Scope of Work for Solar Rooftop I&C (Services Only)

Introduction and Exclusions

This document defines the scope of services for the installation and commissioning of a client-supplied solar rooftop photovoltaic (PV) system. The scope includes only services and excludes any material supply. All work shall be carried out in accordance with applicable safety, quality, and regulatory standards.

Scope Type: Services only — no supply of modules, inverters, structures, cables, ACDB/DCDB, meters, earthing materials, or consumables.

Deliverables: Installed system, verified through staged QA checks, commissioning records, and a one-week generation log; complete as-built documentation and handover pack.

Phase A — Pre-Installation Planning and Controls

- • Site inspection & constraints mapping
- • Document organization
- • BOM verification (client-supplied)
- • Project planning and method statements
- • Vendor job card creation
- • String distribution planning

Phase B — Material Movement

- • Staged shifting of modules, mounting structures, and electrical equipment to site
- • Protection and storage of materials

PhaseB1 – Material lifting using Pully

(Write details of the material to be lifted)

PhaseB2 – Scaffolding for working on height

(Write details of the scaffholding requirements)

Phase C — Mounting Structure Installation

- • Vertical pole planning and marking
- • RCC block construction and curing
- • Rafters and purlins installation
- • Structure bolting and strength verification

Phase D — Module Installation and DC Works

- • Module installation and fixation
- • Module interconnections
- • DC cable routing with conduits/trays and dressing
- • Labeling and feruling
- • Earthing (DC side): module frame bonding and strip laying

Phase E — Earthing System and Lightning Arrester

- • Earth pit installation
- • Lightning arrester installation
- • Earthing resistance testing

Phase F — AC Works and Power Interface

- • AC cable laying and saddling
- • ACDB & DCDB mounting
- • String connections to DCDB
- • AC cable connections to ACDB
- • Energy meter and MCB installation
- • System labeling and feruling

Phase G — Module Cleaning System Installation

- Installation of uPVC piping around solar modules with brass nozzle
- Installation of water pump
- Commissioning

Phase H — System Testing and Commissioning

- • Pre-energization checks
- • Electrical verification (DC/AC voltages, floating voltage)
- • Inverter charging and synchronization
- • Performance observation (1-week monitoring)
- • Post-test grid disconnection (if net meter pending)

Phase H- Supply and Installation of Energy Meter

Documentation and Handover

• As-built pack: Final string map, cable routes, earthing/LA layout, commissioning certificate

Questions to be answered for making commercial proposal

1. No, of floors of the building
2. Installation is on terrace or Tin Roof Top
3. If Tin Rooftop then , what is the height of the rooftop
4. If Terrace, what is the height of MMS structure
5. Is service life available for material movement.
6. Is service life big enough to carry solar modules and MMS structure material
7. Earthing strips and AC cable to be drawn through duct or from outside the building wall
8. IS the module layout protruding out of parapet wall
9. What is the size of RCC block and how many blocks are required to be prepared
10. Is the safety railing required around the terrace and solar system
11. Is module mounting system required for manual cleaning of the modules.