Offshore Substation Engineering Manager

Burns & McDonnell is growing our Offshore Wind team and has an exciting opportunity for an experienced Offshore Substation Engineering Manager to join us in one of our New England offices that includes either Wallingford, CT, Boston, MA, Morristown, NJ or Portland, ME. We would relocate the right candidate.

We’re looking for a strategic thinker with big ideas and an entrepreneurial mindset. It’s those kinds of people who’ve helped us grow from a small consulting business back in 1898 to a global leader in engineering, construction, environmental and consulting solutions. Today, we’re a thriving company with more than 7,500 professionals working in 40 offices worldwide and recognized in the US as the leading Transmission & Distribution services company.

We are addressing projects across the US onshore T&D industry, encompassing substations, overhead lines and underground cables but as we move into the offshore sector, we are now also looking at offshore substations and submarine cables both export / interconnector and array. We are supporting the challenges of future offshore networks as we innovate in the types of investment and technology to support this growing renewable energy market. If you are excited about working at the forefront of a new sector then we want to hear from you. We are Burns & McDonnell and we create amazing.

The Offshore Substation Engineering Manager role is primarily an engineering function and will provide engineering leadership and direction to the Burns & McDonnell Offshore Substation Engineering activities. Position will, at the direction of the Director of Offshore Wind, support the Burns & McDonnell Offshore Wind vision, mission and values, including developing market specific business strategies, long-
term client relationships and promoting a successful team-oriented environment.

The Offshore Substation Engineering Manager will work closely on a variety of projects, being the Offshore Wind projects the primary focus. Position will support onshore projects as needed.

**Job Responsibilities:**

- Act as the lead engineer providing leadership, guidance, and directly performing the execution of the following engineering activities (including but not limited to):
  - Physical substation design including layouts, plans, sections and details, auxiliary AC/DC power systems, platform cabling systems, transformers (including Main & Earthing Auxiliary transformers), switchgear, technical interfaces between offshore and onshore substations and, as required, harmonic filter(s), system studies and export / array cable interfaces and associated bills of material
  - Grid Code compliance
  - Protection and control design including panel arrangements, one lines/single lines, three lines, AC schematics, DC elementaries, equipment wiring and relay panel wiring
  - Calculations for studies and reports (lighting protection, AC/DC load studies, etc.)
  - Integration of 3rd party supplied equipment
  - Equipment specifications for procurement and/or factory acceptance testing
  - Commissioning coordination as required
- Support Director of Offshore Wind in identifying, directing and implementing business strategies for the Offshore Wind Team,
including operational, marketing, pricing, sales and customer retention strategies.

- Assist in preparation of proposals and scope development, including:
  - Feasibility opportunities
  - Conceptual designs, Front End Engineering Design, detailed design and execution plans
  - Functional specifications
  - Identification of potential suppliers
  - Preparation and review of supplier documentation
  - EPC package preparation and execution documentation
  - Engineering/project cost estimates and schedules
  - Participation as required in complete electrical system design opportunities
  - Involvement in onshore substation opportunities for offshore wind farm developments to ensure interface requirements are addressed
  - Offshore inspections
- Lead coordination of design activities with other departments (Civil/Structural, Networks, Transmission Line, etc.)
- Work with department managers and section managers to identify opportunities and manage team efforts for submittals, proposals, presentations, contract negotiations and related activities.
- Develop relationships with potential partners within the Offshore Wind sector.
- Manage the development of tools to increase efficiency in planning, design, and project execution.
- Provide senior level technical expertise, input and evaluation on engineering projects.
- Perform and coordinate all quality control and resource coordination for all assigned projects.
• Responsible for interpreting policies, purposes and goals of the organization to staff.
• Oversee assignments and activities of personnel assigned to projects ensuring efficient and cost-effective utilization of employees and company resources.
• Ensure compliance with company and site safety policies.
• Responsible for ensuring compliance with Burns & McDonnell Quality Control program.
• Responsible for diversity initiatives.
• Position will work with a high degree of autonomy.
• Develop and improve processes, tools and/or technology implementations
• Provide leadership, training and mentoring to less experienced engineers and team members
• Regularly meet and correspond with clients or outside personnel
• Perform quality reviews for other engineers and designers
• Other areas of involvement may include: onshore substation design, relay settings, 3D modeling/design, or industry/professional technical committee involvement
• All other duties as assigned.

Requirements

• Bachelor's degree in engineering from an accredited program. A minimum of 7 years relevant industry experience.
• Licensed Professional Engineer preferred.
• Expert experience in managing projects, which includes proposal development, contract negotiations, project planning, scheduling, directly performing engineering, design team coordination, quality reviews & communication, budgeting, and client management.
• Expert facilitation, collaboration, organization, and problem-solving skills.
• Demonstrated success as to budget, savings and/or profit margins in completed projects.
• Proficiency with Electrical Safety Codes and IEEE / ANSI Standards
• Ability to thoughtfully and positively influence, lead and manage.
• Excellent planning and analytical skills.
• Must demonstrate excellent oral and written communication skills; strong interpersonal skills; ability to clearly and effectively present complex information to all levels of employees, management, and clients.
• Candidate will have the ability to travel 20% of the time.

EEO/Minorities/Females/Disabled/Veterans

To see online job posting and apply visit: Offshore Substation Engineering Manager - New England - USA