lines: The cables and conduits contain no materials known to be harmful to the environment. As part of the decommissioning of the project, these items will be removed up to a depth of 48 inches and shipped for resale to a recycling facility. Topsoil will be segregated and stockpiled for later use prior to any excavation and the subsurface soils will be staged next to the excavation. Following the removal of the cable and conduits the excavation will be backfilled with the spoils previously removed. The subgrade will be compacted to a density similar to native prairie or agricultural uses. Topsoil will be redistributed across the disturbed area. All cable and conduit buried deeper than 36 inches will be left in place and abandoned.

Inverters, Transformers, and Ancillary Equipment: All electrical equipment will be disconnected, disassembled and sold. All parts will be removed, reconditioned, reused, sold as scrap, recycled, or disposed of appropriately at KaneSolar02's discretion.

Equipment Pads and Ancillary Foundations: Topsoil will be removed from an area surrounding any foundation, equipment pad or ancillary foundation and stockpiled for later use. Foundations will be excavated to a depth sufficient to remove all conduits, cables, aggregate and concrete to a depth of sixty (60) inches below grade. The remaining excavation will be filled with clean subgrade materials of quality comparable to the immediate surrounding area. All unexcavated areas compacted by equipment used in decommissioning will be decompact in a manner to adequately restore the topsoil and sub-grade material to a density consistent and compatible with native prairie or agricultural uses. All materials will be removed from the site, reconditioned, reused, sold as scrap, recycled, or disposed of appropriately, at KaneSolar02's discretion.

Fence: All fence parts and foundations will be removed from the site, reconditioned, reused, sold as scrap, recycled, or disposed of appropriately, at KaneSolar02's discretion. The surrounding areas will be restored to pre-construction conditions to extent feasible.

Access Roads: Facility access roads will be used for decommissioning purposes. After final clean-up, roads may be left intact through mutual agreement between the Landowner and KaneSolar02, unless otherwise restricted by Federal, State, or Local Regulations. If a road is to

be removed, aggregate will be removed and shipped from the site to be reused, sold, or disposed of appropriately, at KaneSolar02's discretion, consistent with applicable regulations and industry standards. Ditch crossings connecting access roads to public roads will be removed unless the landowner requests they remain. The subgrade will be de-compacted to a density similar to surrounding sub-grade material. Topsoil will be distributed across the open area. The access roads and adjacent areas that are compacted by equipment will be de-compacted in a manner to adequately restore the topsoil and sub-grade material to a density consistent with native prairie or agricultural uses.

Land Leveling: As part of site decommissioning, to the extent commercially reasonable, KaneSolar02 will restore the area disturbed by construction to pre-construction elevation and contour to extent feasible. If uneven settling occurs or surface drainage problems develop as a result of Project decommissioning, KaneSolar02 will provide additional land leveling services to remedy the situation.

Restoration/Reclamation of Site:

KaneSolar02 assumes that the site may be utilized for agriculture after decommissioning and will implement appropriate measures to facilitate agricultural use. All site restoration will be in accordance with a Kane County Stormwater Management Permit, a County-approved soil erosion control plan, and an Agricultural Impact Mitigation Agreement through the Illinois Department of Agriculture. If no specific use is identified, KaneSolar02 will vegetate the site with a native grassland seed mix. The goal of restoration will be to restore natural hydrology and plant communities to the greatest extent practicable while minimizing new disturbance and removal of native vegetation. The decommissioning best management practices (BMP's) to minimize erosion and contain sediment that will be employed on the Project to the extent practicable with the intent of meeting this goal include:

1. All affected areas shall be inspected, thoroughly cleaned, and all construction-related debris shall be removed.
2. Items required to be restored include windbreaks, waterways, site grading, drainage tile systems (if applicable) and topsoil to former productive levels.
3. Minimize new disturbance and removal of native vegetation to the greatest extent practicable.
4. Removal of solar equipment and access roads up to five (5) feet below surrounding grade, backfill with subgrade material and cover with suitable topsoil to allow adequate root penetration for native plants, and so that subsurface structures do not substantially disrupt ground water movements. Access roads will be left in place if mutually agreed upon by the landowner.
5. Any topsoil that is removed from the surface for decommissioning will be stockpiled to be reused when restoring plant communities. Once decommissioning activity is complete, topsoil will be restored to assist in establishing and maintaining plant communities.
6. Stabilize soils and re-vegetate with native prairie plants appropriate for the soil conditions and adjacent habitat and use local seed sources where feasible, consistent with landowner objectives. Reseeding with native plants will not be performed for site that will be returned to agricultural use or other more intensive beneficial uses.

7. During and after decommissioning activities, install erosion and sediment control measures in all disturbance areas where potential for erosion and sediment transport exists, consistent with Kane County Stormwater Management Permit and soil erosion control plan, which will be approved by the County Soil and Water Conservation District prior to work commencement.
8. In unlikely case of an occurrence, remediate any contamination leaks or releases prior to completion of decommissioning.

#### Post-Restoration Monitoring

Decommissioning of the site will not require new permits or approvals except potentially a NPDES/SDS CSW Permit and SWPPP, if grading activities are necessary and exceed applicable permit thresholds. Decommissioning should include post-restoration monitoring as required by the NPDES/SDS CSW Permit and SWPPP or other applicable requirements. In addition, the KaneSolar02 Field Representative assigned to decommissioning monitoring will stay in contact with landowners, including onsite check-ins until the NPDES/ SDS CSW permit is closed.

#### Decommissioning Costs

KaneSolar02 will be responsible for all costs to decommission the project and associated facilities. **Net decommissioning costs are expected to be a positive \$351,300.** The engineering firm GEI estimated a conservative gross decommissioning estimate of \$442,700 (including mobilization, permitting, etc.) The salvage value of the scrap aluminum, steel and other components is estimated to be \$794,000. In addition, the resale value of the solar modules is expected to be \$150,000. Note that solar modules are very stable products and are warranted to retain at least 85% of their functionality after 25 years and will be functional for more than 50 years). Thus, solar modules are and will be valuable equipment well beyond the life of this project. For the purpose of this estimate we have significantly discounted the sale of the used modules to \$150,000 (\$0.02/Wdc). A detailed breakdown of this cost estimate is attached below.

We propose that the decommissioning cost estimate be re-evaluated every five years after the initial ten years of operation. If the Applicant had used the estimated re-sale value of the modules after only five years, then the value would be on the order of twenty-five cents (or more) per watt. If applicant had used the five-year resale value, the total cash flow from selling the used modules would result in a ***net positive cash flow of approximately \$351,300***, all of which would be available to the County if the site was abandoned. Applicant's decommissioning cost estimate includes a value of only *two cents per watt* for the solar modules, which is the anticipated value of the modules after 25 years. On balance, there is more than six times the amount of money needed to decommission the site that will be available to the County should site be abandoned before the next time the Decommissioning Cost Estimate is updated.

#### Decommissioning Financial Surety Plan

KaneSolar02 will provide financial surety to the County to ensure the decommissioning is funded. KaneSolar02 proposes providing either (i) a mutually acceptable escrow agreement (the "Escrow Agreement") establishing an escrow (the "Escrow") to secure KaneSolar02 obligations for decommissioning, (ii) a "Letter of Credit" or equivalent form of security, or (iii) a bond, in either case naming Kane County as the beneficiary. KaneSolar02 would like some flexibility in the form of security to

allow us to evaluate the options and costs of obtaining the security given market conditions at the time of issuance. The mutually agreed upon form of security will be established prior to the installation of any physical equipment on the site.

The decommissioning security amount and type will be updated every five (5) years by KaneSolar02 utilizing an independent third-party P.E. to reassess the difference between the estimated commissioning costs and salvage value. The escrow or security shall be held, administered, and disbursed by a title company, bank or other qualified escrow agent mutually satisfactory to KaneSolar02 and Kane County. If KaneSolar02 does not remove the solar facilities within one hundred fifty (150) days after the expiration of the lease or earlier termination of the lease, the County may draw from the Escrow or security an amount sufficient to complete the decommissioning of the site. The security shall remain in place until decommissioning is complete.