NANTICOKE SOLAR

Decommissioning Plan Report

February 2017

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1.0 DECOMMISSIONING PLAN

The Nanticoke Solar electricity generation project (herein referred to as "The Project") is being developed by Nanticoke Solar LP (herein referred to as "Nanticoke Solar"), which is an Ontario limited partnership, with Ontario Power Generation Inc. (OPG), SunEdison Canadian Construction LP and 9374264 Canada Limited (the Six Nations of Grand River) as limited partners and Nanticoke Solar Inc. as general partner. OPG owns a majority of the shares and units in Nanticoke Solar Inc. and Nanticoke Solar LP and therefore has a controlling interest in these entities.

Nanticoke Solar LP leased the Nanticoke GS lands and the Central Parcel from OPG. Nanticoke Solar LP leased the West Parcel and the East Parcel from 172965 Canada Limited.

Nanticoke Solar LP has been selected by the Independent Electricity System Operator (IESO) to build and operate up to a 44 megawatts alternating current (MW_{AC}) solar electricity generation facility on and near the existing OPG Nanticoke Generating Station (G.S.) site in Haldimand County, Ontario ("The Project").

The Nanticoke GS is located on heavy industrial zoned land located south of Rainham Road, east of Nanticoke Road and bounded to the south by Lake Erie. Solar Panels are being considered for four land parcels. One land parcel is located on the former coal pile. There are also three land parcels located immediately east of the Nanticoke GS site (West, Central and East Parcels) that are partially in agricultural production and partially exist as natural areas. OPG owns the land upon which the former coal pile is situated, as well as the Centre Parcel. The West Parcel and East Parcel are leased from by Nanticoke Solar from a private owner, and some areas are currently in agricultural production.

The term of the contract with the IESO is 20 years. The anticipated life of The Project is a minimum of 35 years, given that the modules and other equipment have a longer design and useful life. If the economics of solar power remain viable at the end of the IESO LRP contract, or beyond, the facility could continue to operate. If, after 20 years, another power production contract cannot be secured the owner of The Project could decommission the facility. It may also be possible to "repower" the site with new, more efficient solar PV technology, after the expiry of the IESO Contract, or later.

1.1 Decommissioning During Construction

It is extremely unlikely that The Project would be dismantled or decommissioned during construction. Should this occur the procedures used would depend on the state of construction at the time of project termination. The procedures used would be the same as those used after ceasing operation. All equipment and imported material (including roads) would be removed from the site in accordance with applicable municipal, provincial and federal requirements. The pile foundations supporting each panel will be removed.

The process of decommissioning the Project is assumed to take approximately 6 months, but could be less depending upon what stage of completion The Project is at prior to decommissioning. Any exposed soils on the agricultural land would be re-seeded with native grasses or trees, depending on the preference of the property owner.

1.2 Decommissioning After Ceasing Operations

If the project is not repowered, the equipment will be dismantled. In the case of the West, Centre and East Parcels, if desired by the property owners, the lands will be restored to their pre- construction state (agricultural land use for the West and East Parcels, and fallow for the Centre parcel, or as may be appropriate at that time). In the case of the Coal Yard, the land will not be returned to its former use as a coal pile.

If the facility is to be decommissioned and the solar array is to be removed at the end of LRP contract, the impacts will be similar to the construction phase, but in reverse sequence. All decommissioning of electrical devices, equipment, and wiring/cabling will be conducted in accordance with local, municipal, provincial and federal standards and guidelines. Any electrical decommissioning will include obtaining the required permits and following procedures before de-energizing, isolating, and disconnecting electrical devices, equipment and wiring/cabling. The procedures will include the following.

- The creation of temporary work areas. One of the benefits of the Nanticoke GS lands is that there are large open areas and unused buildings that can facilitate both the construction and decommissioning of the proposed project. Therefore, temporary work areas would be first prioritized to go into these areas. Following that some very small temporary work areas may be needed on the West, Centre and East Parcels. In order to provide sufficient area for the lay-down of the disassembled panels and racking and loading onto trucks, a minimal amount of area will be cleared, levelled and made accessible. The topsoil may be disturbed and some material may need to be added.
- Equipment will include, at a minimum: The use of cranes to remove the panels, racking, inverters and transformers and the use of trucks for the removal of panels, racking, inverters and transformers.
- In the case of the East, Centre and West Parcels, driveways and culverts (if installed) will be removed unless Nanticoke Solar makes arrangements with the property owners to leave them in place. Driveway bedding material will be removed and replaced with clean sub- and top-soil for reuse by the landowner for agricultural or other purposes.
- Decommissioning of on-site electrical lines and foundations.

During decommissioning, mitigation measures similar to those used for a construction site (e.g., sediment and erosion controls) will be implemented and maintained by the Contractor and inspected by the Contractor's Environmental Site Inspector. The Contractor will be responsible for preparing and submitting environmental monitoring reports to Nanticoke Solar to ensure conformance with applicable regulatory requirements.

Overall, no significant adverse impacts to the environment are expected as a result of decommissioning the Project.

1.2.1 Dismantling PV Modules, Racks and Supports

All modules will be disconnected, removed from the racks, packaged and transported to a designated location for resale, recycling or disposal. If the modules are not to be reused in a different location, the glass and silicon will be reclaimed and the aluminum frames will be recycled. Any disposal or recycling

will be done in accordance with local by-laws and requirements. The connecting underground cables and the junction boxes will be de-energized, disconnected and removed.

The steel lattice racks supporting the modules will be unbolted and disassembled using standard hand tools, possibly assisted by a small portable crane. The vertical steel posts supporting the racks and all steel support posts (driven or screwed) will be completely removed by mechanical equipment and transported off-site for salvage (driven piles) or reuse (screw piles).

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 from the site for resale, scrap value or disposal depending on market conditions.

1.2.2 Dismantling Electrical Equipment, Buildings and Foundations

All decommissioning of electrical devices, equipment, and wiring/cabling will be in accordance with local, municipal, provincial and federal agency standards and guidelines. Any electrical decommissioning will include obtaining the required permits, and following before de-energizing, isolating, and disconnecting electrical devices, equipment and wiring/cabling.

Decommissioning will require dismantling and removal of the electrical equipment, including inverters, transformers, underground cables and overhead lines, the prefabricated inverter enclosures and substation electrical building. The equipment will be disconnected and transported off-site by truck. Any foundations on the Nanticoke GS Lands may be left in place at the request of the property owner. On the West, Centre and East Parcels, the larger slab-on-grade concrete foundations and support pads may be broken up by mechanical equipment (backhoe-hydraulic hammer/shovel, jackhammer), loaded onto dump trucks and removed from the site, at the request of the property owners; and smaller pre-cast concrete support pads may be removed intact by cranes and loaded onto trucks for reuse or be broken up and hauled away by dump trucks.

Prior to removal of the transformers, the oil will be pumped into a separate industry approved disposal container and sealed to prevent any spill during storage and/or transportation. Equipment and material may be salvaged for resale or scrap value depending on the market conditions.

1.2.3 Dismantling Roads, Parking Area and Substation Yard

Specifically on the Nanticoke GS Lands, no dismantling of roads, parking areas or the substation yard will be conducted unless at the request of the property owner. In the case of the West, Centre and East Parcels, unless retained for other purposes, the access roads, the parking area and fenced yards will be removed to allow for the restoration of these areas. Granular may be removed, and dump trucks used 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 disked using a tractor and disk attachment to restore the soil structure and aerate the soil. Clean topsoil would be replaced over this area, from where it may have been temporarily stored elsewhere on-site by dump truck, to match the surrounding grade. Depending upon the time of year and the planned use of the land, the area will be returned to its pre-construction condition.

1.2.4 Other Components

Unless retained for other purposes, and at the request of the property owners, removal of all other facility components from the site will be completed, including but not limited to surface drains, culverts, and fencing. Anything deemed usable shall be recovered and reused. All other remaining components will be considered as waste and managed according to federal, provincial and municipal requirements. For safety and security, the security fence will be the final component dismantled and removed from the site.

1.3 Restoration of Land

Decommissioning of The Project will not result in any adverse impacts to surface or groundwater quality.

Restoration of land use is not a concern for the Nanticoke GS lands, as the coal yard will never again be used to store coal; so any specific restoration activities are limited to the West, Centre and East Parcels. The Project doesn't include any permanent changes to the original use of the West, Centre and East Parcels. Therefore, the agricultural use of the areas will be accomplished by ensuring:

- Site cleanup.
- Any excavation and/or trenching caused by the removal of building or equipment foundations, rack supports and underground electrical cables will be backfilled with the appropriate material and leveled to match the ground surface.
- The roads, parking areas and substation yard will be removed completely, filled with suitable sub-grade material and leveled. Top soil will be placed on these areas to restore agricultural capability.
- Any compacted ground will be tilled, mixed with suitable sub-grade materials and leveled.

1.3.1 Pre-Construction Conditions

The Project is located on four (4) parcels of property in Haldimand County, Ontario including the former Nanticoke G.S. site and lands nearby. The four parcels of the project land are privately owned:

- The Nanticoke GS Lands consist of a coal yard, no longer in use by the GS;
- The Western and Eastern Parcels, are currently in agricultural use; and,
- The Centre Parcel, which is an unused, tall-grass field.

1.3.2 Land Restoration Activities

In the case of the West, Centre and East Parcels, once the equipment has been removed the land will be restored to its previous uses. This will be accomplished by removing part of the foundation and granular material from roadways and culverts (if installed). Land use will be restored (if necessary) using stockpiled subsoils and topsoil. If there is insufficient material onsite, topsoil and/or subsoil will be imported form a source acceptable to the landowner.

Although strict spill prevention procedures will be in place, there is the potential through the decommissioning process for small spills of solvents or fuels. The soil conditions of the site will be surveyed to the standards of the day to determine if any impacts have occurred. Should soil impacts be

noted, the impacted soils will be delineated, excavated and removed, to the standards of the day, from the site for disposal at an approved and appropriate facility. The removed soils will be replaced with soil from on-site if available. If none are available, clean fill and topsoil will be imported. If possible, native plant species will be used for the re-vegetation of disturbed areas.

1.4 Waste Disposal

As discussed above, the waste generated by the installation, operation and decommissioning of The Project is minimal, and there are no toxic residues. Any wastes generated will be disposed of according to standards of the day with the emphasis of recycling materials whenever possible.

1.5 Other Approvals

It is anticipated that the decommissioning will require a Building or Demolition permit obtained from Haldimand County.

1.6 Emergency Response and Communications Plans

The Emergency Response and Communications Plan as it pertains to the decommissioning phase of The Project is the same as described in the Design and Operations Report. Prior to initiating any decommissioning activities, Nanticoke Solar will notify the local authorities, the public, and relevant government agencies of their intent to decommission The Project. Copies of a detailed emergency response plan, developed in conjunction with the local emergency services, will be distributed to the local municipality prior to the commencement of operations. A plan specific to The Project will be developed during the construction phase of this project and will be applicable to both the operations and decommissioning phases of The Project.

During decommissioning, Nanticoke Solar will coordinate with the local authority, the public and others as required to provide them with information about the ongoing activities. Besides regular direct/indirect communication, a sign will be posted at the gate of the facility which will include Nanticoke Solar's contact information (telephone number, e-mail and mailing address) should the public have any questions, inquiries or complaints. All inquiries will be directed to Nanticoke Solar's primary contact person who will respond to the inquiry accordingly. All inquiries will be logged electronically with the following information: date of question, inquiry or complaint, name, phone number, email address of the individual, response, date of response, and any follow-up issues.