

Islander Solar, LLC Decommissioning Plan

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Project Location:
850 Iron Mine Hill Road
North Smithfield, Rhode Island 02896
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1.0 Decommissioning Plan

System shall be constructed in North Smithfield, Rhode Island. The system to be constructed will be a fixed-tilt Photovoltaic system. The foundations will be ground screws drilled into ground. The site is not going to be mass graded, but rather leveled and planted in pollinator plants and native grasses. The site may have a small storage building for maintenance equipment, spare modules, inverters, and other sensitive system components. Entire site shall be surrounded with chain-link fencing for additional security.

Decommissioning will commence once the system stops producing power for 12-month period. At which point the interconnection will be disconnected, and such will commence the 365-day removal timeframe for decommissioning.

1.1 Decommissioning During Construction or Early Life Termination

It is extremely unlikely that system 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 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 system is assumed to take approximately 1 month, but could be less depending upon what stage of completion System is at prior to decommissioning. Any exposed soils on the agricultural land would be re-seeded with native grasses or agriculture crops depending on the preference of the property owner.

1.2 Decommissioning After Ceasing Operations

If the system is to be decommissioned and the solar array is to be removed at the end of its useful life, 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. 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, leveled 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.
- 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 ensure conformance with applicable regulatory requirements.

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

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 electrical grid connection equipment. The equipment will be disconnected and transported off-site by truck.

Equipment and material may be salvaged for resale or scrap value depending on the market conditions.

1.2.3 Dismantling Roads, Parking Area

No dismantling of roads, parking areas or the building will be conducted unless at the request of the property owner.

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 system will not result in any adverse impacts to surface or groundwater quality.

1.3.1 Land Restoration Activities

Land use will be restored (if necessary) using onsite materials and topsoil. If there is insufficient material onsite that can be used for leveling, topsoil and/or subsoil will be utilized from the existing landscaping berms and regarded to a condition that is acceptable to the landowner.

1.4 Waste Disposal

The waste generated by the installation, operation and decommissioning of system 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 Emergency Response and Communications Plans

The Emergency Response and Communications Plan as it pertains to the decommissioning phase of system is the same as described in the Design and Operations Report. Prior to initiating any decommissioning activities, local authorities, the public, and relevant government agencies will notify the of intent to decommission system. 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 system will be developed during the construction phase of this project and will be applicable to both the operations and decommissioning phases of system.

During decommissioning, the local authority, the public and others as required will be coordinate 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 contact information (telephone number, e-mail and mailing address) should the public have any questions, inquiries or complaints. All inquiries will be directed to 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.

2.0 Decommissioning Cost Estimate

2.1 Estimated Decommissioning Cost to Remove and Restore

Item	Description	Unit	Est Qty	Unit Price	Total
1	Fencing Removal	LF	1,986	\$4.00	\$7,944
2	Racking Frames	each	212	\$175.00	\$37,100
3	Racking Screws/Posts	each	848	\$7.00	\$5,936
4	Solar Modules	each	5,252	\$5.00	\$26,260
5	Inverters/Switchgear	lb	5,712	\$0.28	\$1,599
6	Transformers	each	1	\$2,000.00	\$2,000
7	DC String Wire (CU)	lb	15,530	\$0.50	\$7,765
8	AC Wire (AL)	lb	34,743	\$0.50	\$17,371
9	Concrete Removal	sf	270	\$6.50	\$1,755
10	Regrading	ac	6	\$500.00	\$3,000
Total					\$110,730

2.2 Estimated Waste Salvage Value

Item	Description	Unit	Est Qty	Unit Price	Total
1	Fencing Removal	lb	7,924	\$0.17	\$1,347
2	Racking Frames (190 lb each)	lb	40,280	\$0.60	\$24,168
3	Racking Screws/Posts (75 lb each)	lb	15,900	\$0.17	\$2,703
4	Solar Modules (\$0.05/w)	each	5,252	\$16.25	\$85,345
5	Inverters/Switchgear	lb	5,712	\$0.28	\$1,599
6	Transformers	each	1	\$4,000.00	\$4,000
7	DC String Wire (CU)	lb	15,530	\$1.65	\$25,625
8	AC Wire (AL)	lb	34,743	\$0.83	\$28,837

Decommissioning Plan Report

	\$0
	\$0
Total	\$173,624

2.2 Estimated Net Total

Net Total	\$62,894
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Based on a positive net total a decommissioning bond is not required.