

## Job Description

Position: Electrical Engineer

Location: North Slope

Duration of contract:: 11 months

Required start date: October

Number of Positions: 2

## Work Description

The Electrical Engineer will provide day-to-day on-site electrical engineering support to all North Slope facilities. This position will play a key role in identifying reliability improvement opportunities, leading electrical projects, reviewing electrical design for multidiscipline capital and expense projects and providing technical support in completing repairs to electrical equipment and power distribution systems. This role includes the analysis and design of power systems, transmission and distribution equipment, explosion prevention and detection, protection systems, electrically operated motors and other equipment.

The post holder will report to the Automation, Instrumentation and Controls, Electrical Team Lead and be a key member of the Facility Engineering technical engineering Team.

## Responsibilities

The Electrical Engineer's duties and responsibilities are as follows:

- Provide technical support to Operations and Maintenance (O&M) personnel in troubleshooting, inspection / repair, design changes and modifications to electrical systems.
- Provide technical expertise to electrical designers for the design and review of O&M minor capital engineering projects.
- Provide electrical system analysis studies to project organizations to support proposed expansions.
- Review contract engineering projects to ensure compliance with BP design criteria and standards.
- Maintain technical knowledge of the following:
  - Industrial electrical systems, including the following: 69kV and 13.8kV outdoor overhead distribution, 13.8kV, 4.16kV and 480V switchgear, protective relay application and testing, 4.16kV and 480V motor control centers and motors, large 125VDC battery and distribution systems and 120VAC uninterruptible power systems
  - Emergency generators and their associated control and synchronization systems
  - National Electrical Code, with emphasis in hazardous (electrically classified) locations, and the American Petroleum Institute recommended practices for classifying electrical installations in hazardous locations
- Provide leadership for electrical engineering activities.
- Provide daily technical support to instrument and electrical technicians.
- Assist in the planning and execution of turnaround electrical activities.
- Provide technical input in determining priority and scope of equipment repairs.
- Lead root-cause failure investigations for electrical equipment related incidents.
- Analyze equipment monitoring data and develop the appropriate response to reliability issues.

- Review engineering packages technical content.
- Identify and develop reliability projects for refinery electrical systems.
- Provide guidance to design engineering and construction contractors.

## **Experience & Knowledge**

To be considered for the role of Electrical Engineer, applicants must have the following qualifications:

- Certification as a State of Alaska Registered Professional Engineer
- Strong focus on and commitment to health, safety and the environment (HSE)
- 5-plus years of experience in electrical system design and maintenance in oil and gas production facilities
- Good communication skills
- Strong influencing skills
- Minimum of a bachelor's degree in Electrical Engineering or a related discipline
- Experience and working knowledge of power distribution applications, including substations, relay coordination and short circuit studies
- Experience and working knowledge of electrical equipment design, specification, installation, repair and maintenance
- Experience with 480V, 2300V, 4160V and 12500V systems
- Technical knowledge of electrical and power system engineering calculations, construction methods, and materials
- Industrial experience with refining or petroleum hydrocarbon facilities experience
- The ability to read and decipher regulations and industry codes and explain requirements to others
- Strong verbal and written communication skills
- Ability to engage and work with all levels, including contractors and Client employees
- Ability to manage multiple priorities and possess good organization, facilitation and group coordination skills
- Ability to use web-based systems

### ***Preferred Qualifications***

In addition to the required qualifications, the successful applicant is likely to be able to demonstrate the following:

- Aptitude to innovate and be open to new ideas
- Competence with Landmark well-engineering software packages (DIMS, Wellplan, etc.)
- Participation in continuous improvement processes
- Experience of working with third-party service providers
- International Well Control Forum (IWCF) certification or equivalent
- Work experience in up to 230 kV

**Any Other Relevant Information**

***Education***

Minimum of a bachelor's degree in Electrical Engineering or related discipline required

***Certifications***

State of Alaska Registered Professional Engineer preferred

***Languages Needed***

English fluency required

Local Candidates Preferred