Islander Solar, LLC Operations & Maintenance Plan

Prepared by:

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Project Location:

850 Iron Mine Hill Road

North Smithfield, Rhode Island 02896

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Frequency of Service	Description of Service	First Date of Service Following COD
Ongoing	**1.0 Warranty Management** • 1.1 Make and coordinate warranty claims for replacement under any available warranty from manufacturers, installers or other similar entities relating to any or all of the System • 1.2 Inform Owner with updates throughout the process and timelines until resolution • 1.3 Furnish Report and document all equipment replacements with serial numbers of old and new equipment if available	COD Onward
2 x per year	**2.0 Pad Mounted Transformers, Switchgear** • 2.1 Visual Inspection • 2.2 Mechanical Inspection including • 2.3 Transformer Fluid Analysis <Annually> • 2.4 Transformer Dissolved Gas Analysis <Annually> • 2.5 IR Thermography Scans • 2.6 Photographic Documentation	Six (6) months after COD
2 x per year	**3.0 Mechanical Inspection:** • 3.1 General Site photos of System including Equipment Pad, Inverters, PV Module, Disconnects, Combiners, DAS, Weather Station Components • 3.2 General Site photos of System Fencing and Access Roads • 3.3 Visually inspect PV Array for damaged, defective, or cracked modules. • 3.4 Visual inspection of array mechanical components, including mounting system and clamps. • 3.5 Visually inspect wire management, wires in contact with sharp edges, damaged wires, loose conduit connectors, and MC4 connector condition at homeruns • 3.6 Verify conductor and conduit sizing match plan set • 3.7 Visual inspection of all system enclosures. Inspect for damage due to weather, animals, and vandalism. Ensure that all locking mechanisms are in working order. • 3.8 Corrosion protection. Apply cold galvanized spray as needed • 3.9 If applicable complete Tracker Inspection; follow all OEM requirements including but not limited to; • 3.10 Inspect drive-shaft assemblies and bearing housings for misalignment due to ground setting.	Six (6) months after COD

	• 3.11 Inspect bearings for excessive wear due to column setting; also check torque markings on these columns. Repair/replace/retighten if necessary. • 3.12 Check motor lubrication level and condition. If lubrication appears light or milky or cloudy it may indicate water intrusion. If lubricant level is at or below site glass level, a significant amount of oil is visibly leaking, or there appears to be water intrusion, record observation and contact OEM.	
2 x per year	**4.0 Electrical System Inspection (Switchgear, Switchboards, Panelboards, Subpanels, Safety Disconnects, CT Cabinets, Meter Pants): Follow all OEM required maintenance and care instructions to maintain warranty.** • 4.1 Visual inspection of all AC and DC electrical components. Note signs of arcing or damage to components. • 4.2 Infrared Thermography Scans of all terminations • 4.3 Confirm torque on all electrical terminations. Note any connections not torqued to OEM recommendation and re-torque as necessary. • 4.3 Verify proper operation of inverter's internal and external cooling fans. If applicable, change or clean air filters per OEM requirements. • 4.4 Review error logs of inverters and ensure no faults or alarms are present. • 4.5 Confirm all inverter strings operational with Proof of Life test using clamp meter. Replace string fuses where necessary or note downed strings in report recommended action items. • 4.6 100% IV Curve Trace. Array testing to be performed during a period of constant irradiance and minimum 400 w/m². (Optional: Aerial Thermography Documentation is also acceptable in lieu of IV Curve Tracing). • 4.7 Verify continuity to ground on all enclosure/equipment grounds.	Six (6) months after COD
2 x per year	**5.0 Data Acquisition System Inspection:** • 5.1 Enclosure Integrity Check • 5.2 Verify irradiance sensor pitch, and azimuth with System as-builts • 5.3 Verify weather data output with handheld instruments • 5.4 Clean pyranometer • 5.5 Perform test of DAS UPS backup battery system • 5.6 If applicable, perform tracker system gateway and controller maintenance following OEM maintenance manuals.	Six (6) months after COD
	6.0 Shading Inspection:	

As needed, to ensure optimal System performance, but no less than annually	• 6.1 Verify no shading issues have arisen since previous service; recommend correction where they have. • 6.2 Inspect landscaping under and around System to ensure that there is no shading caused by plants or plant debris. Make recommendation to perform landscaping/mowing as needed.	Six (6) months after COD
Up to 3x Per Season Between May - October	**7.0 Site Vegetation Management** (follow guidelines of scope below unless otherwise noted by Owner; scope subject to change on a site to site basis.) • 7.1 Perform mowing in between and around array rows. Lowest edge of leading module row cut at least 12 inches under module • 7.2 Perform mowing/hand trimming around interior of perimeter fence and one pass outside of perimeter fence • 7.3 Hand trimming around equipment pad, combiner boxes, inverters, MV equipment poles • 7.4 Verify general site condition for cleanliness, safety hazards, site drainage/erosion and storm water management features. • 7.5 Furnish report showing before/after photos and note any deficiencies or areas of concern	COD Onward
As Needed Per Season	**8.0 Snow Plowing** • 8.1 Perform snow removal at access roads leading to main gate(s) to Site and clear snow to main equipment pad(s) inside site fence	COD Onward
As Needed	**9.0 Spare Parts Management** • 9.1 Maintain record of all spare parts	COD Onward
Ongoing	**10.0 Reporting** • 10.1 Furnish written report no later than 7 business days after completion of site inspection including photos and IR scan deficiencies, if applicable. Include all recommendations for corrective action. • 10.2 Report immediately or no less than 24 hours after observing site issues that need immediate attention or production or monetary loss are imminent if not corrected.	COD Onward
Ongoing	**11.0 Response Times** Operator shall respond to System Owner request for dispatch depending on the severity of the problem. • **11.1 High Priority:** 250kw or greater loss of power or loss communication causing the status of at least 250kw of the plant capacity to become unknown **Response Time:** Within 24 hours • **11.2 Medium Priority:** 50-249kw loss of power or loss communication causing the status of at least 50-249kw of the plant capacity to become unknown	COD Onward

	Response Time: Between 24 - 72 hours • **11.3 Low Priority:** <50 kW loss of power **Response Time:** Between 24 -120 hours	