

Soho Farm Solar Park		Quantity of Modules	6808	Quantity of Strings	296	Quantity of Inverters	2	Quantity of Array Monitors	10
1	Solar Modules	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year		
a	Review of signs of Browning or Yellowing on Surface of Modules.	Monthly	12	5%	60%	340	4085		
b	Review of any Damage to the Modules.	Monthly	12	5%	60%	340	4085		
c	Review of any Shadowing on the Modules.	Monthly	12	5%	60%	340	4085		
d	Visual Inspection of the DC Junction Boxes on the Modules.	Monthly	12	5%	60%	340	4085		
e	Visual Inspection of the MC4 Connections from the Modules.	Monthly	12	5%	60%	340	4085		
f	Cleaning of the Modules.	Monthly	12	5%	60%	340	4085		
g	Visual Inspection of the Mechanical Fastening of the Modules to the Structure.	Monthly	12	5%	60%	340	4085		
h	Thermographic Inspection of the Modules	Monthly	12	5%	60%	340	4085		
i	Open Circuit Voltage Measurement (Voc).	Bi Annual	2	10%	20%	681	1362		
j	Short Circuit Current Measurement (Isc).	Bi Annual	2	10%	20%	681	1362		
k	Check Back of Panels for any Signs of Damage.	Monthly	12	5%	60%	340	4085		
2	String Wiring	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year		
a	Visual Inspection of Containment, Ductwork and Fastenings of String Cabling.	Monthly	12	5%	60%	15	178		
b	Mechanically check the Tightness of the String Terminations at the Array Monitors.	Monthly	12	5%	60%	15	178		
c	Visually Inspect the MC4 Terminations of the String Circuits.	Monthly	12	5%	60%	15	178		
d	Visual Inspection of Array Monitors Internally.	Monthly	12	5%	60%	1	6		
e	Integrity Test of Cat5 Communications from Array Monitors.	Monthly	12	5%	60%	1	6		
f	Earth Electrode Test at Array Monitors.	Monthly	12	5%	60%	1	6		
g	Visual Inspection for Fire Proof Sealing of Ducting to Array Monitors	Monthly	12	5%	60%	1	6		
h	Inspection of State of Galvonisation on Containment and Fixings to Array Monitor.	Monthly	12	5%	60%	1	6		
3	AC Distribution Installation	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year		
a	Mechically inspection of Tightness of ALL AC Circuit Cabling and Sub-Main Cicruits.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
b	Clearing of Debris, Rubbish or Waste from Inside Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
c	Visual Checking of Weather Proofing of Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
d	Visual Inspection of Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
e	Visual Inspection of Fuses within the Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
f	Earth Electrode Test at the Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
g	Visually Inspect Check condition of MCB's, RCD's, Surge Arrestors and Isolators.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
h	Test Insulation Resistance of Busbars within Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
i	Thermographic Inspection of Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
j	Check Distribution Board Enclosure for Defects.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
k	Check Circuit Labelling, Identification and Distribution Board Labelling.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
l	Mechanical Inspect Tightness of Sub Mains Connections with Distribution Boards.	Bi Annual	2	100%	200%	ALL	ALL TWICE		
4	Control and Monitoring Equipment	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year		
a	Mechanically inspect Terminations within Control and Monitoring Equipment	Bi Annual	2	50%	100%	HALF	ALL		
b	Check Control and Monitoring Equipments enclosures for Defects.	Bi Annual	2	50%	100%	HALF	ALL		
c	Check Control and Monitoring Equipment Labelling, Identification and Enclosure Labelling.	Bi Annual	2	50%	100%	HALF	ALL		
d	Visually inspect the Control and Monitoring Equipments Fuses and Pilot Signals.	Bi Annual	2	50%	100%	HALF	ALL		
e	Thermographic Inspection of Control and Monitoring Equipment.	Bi Annual	2	50%	100%	HALF	ALL		
f	Functional Test of Circuit Breakers, Fuses, Contacts and Pilot Signalling.	Bi Annual	2	50%	100%	HALF	ALL		
g	Test Continuity of Control and Monitoring Equipment Circuits.	Bi Annual	2	50%	100%	HALF	ALL		
h	Test Control and Monitoring Voltages to ensure that they are within Acceptable Operational Range.	Bi Annual	2	50%	100%	HALF	ALL		
i	Thermographic Inspection of Control and Monitoring Equipment Chambers.	Bi Annual	2	50%	100%	HALF	ALL		
5	Mounting Structure	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year		

<i>a</i>	Inspection of Piles to ensure that they are secure within there foundation and that there has been no signs of movement or damage.	Monthly	12	5%	60%	12	144
<i>b</i>	Mechanically Verify Tightness of Fixings on the Structure	Monthly	12	5%	60%	12	144
<i>c</i>	Visually inspect for any signs of Corrosion on the Structure.	Monthly	12	5%	60%	12	144
<i>d</i>	Check Frame Allignment and Levelling across a Row.	Monthly	12	5%	60%	12	144
<i>e</i>	Visually and Mechanically Check that Piles are connected to Grounding Cable and Earth Rods.	Monthly	12	5%	60%	12	144
6	Inverter	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Visual Inspection of equipment within Inverter Compartments.	Monthly	12	50%	600%	2	12
<i>b</i>	Mechanically Check Cable Connections and Tightness of Cables within the Inverter.	Annual	1	100%	100%	2	2
<i>c</i>	Check Lightings and Small Power Circuits within the Inverter.	Monthly	12	50%	600%	2	12
<i>d</i>	Visually Inspect for signs of Moisture within the Inverter Compartments.	Monthly	12	50%	600%	2	12
<i>e</i>	Visually Inspect footings of inverter for signs of movement.	Monthly	12	50%	600%	2	12
<i>f</i>	Visually Inspect Grilles, Fans and Filters of inverters for Blockages.	Monthly	12	50%	600%	2	12
<i>g</i>	Check Inverter Compartments for signs of standing water.	Monthly	12	50%	600%	2	12
<i>h</i>	Verify Absence of Rodents or Wildlife within the Inverter Compartments.	Monthly	12	50%	600%	2	12
<i>i</i>	Verify Inverter is not in alarm on its Main Display.	Monthly	12	50%	600%	2	12
<i>j</i>	Test Battery Output of Batteries on the Inverter.	Bi Annual	2	100%	200%	2	4
<i>k</i>	Visually Inspect Grounding of the Inverter.	Bi Annual	2	50%	100%	2	2
<i>l</i>	Undertake Earth Electrode Test at the Inverter.	Annual	1	100%	100%	2	2
<i>m</i>	Thermographic Inspection of Inverter Compartments.	Bi Annual	2	50%	100%	2	2
7	Medium Voltage Switchgear	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Visual Inspection of Switchboard enclosure and Switchboard.	Monthly	12	100%	1200%	1	12
<i>b</i>	Ensure Switchboard Enclosure and Switchboard are clear of any Rubbish of Debris.	Monthly	12	100%	1200%	1	12
<i>c</i>	Visual Inspection of Seals, Gaskets, Glands and Vents within the Switchboard Enclosure.	Monthly	12	100%	1200%	1	12
<i>d</i>	Visual Inspection of Terminations.	Annual	1	100%	100%	1	1
<i>e</i>	Visual Inspection of Voltage Indicators.	Monthly	12	100%	1200%	1	12
<i>f</i>	Visual Inspection of Earthing Connection.	Monthly	12	100%	1200%	1	12
<i>g</i>	Thermographic Inspection of Switchboard.	Annual	1	100%	100%	1	1
<i>h</i>	Visual Inspection of Any Voltage or Current Transformers.	Annual	1	100%	100%	1	1
<i>i</i>	Insulation Resistance Test of the Cabling and Connections.	Annual	1	100%	100%	1	1
<i>j</i>	Functional Check of Circuit Breaker's and Switch Disconnectors.	Annual	1	100%	100%	1	1
<i>k</i>	Verify Meter Reading and Caliberation of Meter.	Monthly	12	100%	1200%	1	12
<i>l</i>	Functionally Check Mechanical Interlocking mechanisms within Switchboard.	Bi Annual	2	100%	200%	1	2
<i>m</i>	Test Voltage at Battery Chargers.	Bi Annual	2	100%	200%	1	2
<i>n</i>	Check Fuses and Indicators at Baterry Charges.	Bi Annual	2	100%	200%	1	2
<i>o</i>	Visually Inspect connections within G59 Enclosure.	Monthly	12	100%	1200%	1	12
<i>p</i>	Check Indicator Lights at G59 Enclosure.	Monthly	12	100%	1200%	1	12
8	Transformers	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Visually Inspect Oil Level on Transformers.	Monthly	12	100%	1200%	1	12
<i>b</i>	Visually Inspect Temperature of Transformers.	Monthly	12	100%	1200%	1	12
<i>c</i>	Thermographic Inspection of Transformer.	Monthly	12	100%	1200%	1	12
<i>d</i>	Check Oil Pit of Transformer.	Monthly	12	100%	1200%	1	12
<i>e</i>	Check for Rodents or Wildlife within Transformer Enclosure.	Monthly	12	100%	1200%	1	12
<i>f</i>	Release any Gas from the Transformers.	Annual	1	100%	100%	1	1
<i>g</i>	Check Electrical Connections to Transformer.	Annual	1	100%	100%	1	1
<i>h</i>	Check Supply Fuses to Transformer.	Annual	1	100%	100%	1	1
9	Pyranometer	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	General Inspection of Pyranometers.	Monthly	12	100%	1200%	2	24

<i>b</i>	Check for Any Dirt or Mud on the Pyranometer.	Monthly	12	100%	1200%	2	24
<i>c</i>	Verify Gel Within the Pyrnaometer is Clear and not showing signs of Yellowing.	Monthly	12	100%	1200%	2	24
<i>d</i>	Inspect Area around Pyranometer and ensure that it is not being Shaded by Any Obstacles.	Monthly	12	100%	1200%	2	24
<i>e</i>	Inspect Bracketry Supporting Pyranometer and ensure that it is secure.	Monthly	12	100%	1200%	2	24
<i>f</i>	Verify that Pyranometer is fitted at the Designed Angle.	Monthly	12	100%	1200%	2	24
<i>g</i>	Check Pyranometer Calibration.	Bi Annual	2	100%	200%	2	4
<i>h</i>	Check Cell Calibration.	Bi Annual	2	100%	200%	2	4
10	Fire Equipment	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Verify Condition of Fire Extinguishers	Annual	1	100%	100%	1	1
11	Site Security and CCTV Equipment	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Visually Inspect Camera Display at DVR's.	Monthly	12	100%	1200%	1	12
<i>b</i>	Check All circuits, nodes, Camera's, DVR's, Displays and Alarms are operating correctly.	Bi Annual	2	100%	200%	1	2
<i>c</i>	Visual Inspection of Alarms at DVR Control Centre.	Monthly	12	100%	1200%	1	12
<i>d</i>	General Calibration of DVR Control Centre.	Bi Annual	2	100%	200%	1	2
<i>e</i>	Checking of Voltage at the DVR Control Centre and Node Locations.	Bi Annual	2	100%	200%	1	2
<i>f</i>	General Calibration of Infrared Sensor's.	Bi Annual	2	100%	200%	1	2
<i>g</i>	Visual Inspection of Supporting Columns and Posts for Devices.	Bi Annual	2	100%	200%	1	2
<i>h</i>	Visual Inspection of DVR Control Centre Housing.	Monthly	12	100%	1200%	1	12
<i>i</i>	Random Simulation of Intrusion.	Annual	1	100%	100%	1	1
<i>j</i>	Inspection for Fence Boundary and Gates.	Bi Annual	2	100%	200%	1	2
<i>k</i>	Inspection and Oiling of Site Locks.	Bi Annual	2	100%	200%	1	2
<i>l</i>	Lubrication of Gates.	Bi Annual	2	100%	200%	1	2
<i>m</i>	Inspection of Corrossion at Gate or Fence Boundary.	Bi Annual	2	100%	200%	1	2
<i>n</i>	Status of Vegetation around Fence Boundary and Gates.	Bi Annual	2	100%	200%	1	2
<i>o</i>	Inspection of Internal Access Road Condition.	Bi Annual	2	100%	200%	1	2
<i>p</i>	Functional Check of Gates Latches and Hinges.	Bi Annual	2	100%	200%	1	2
12	Application of Chemical Weed Control within Area's which are not being maintained by either cutting or Animals Grazing.	Frequency	Visits per Year	% to be Inspected Per Visit	Total % Inspected Per Year	Total Quantum Inspected per Visit	Total Quantum Inspected per Year
<i>a</i>	Visual Review of Growth and Signs of Pest's or Wildlife within the Park.	M	12	100%	1200%	1	12
<i>b</i>	Application of Chemical Weed Control within Area's which are not being maintained by either cutting or Animals Grazing.	X	2	100%	200%	1	2
<i>c</i>	Treatment of Pest Control if Required.	X	2	100%	200%	1	2
13	Plant Growth and Pest Control.	Frequency	Reports Per Year				
<i>a</i>	Provide Detailed Report including maintenance activities, Incidents, Photos, Actions and Comments.	Monthly	12				
<i>b</i>	Performance and Fault Monitoring of the installation.	Annual	1				
<i>c</i>	Fault Reporting.	On Occurence	x				
<i>d</i>	Installation Log detailing any changes of equipment, circuits and Performance Criteria.	Bi Annual	2				
<i>e</i>	Performance Monitoring.	Daily	365				
<i>f</i>	Security Alarms and Registers.	Monthly	1				
<i>g</i>	Planned Maintenance Programme	Yearly	1				