



Case No. 17-1152-EL-BGN

June 22, 2020

Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3793
Attn: Grant Zeto

RE: Hillcrest Solar I, LLC

Notice of Compliance with Certificate Condition #1 - The facility shall be installed at Hillcrest's proposed site as presented in the application and modified by supplemental filings.

Dear Mr. Zeto;


Hillcrest Solar I, LLC ("Hillcrest Solar") is certified to construct a solar-powered electric generation facility in Brown County, Ohio in accordance with the orders issued by the Ohio Power Siting Board ("OPSB") in the above-referenced cases.

Attached please find a copy of the Hillcrest Solar Decommissioning Study provided by Leidos Engineering, LLC regarding compliance with Certificate Condition #1 of the Opinion, Order and Certificate issued on February 15, 2018 in Case No. 17-1152-EL-BGN and Amendment 18-1267-EL-BGA. In accordance with PCL's Hillcrest Solar Project Decommissioning Plan (docketed December 14, 2019), the study provides a description of the decommissioning and restoration phase and the estimated costs of dismantling and removal activities to restore the project to pre-construction conditions. The study covers all components of the Project as outlined in the OPSB case numbers stated above as well as for the Transmission Line Project (Case No. 20-0614-EL-BNR). A Decommissioning Performance Bond (Bond No. 799-5148/800047712) as per the amount stated in the study was executed and serves as Hillcrest Solar's commitment to the activities required for project retirement.

HILLCREST SOLAR PROJECT

We are available, at your convenience, to answer any questions you may have.

Sincerely,



Julia Mancinelli, Director – Environment

Attachment: Hillcrest Solar Project Decommissioning Study

Innergex Renewable Energy Inc.

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April 9, 2020

Via E-mail (ATerziotis@innergex.com)

Hillcrest Solar I, LLC
c/o Adriana Terziotis
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**Subject: Hillcrest Solar Project
Decommissioning Study**

Ladies and Gentleman:

Introduction

Hillcrest Solar Project (the "Project") is a 200 megawatt ("MW") alternating current ("AC") – 260 MW direct current ("DC") solar project located in Brown County, Ohio, to be constructed on approximately 1,313 acres of land under long-term lease (the "Project Site"). The Project consists of 606,480 First Solar Series 6 cadmium telluride ("CdTe") solar modules; 87,360 solar modules rated at 430 W DC each; 166,140 solar modules rated at 435 W DC each; and 352,980 solar modules rated at 440 W DC each. The modules are to be mounted on 1,597 single-axis trackers manufactured by Soltec Renewable SL ("Soltec"), which are to be connected to 55 4,400 kilovolt-ampere ("kVA") inverters manufactured by the SMA Company ("SMA") (model number SC4400UP [the "SMA Inverters"]). Collectively, these inverters are able to provide a peak capacity of 242 MW-AC at 25°C at the output of the inverters. The AC capacity at the output of the inverters will be transformed from 660 volts ("V") to 34.5 kilovolts ("kV") for connection to a new on-site substation (the "Project Substation") where the output voltage is further stepped up to 138 kV. The Project Substation is interconnected via an approximate 725 foot underground 138 kV Interconnection Line to the nearby Duke Energy Business Services, LLC for Duke Energy Ohio, Inc. (the "Transmission Owner" or "Duke Energy") existing 138/345 kV Hillcrest Substation, which is the point of interconnection ("POI").

This Decommissioning Study (the "Study") serves as a high-level description of the decommissioning and restoration phase of the Project, including a summary level listing of the Project main components and a proposed sequence for the Project dismantling and removal activities (detailed in the document ("*Decommissioning Plan – Hillcrest Solar Project*" by PCL, dated November 22, 2019). The Study also provides the estimated costs for dismantling and removal activities, and a listing of the potential revenues from the sale of scrap commodities and equipment from the decommissioning activities. The intent of the decommissioning activities is to restore the Project Site to substantially pre-construction condition.

Solar Farm Components

The main components of the Project that will be dismantled include:

- Fences and gates;
- Solar modules (606,480 First Solar modules);
- Trackers (1,597 Soltec trackers);
- Piles (60,429 piles);
- Inverters (55 – SMA inverters rated at 4,400 kVA) and associated 110 vaults;
- Main power transformers;
- Underground electrical collection system;
- Substation;
- Dead-end structure;
- Underground interconnection line (725 feet);
- Pyranometer stations and associated foundations;
- Access roads (13 miles – 20 feet wide);
- Access road (400-foot access road from Duke Substation access road to dead-end structure); and
- Operations and Maintenance (“O&M”) Building.

Decommissioning Sequence

Decommissioning of the Project would include the following activities for the removal of the main components of the Project:

- De-energize entire Project and disconnect from the transmission line/system;
- Remove 606,420 solar modules from trackers, place on pallets for shipping, load semi-trailers, and haul away;
- Remove the trackers and associated drive motors and load on semi-trailers for transport;
- Pull piles out of ground and load on semi-trailers for transport;
- Remove the inverters and load onto semi-trailers for transport;
- Remove 60,919 lineal feet of AC cable and 4,472 lineal feet of directional drilling, and associated electrical systems, including junction boxes and combiner boxes (DC and AC collection system wiring does not need to be removed as the wiring is buried 3 feet underground and not required to return the farm fields to cultivation);
- Remove the Project main power transformer, collection circuit breakers dead-end structure, substation, and associated foundations;
- Remove access roads (including gravel-concrete mix);
- Remove perimeter fencing and gates.

- Grade entire site, including applying manure and blending back into topsoil, and refurbishing access roads to push previously stockpiled topsoil back across the excavated access road beds to contour to existing ground level; and
- Removing the O&M building and associated gravel.

The only materials that may be left on the Project area are the roads desired to be kept by the landowners.

Solar Farm Components – Specific Assumptions

Substation and Associated Foundations

The substation foundation, dead-end structure foundation, 138 kV skid structure foundations, 34.5 kV skid foundations, and static pole foundations dimensions were obtained from design foundation drawings and are to be removed. The substation transformer oil and other oils would be removed in an environmentally safe and responsible manner and no contamination of water or wastewater would be expected to occur. No soil contamination is expected with no soil remediation required.

Medium-Voltage Inverters and Vaults

The medium-voltage decommissioning includes 55 inverters and associated 110 vaults.

Interconnection Line

The 138 kV interconnection line that is estimated to be removed is 725 feet in length.

Substation Main Power Transformer

The cost for the removal of the main power transformer along with collection circuit breakers and associated foundations has been included. All topsoil removed during construction either will be returned before the end of construction or provided to the participating landowner, and not removed from the Project area.

Operations and Maintenance Building

The O&M building will be dismantled and removed.

Pyranometer Stations

The decommissioning activities are to include the demolition of five inverter pyranometer stations.

Access Roads

The access roads were estimated at 13 miles and 20 feet wide, and the cost of removing the gravel-concrete mix was included.

Site Rehabilitation / Restoration

Agricultural areas will be restored by redistributing topsoil to allow return to active agricultural use. Previous agricultural areas will be re-seeded only at landowner requests. Natural areas will be revegetated using native plant material and seeds (refer to the *"Decommissioning Plan - Hillcrest Solar Project"* for further details).

Once all Solar Farm components are removed, the Project area will be de-compacted to previous conditions while ensuring functional long-term drainage (e.g., ditches).

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Table 2
Hillcrest Solar Farm: Decommissioning Cost Study
Estimated Decommissioning Revenues

Type	Quantity (Each)	Value (\$/unit)	Salvage (%)	Salvage Total (\$)
Steel from dead-end structure, piles, trackers and fence		\$220/ton	95	2,546,000
Copper from wire		\$2.02/lb	95	132,000
Aluminum from wire		\$0.18/lb	60	275,800
Inverter Transformers and Electronics	55 each	\$500/ton	95	274,600
Solar Modules	606,000	\$14.00 each		2,969,400
Substation Transformer	1			\$475,000
Access Road, Crane Pads, Substation Aggregate	26,630 CY	\$6.00 per CY	60	95,900
Miscellaneous Materials and Equipment				28,400-
Total Estimated Revenues				\$6,797,100

Net Decommissioning Cost

The Net Decommissioning Cost will be the difference between the decommissioning costs and the decommissioning revenues or \$19,532,000 less \$6,797,100, or \$12,734,900.

All of the decommissioning costs must be recalculated approximately every 5 years over the operating life of the Project. The design life of the Project is 25 years.

References

Foundation Drawings:

- Hillcrest_Substation_DWG_ST-B637-S500_Foundation Plan_RA_20191118.pdf
- Hillcrest_Substation_DWG_ST-B637-S501_Foundation Details_RA_20191118.pdf
- Hillcrest_Substation_DWG_ST-B637-S502_Foundation Details_RA_20191118.pdf
- Hillcrest_Substations_RPT_ST-B637-_Foundation Design_RA_20191118.pdf
- Hillcrest_SS_EL_AC Cable_RB_20191125.pdf
- Hillcrest_SS_EL_DC Cable_RB_20191125.pdf

Scrap Register - www.scrapregister.com.

Sincerely,
LEIDOS ENGINEERING, LLC

Eo: john.d.fx@leidos.com; john.c.schmalz@leidos.com; Thomas.j.renes@leidos.com

This foregoing document was electronically filed with the Public Utilities

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in

Case No(s). 17-1152-EL-BGN

Summary: Notice Notice of Compliance with Condition 1- Decommissioning Plan / Bond
electronically filed by Ms. Julia M Mancinelli on behalf of Hillcrest Solar I, LLC