

October 9, 2018

Champaign County Department of Planning & Zoning Attn: Susan Burgstrom, Senior Planner 1776 East Washington Street Urbana, IL 61802

## Re: Prairie Solar Decommissioning Plan

Dear Champaign County,

Please see the attached Decommissioning Plan.

Sincerely,

Terre Doce

George J. Gunnoe Development Manager

# PRAIRIE SOLAR 1 DECOMMISSIONING PLAN

Prepared by BayWa r.e. Solar Projects, LLC Prepared for: Champaign County, Illinois Dated: October 8, 2018

## 1. INTRODUCTION

#### 1.1 Project Background

Prairie Solar 1 is a 150MW AC solar array located in Champaign County, Illinois, spanning approximately 1,222 acres. The solar photovoltaic power array owned by Prairie Solar 1, LLC, ("**Project"**), is anticipated to operate for a period of no less than 20 years under a power purchase agreement from Utility/Commercial-Industrial Consumer. It is anticipated that the Project will use the existing technology up to an additional twenty years for a total operating period of 40 years. At the completion of its operating life, the Project will either be redeveloped with modern equipment, or it will be decommissioned and removed from the site in accordance with this plan.

#### 1.2 Objectives

The objective of this Decommissioning Plan, ("Plan"), is to provide the requisite financial surety to guarantee the decommissioning of the Project.

#### 1.3 Plan Conditions:

Prior to commencing with any decommissioning activities in accordance with this Plan, Prairie Solar 1, LLC will provide documentation to process the appropriate permit(s). If the Project is to be redeveloped, a new building plan permit will be processed before any installation of new equipment. Decommissioning the Project will allow the parcels that were changed under the Project's Special Use Permit (SUP) to be returned to their original zone classifications.

# 2. DECOMMISSIONING OF FACILITY AFTER CEASING OPERATION

## 2.1 General Environmental Protection

During decommissioning and restoration activities, general environmental protection and mitigation measures will be implemented. Many activities during decommissioning will be comparable to the construction phase, including the use of heavy equipment on site, preparing staging areas, and restoring constructible areas.

#### 2.2 Pre-Decommissioning Activities

Prior to engaging in decommissioning activities, Prairie Solar 1, LLC will provide documentation to process the appropriate permits in accordance with all relevant county, state and federal statutes in place at the time of decommissioning.

Prior to any decommissioning or removal of equipment, staging areas will be delineated as appropriate. At the end of the Project's useful life, it will first be de-energized and isolated from all external electrical lines. All decommissioning activities will be conducted within designated areas; this includes ensuring that vehicles and personnel stay within the demarcated areas. Work to decommission the collector lines and Project-owned transmission lines will be conducted within the boundaries of the municipal road allowance and appropriate private lands.

#### 2.3 Equipment Decommissioning and Removal

The basic components of the Project are photovoltaic (PV) modules, mechanical racking system, electrical cabling, inverter racks, transformers and concrete pads as described below.

- **Modules:** The modules will be removed by hand and placed in a truck to be retuned for recycling or disposal as described below in section2.4.
- **Mechanical racking system**: will be removed with an excavator with a demolition thumb. The recyclable metal will be loaded on trucks and hauled away in accordance with section 2.9.
- **Inverters Racks and Inverters:** The inverters and its racks will be removed by hand and loaded on trucks for recycling in compliance with section 2.5.
- **Transformers:** Transformers will be removed in compliance with section 2.5 and then loaded on to a truck with a crane and sent for recycling.
- Concrete pads: The equipment will be disconnected and transported off site by truck. The concrete foundations and support pads will be broken up by mechanical equipment (backhoe-hydraulic hammer/shovel, jackhammer), loaded onto dump trucks and removed from the site. Smaller pre-cast concrete support pads and/or pre-manufactured metal skids will be removed intact by cranes and loaded onto trucks for reuse, or will be broken up and hauled away by dump trucks.

## 2.4 PV Module Collection and Recycling

All modules will be disconnected, removed from the trackers, packaged and transported to a designated location for resale, recycling or disposal. Any disposal or recycling will be done in accordance with applicable laws and requirements. The connecting underground cables and the junction boxes will be de-energized, disconnected, and removed. The mechanical racking system supporting the PV modules will be unbolted and dismantled by laborers using standard hand tools, possibly assisted by small portable cranes. All support structures will be completely removed by mechanical equipment and transported off site for salvage or reuse. Any demolition debris that is not salvageable will be transported by truck to an approved disposal area. Other salvageable equipment and/or material will be removed for the site for resale, scrap value or disposal.

## 2.5 Electrical Equipment and Inverters

All decommissioning of electrical devices, equipment, and wiring/cabling will be in accordance with local, state and federal laws. Any electrical decommissioning will include obtaining required permits, and following applicable safety procedures before de-energizing, isolating, and disconnecting electrical devices, equipment and cabling.

Decommissioning will require the removal of the electrical equipment, including inverters, transformers, underground/aboveground cables and overhead lines. Equipment and material may be salvaged for resale or scrap value depending on the market conditions.

#### 2.6 Roads, Parking Area

All access roads and the parking area will be removed to allow for the complete rehabilitation of these areas unless the landowner provides written consent to retain these features. Typically, the granular base covering of these areas will be removed using a wheel loader to strip off the material and dump trucks to haul the aggregate to a recycling facility or approved disposal facility. The underlying subsoil, if exhibiting significant compaction (more likely for the site entrance road than the interior access roads), will then be diced using a tractor and disc attachment to restore the soil structure and to aerate the soil. Clean topsoil will be imported on site by dump truck, replaced over the area and leveled to match the existing grade.

#### 2.7 Other Components

Unless retained for other purposes, removal of all other facility components from the site will be completed, including but not limited to surface drains, access road cross-culverts, and fencing. Anything deemed usable shall be recovered and reused elsewhere. All other remaining components will be considered as waste and managed according to local, state, and federal laws. For safety and security, the security fence will be dismantled and removed from the site after all major components, PV modules, tracker system and foundations have been removed.

#### 2.8 Site Restoration

The following activities will be undertaken to restore the site to substantially its previous condition;

- Site cleanup, re-grading to original contours and, if necessary, restoration of surface drainage swales and ditches.
- Any trenches/drains excavated by the Project will be filled with suitable materials and leveled.
- Any road, parking area will be removed completely, filled with suitable sub-grade material and leveled.
- Any compacted ground will be tilled, mixed with suitable sub-grade materials and leveled.
- Topsoil will be spread as necessary to ensure suitable conditions for vegetation re-growth and reseeded with native seed mix to promote vegetation.

The project fence and existing fire access roads may remain in place upon written consent of the landowner.

#### 2.9 Management of Wastes and Excess Materials

All waste and excess materials will be disposed of in accordance with local, state and federal laws. Waste that can be recycled under municipal programs will be done accordingly. Waste that requires disposal will be disposed of in a state licensed facility by a state licensed hauler.

## 2.10 Emergency Response and Communications Plans

During decommissioning, , Prairie Solar 1, LLC will coordinate with local authorities, the public, and others as required to provide them with information about the ongoing activities. Besides regular direct/indirect communication, signs will be posted at the Project facility to give information to the local

public and visitors. The Prairie Solar 1, LLC contact information (telephone number, email and mailing address) will be made public for those seeking more information about the decommissioning activities and/or reporting emergencies and complaints. All inquiries will be directed to the Prairie Solar 1, LLC Representative who will respond to any inquiry. In the event of an emergency, Prairie Solar 1, LLC will mobilize its resources to the site to respond to the event. Personnel involved in decommissioning will be trained in the emergency response and communications procedures. Emergency response procedures will be prepared prior to decommissioning.

# 3. PROJECT DECOMMISSIONING COST ESTIMATE

## 3.1 Cost Estimate:

Prairie Solar 1, LLC shall provide a detailed Decommissioning Cost Estimate, prepared by an Illinois Licensed Engineer, prior to the issuance of building permits, which shall include the following:

- a) Three (3) individual, gross estimated costs to perform decommissioning for: above-ground restoration, below-ground restoration, and environmental remediation as set forth in Section II above ("Gross Cost");
- b) an increase of the Gross Cost by 25% to eliminate any discrepancy in cost estimation techniques ("Contingency");
- c) the estimated resale and salvage values associated with the Project equipment ("Salvage Value");
- a reduction from the Salvage Value by 30% such that only 70% of the Salvage Value can be used as a credit against the Gross Cost and Admin Factor. The Salvage Value multiplied by 70% is the ("Salvage Credit").

Thus the Decommissioning Cost Estimate formula is:

Gross Cost + Contingency - Salvage Credit = the "Decommissioning Cost Estimate".

Salvage value may be deducted from the Decommissioning Cost Estimate, only if the PV solar farm maintains free and clear of liens and encumbrances, including financing liens and provide proof prior to issuance of Special Use Permit, or deduct the amount of liens or encumbrances from salvage value, or any and all financial security agreements entered into by the applicant are subject to the covenant required by Section 6.1.1 A.2.

The Decommissioning Cost Estimate shall include a table allocating the net cost estimate across the Project area, based on the percentage of generating capacity in megawatts (MW) on each property ("Allocation Areas"). The Allocation Areas will be divided based upon the lease areas, however Allocation Areas will reference the underlying land, in case ownership of the underlying land changes control during the life of the Project.

## 3.2 Security:

Prairie Solar 1, LLC will provide an amount equal to One Hundred Twenty-Five percent (125%) the

Decommissioning Cost Estimate (as determined by an Illinois Licensed Engineer, per section 3), (**"Decommissioning Security"**). All financial assurances required by the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture shall count towards the total financial assurance. Decommissioning Security shall be provided by Prairie Solar 1, LLC prior to the Commercial Operation Date.

The Decommissioning Security will be in the form of a irrevocable letter of credit and an escrow account with the governing body as the beneficiary per section 6.1.5 Q(4) of the Solar Ordinance. The governing body has the right to require multiple letters of credit based on the regulations governing federal insurance for deposits, and the Applicant, its successors in interests, and all parties to decommissioning shall adjust the amount of financial assurance in escrow to ensure that it reflects current and accurate information. Unless the Governing Body states otherwise, the Champaign County State's Attorney's Office shall review and approve every Letter of Credit prior to Zoning Administrator Acceptance. Decommissioning estimates will be updated once every three (3) years for the first twelve (12) years of operation, and every other year, thereafter. Estimates will be created by an Independent Illinois Licensed Professional Engineer.

Payment of the Decommissioning Security is to be made in equal installments over the first thirteen (13) years of the facility's life.