Job Position: Associate – Technical

Reporting to: Solar Technical Manager

Position Purpose

Overview

- Engineering & Design: technical role – site screening, design review, review and equipment selection
- RFP development and contracting all the site and grid–based studies.
- Perform energy yield analyses (EYAs) and review EYAs by other parties
- Review the site and grid study reports from consultants and provide feedback
- Evaluate and optimise technology and layout options for future projects
- Highlight grid connection and off–taker requirements for future projects
- Lead the write–up of the Employer's Requirements for the EPC to align with – with a strong focus on cost–effectiveness and constructability
- Write–up of minimum specifications for key equipment (Inverter, Module, Tracker / substructure, BESS, PPC, SCADA, substation equipment)
- Liaise and coordinate with Lenders' Technical Advisor (LTA) and support in all technical matters on behalf of the organisation and, in some cases, the EPC.
- Review and approve manufacturer/ subcontractor/ vendor techno–commercial offer
- Support the Solar Technical Manager and other parties in the Technical team in achieving AMEA's annual and long term strategic renewable energy business plan
- Support with project agreements like PPA, EPC and O&M and their typical technical schedules
- Specify the Owner's Engineer (OE) role to help with the development of their RFPs and Contracts – while assuming more responsibility to reduce the organisation's reliance on an OE for technical support
- Coordination and communication with internal and external parties and/or suppliers to resolve techno–commercial issues
- Manage technical work streams within the projects allocated

Key Responsibilities

Site Screening, Engineering & Design:

- Support project team with regards to site screening, initial layout design, basic grid connection design, selection of critical equipment and contracting all the site studies. Review and evaluate the EPC requirements and offers Review the site study reports from consultant and provide feedback
- Support the development team for carrying out site screening assessments including but not limited to Africa, Middle and Asia regions and identifying potential solar and BESS energy assets for development
- Support the organisation in performing and packaging projects' technical feasibility studies

- Perform technical due diligence assessments on potential projects
- Build and maintain relationships with consultants, EPC contractors, technology providers, OEMs, Lenders.
- Support, and in some cases lead, a project through various stages of development like resource studies, feasibility studies, conceptual designs, high–level environmental impact assessments, agreements and applications,
- Negotiate techno–commercial terms of the PPA and other project agreements, detailed studies, procurement, EPC, O&M / LTSA and Project Financing agreements
- Prepare budget for technical studies
- Effectively manage preparation of required technical inputs and management of technical operations for several renewable energy projects concurrently – all with time and budget constraints considered to deliver these projects.
- Coordinate with internal legal and financial team during the development process for the preparation of various document and model reviews
- Coordinate with execution team during structuring, execution and commissioning stages of the projects
- Assist in Lenders and investors technical due diligence processes
- Prepare technical and (in some cases) non–technical project reports for internal or external inquiries
- Monitor and if possible supervise all the above functions for co–developed / co–invested projects
- Detail design review support

Evaluate and optimise technology options for the projects:

- Evaluate and optimize solar and storage technology and associated balance of system components most suitable for the project
- Evaluate and optimize the plant layout for better EYA and plant maintainability
- Ensure that the plant meets all grid code requirements for the region or complies with any best industry practice for grid support

Review and approve manufacturer/ contractor/ vendor techno–commercial offer:

- Should be able to review the offers from key component supplier and preparing comparative statement
- Review and finalise the EPC and other subcontract offers
- Should have good understanding of Project agreements like PPA, EPC and O&M

Assist in developing and updating AMEA's annual and long term strategic renewable energy business plan:

- Support the Technical Manager in achieving the corporate and strategic goals of the department, wider team and organisation

Person Specification	
Experience Requirements	• Successful experience of at least 3 to 5 years in the development, structuring and/or construction of utility–scale solar or renewable energy projects in markets including Africa, the Middle East and Asia. • Strong experience in Solar resource assessment, screening and initial plant design, constructability and technical requirements. • Evidence of continued professional development • Detail design first–hand or review experience • Commissioning and grid code testing experience • Strong understanding of grid codes, grid connection requirements and plant control philosophy • Understanding and some experience in SCADA, plant communications, lightning and electrical protection • Understanding of most common failure points in utility–scale solar and BESS plants • Understanding of typical component and consultancy costs • EPC, developer, utility or consultant business background
Education Requirements	• Bachelor Degree in Electrical Engineering (or Mechatronics) • Masters in renewable energy will be an advantage
Language Requirements	• English: Very strong in written and spoken • French: Strong in written and spoken very advantageous • Arabic or other languages: Beneficial
Required Skills	• Solar PV resource and yield assessment (PVsyst, SolarGIS) – Expert • BESS energy yield assessment (Homer and/or Excel and/or Matlab and/or other calculation tools) – Intermediate to Expert • Solar PV conceptual design (Layouts, SLDs, SCADA) – Expert • Understanding of grid codes, grid connection requirements and plant control philosophy – Expert • Grid study review – Expert • Excel (including macro programming) – Expert • Solar PV and BESS project technical development best practices and standards – Expert • Detail design review – Expert • Battery storage technology –Intermediate to Expert • Other programming / calculation tools – Intermediate

	• AutoCAD or CAD design – Intermediate • Technical software for GIS (Google Earth or QGIS) – Intermediate • Project management software (MS Project or Primavera) – Basic • CFD software (for evaluating trackers) – Basic
Company Values	• Commitment: commit to organizational goals and objectives • Adaptability: be adaptable to competitive and changing environment • Self–discipline: exhibit a diligent approach towards goals and objectives • Ethics: uphold the best ethical standards and high integrity • HSE: ensure 100% adherence to HSE guidelines • Teamwork: strong teamwork spirit and capacity to work efficiently on multiple projects • Compliance: adherence to rules and process • Accountability: take responsibility to quality, excellence and timeliness of work
Interpersonal/ Behavioural Skills (5 key areas)	• Stakeholder Management • Negotiation • Delivering Results • Planning and Organising • Accountability