





SOLAR PV O&M TRAINING PROGRAMME



Arbutus Consultants Pvt Ltd and QUEST are pleased to announce training programme under the RPL scheme of Skill Council for Green Jobs (SGJ/Q0117) for 'SOLAR PV O&M ENGINEER'

6th August 2018

Venue QUEST, Bengaluru

Students can enroll at discounted rate of ₹ 15,000/- + GST@18%

SOLAR PV IN INDIA

The growth in Solar Photo Voltaic (SPV) systems in India has been phenomenal in recent years. The Government of India has set a target of 100 GW of installed solar capacity by 2022 and 275 GW by 2027 of which nearly 20 GW is under operation. Factors contributing to this growth include technological improvements, environmental and social considerations, financial engineering and availability of good manpower. The industry is, however, finding it difficult to cope with the human resource requirement for installation, testing, commissioning, operation and maintenance of SPV systems. Arbutus and QUEST are trying to narrow this gap by imparting focused training in the field of operation and maintenance of SPV systems.

WHO SHOULD ATTEND?

This programme is designed to assist the stakeholders involved in O&M of SPV systems. This training is intended for but not limited to engineers and technical staff involved in installing, configuring and maintaining and operating the SPV systems.

The programme provides practical insights of SPV systems and includes case studies from operational systems. Stakeholders who would derive maximum benefits from this programme include -

- Asset managers
- O&M staff
- Technical personnel from EPC companies and system integrators
- Owners and operators of solar PV power plants
- Consultants

ABOUT THE PROGRAMME

- An 8-day comprehensive training on operation and maintenance (O&M) of SPV systems
- The course outline is designed based on guidelines set by Skill Council for Green Jobs under the Ministry of Skill Development
- Exposure provided via onsite visit to an operational ground-mounted SPV plant
- The programme covers issues faced with grid-integration and potential of energy storage systems, thereby making it complete and purposeful
- Aims to familiarize participants with the latest in technology and practices in O&M
- Joint assessment and certification by SCGJ, Arbutus and QUEST
- Delivered by industry experts with handson experience in designing, installing, operating and maintaining SPV systems.

ABOUT US

ARBUTUS CONSULTANTS PVT LTD

Arbutus Consultants Pvt Ltd. (Arbutus) is an ISO 9001:2008 certified company. Arbutus is one of the foremost providers of consulting, engineering and training services in the field of solar energy in India. Arbutus has an advisory portfolio of over 5GW of solar PV of which nearly 2GW are operational. Arbutus has provided a wide array of services to over 100 clients since 2005 through Owner's Engineer, Lender's Independent Engineer, EPC Engineer, Technical Due Diligence and Technical Advisory Services. Arbutus had the privilege to provide consulting services to the first MW-level grid-connected solar PV power project in the country that was set up in Asansol, West Bengal, by WBGEDCL. Arbutus is also affiliated with Skill Council for Green Jobs and National Institute of Solar Energy for developing and delivering training programmes. Arbutus is proud to have trained more than 750 personnel through various programmes.

Course Director - Mr. Lokabhiraman (Retired as Senior DGM from BHEL)

Mr. Lokabhiraman is one of the foremost industry experts in the field of solar energy in India with a vast experience of over 30 years in design, contract engineering and operation & maintenance of off-grid, grid tied and hybrid PV plants. He will be main faculty for the programme.

QUALITY EVALUATION AND SYSTEMS TEAM PVT LTD

Quality Evaluation and Systems Team Pvt Ltd (QUEST) is an established name in the field of Quality Management for more than 3 decades. An ISO 9001:2015 and ISO 17020:2012 certified company, QUEST has been offering Third Party Inspection, Field Quality Assurance, Vendor Evaluation and allied services for Power, Aerospace, Engineering, Automotive, Healthcare sectors etc.

COURSE DETAILS

Course Fees

₹ 23,000/- + GST @18%

(includes study material, lunch on all days and site visit)

Additional facilities

Accommodation in Bengaluru on twin sharing basis @ ₹ 500 per participant per day is available, if required.

Registration

Interested participants are requested to call or email the programme coordinators for more information or registration.

- Mrs. Devashree Navale
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 Email devashree.navale@arbutus.co.in
- 2. Mr. R R Kasturi Mob - +919945530136 Email - rrkasturi@questxl.co.in

PROGRAMME SCHEDULE

SGJ/N0139 **CARRYOUT OPERATION OF SOLAR PV POWER PLANT** Introduction to PV system sizing and design • Introduction to SCADA system and its role in a solar PV power plant Fault detection through SCADA and corrective action • Site visit - Hands-on training on SCADA system SGJ/N0140 CARRYOUT ELECTRICAL MAINTENANCE OF THE SOLAR PV POWER PLANT Pre-requisite technical requirement of an O & M engineer Availability of O&M manual, OEM manuals Electrical maintenance Site visit - Hands-on training on IR test and HV tests on cables, troubleshooting aspects of inverter, HT panel, battery with battery charger and transformers SGJ/N0141 CARRYOUT CIVIL/MECHANICAL MAINTENANCE OF THE SOLAR PV POWER PLANT Embedment mechanism of MMS columns, clamping arrangement, tracking system, junction box etc. • Study and understanding of soil test report including soil resistivity, SBC etc. Preventive maintenance Documentation of maintenance activity **MAINTAIN PERSONAL HEALTH & SAFETY AT PROJECT SITE** SGJ/N0106 Awareness of corporate policies for workplace safety The requirement of a safe work area and work procedure Identify contact person when workplace safety policies are violated Provide information about incident/violation Identify the location of first aid materials and administer first aid Identify the personal protective equipment required for specific locations on-site Identification and mitigation of safety hazards Environment, health and safety training Demonstration for personal protection and instruction to workers Demonstration of safe and proper use of tools and equipment SGJ/N0120 **WORK EFFECTIVELY WITH OTHERS** Co-ordination matrix Preparation of escalation matrix Documentation of domain knowledge







"All Trainers, course contents and practical's were excellent. This training is very useful for me in my future perspective."

Mr. Deepak Gangadhar (Juwi India Renewable Energies Pvt. Ltd – Bangalore)

"Being a student, I never knew about O&M jobs but after attending the sessions for 10 days, I am confident that I can work effectively, and I will find a career in the power sector. Also, trainers, in-depth knowledge and way of resolving queries in a very shorter period was amazing"

Mr. Chethan N.G (M.Tech, Fresher)





- ✓ Understand the why, what and how of O&M of large-scale solar PV power plants
- ✓ Learn from the foremost industry experts in India
- ✓ Enrich your personal resume with the assessment certification from Skill Council of Green Jobs
- ✓ Prepare to contribute to realise India's ambitious vision in deployment of clean energy