

SOLAR PV POWER PLANT SERVICE



**ENSURING RELIABILITY AND SAFETY
IN SOLAR PV POWER PLANT**



IRCLASS Systems and Solutions Pvt Ltd (ISSPL) is a company promoted by Indian Register of Shipping (IRS) the organisation established in 1975 and globally recognised as classification agency having a full time member of International Association of Classification Societies (IACS).

ISSPL is involved in Third Party Inspections of National and International project such as Infrastructure, Oil & Gas, Power and renewable energy sectors.

Our advisory group facilitates our clients to find ways to complexities associated with Design Verification, Construction, Project Management, Operations and Failure Analysis.

Our Quality Management Systems provides Certification services.

Our Quality Management Systems are certified to ISO 9001:2008 by BSI and accredited to ISO:17020 as Type A Inspection body.

Solar PV power plant service offered include's the following service

- OWNERS ENGINEER SERVICE
- LENDERS ENGINEER SERVICE
- SOLAR PV POWER PLANT INSPECTION AND TESTING SERVICE

Owners Engineer: Site Assessment, Energy Yield Estimation, DPR, Technical bid and bid evaluation, Design Vetting, procurement inspection in India and abroad, Quality Supervision during erection and commissioning, commissioning test as per standard.

Lenders Engineer: Project Due Diligence, Detailed Project Report (DPR), Construction monitoring, Project completion and Operational review phase.



Solar PV Power Plant Inspections: Existing solar PV power plant can be inspected for safety and quality as per IEC 62446 – Grid Connected photovoltaic system-Minimum requirement for system documentation, Commissioning Test and Inspection.

To mitigate risk of land and other environmental issues a survey is planned at site to assess irradiation level, land suitability, right of way and substation facility at site. An independent energy yield assessment report is the first step to mitigate risk associated with solar PV power plant. ISSPL engineers will furnish this document which can help both your bankers and you to take the first step forward.

To ensure sustainable generation in solar PV power plants, safety and quality checks at site are necessary. IEC 62446 provides the basis for such test, inspection and also documentation. ISSPL engineers at site will ensure proper implementation of all necessary standard compliance, adherence to QAP and witness of commissioning test.

Benefits.

- Calculation & Estimation of energy yield
- Expert Inspection and testing
- Selection of photovoltaic panels and BOM
- Mitigation of risk associated at every stage of building a solar PV power plant

- Design vetting of foundation and structures
- All services under one roof from DPR, project risk assessment, procurement, commissioning, testing and inspection.



We measure and evaluate energy level, climatic condition (Temperature, Wind), Inclination & alignment, tolerances, Shading, Quality of components, Aging of components, Modules Design, Quality of Installation and commissioning.

Our range of services.

1. Site assessment
2. Independent energy yield estimation
3. Assessment of investment and returns
4. Review of energy yield from existing PV plants
5. Root cause analysis in case of reduced energy yields
6. Evaluation of PV generator losses and system losses Vs useable electrical energy generated
7. On site inspection and testing



IRCLASS SYSTEMS AND SOLUTIONS PRIVATE LIMITED

Mumbai HO

4th Floor, Industrial Services, 52 A, Adishankaracharya Marg, Opp Powai Lake, Powai , Mumbai – 400072

Tel: + 91 22 30519400 Fax: + 91 22 30519888 Email: industrial_services@irclass.org

Offices in India:

Ahmedabad, Bengaluru, Bhopal, Bhavnagar, Chennai, Coimbatore, Delhi, Goa, Hyderabad, Kandla, Kochi, Vizag, Raipur, Surat,
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