

## Overhead T- Line Engineer/Technician – Grid Conceptual Design ManagerREMOTE

Date: Jul 23, 2022

Location:

US

Company: Black & Veatch Family of Companies

At Black & Veatch, our employee-owners go beyond the project. For over a century, we have been breaking down social, economic and geographic barriers by making life's critical resources accessible to all. Working with us, you will help provide critical expertise as we, along with our valued clients, deliver solutions that positively impact communities around the world. Our professionals are our greatest asset, and we believe nothing is more important than the health, happiness and professional growth of our employee-owners. With a focus on flexible work-life balance options, an expanding and diverse workforce, and limitless career growth opportunities, we will give you our best to help you give us your best, and together we can build a world of difference.

**Company :** Black & Veatch Corporation

**Req Id :** 68221

**Opportunity Type :** Staff

**Relocation eligible :** No

**Full time/Part time :** Full-Time

**Project Only Hire :** No

**Visa Sponsorship Available:** No

### Job Summary

**Black & Veatch's Energy & Process Industries Energy Utilities Business Segment Grid Technology Pursuits** group provides conventional, renewable, sustainable, reliable and integrated power solutions to customers. We are an organization of highly skilled professionals delivering data-driven and strategic planning, consulting, engineering, construction, program management and combined EPC solutions. We are dedicated to innovation and staying up to date with technology advancements and have a desire to help our clients navigate changing demands and regulatory compliance, while providing a cost-effective competitive advantage.

The **Overhead Line Grid Conceptual Design Manager** functions in a mid-level engineer capacity, or as a technical specialist. Under general supervision, performs and/or supervises all aspects of conventional design engineering and analysis. Broadens knowledge and skill set in area of discipline. May start to expand knowledge in other disciplines and/or functional areas.

Civil/Electrical engineer/technician with engineering experience in overhead transmission line projects, experience should include but is not limited to the following:

- Routing and siting transmission systems

- Reading one-line drawings

- Structural design of Transmission Steel, Concrete, Wood structures and foundations.
- Tower and Composite structures and foundation is a plus
- Experience with PLS-CADD, PLS- Pole, LPile, MFAD, Sag10
- Experience with a variety of voltages: 69kV – 765kV
- Experience with a variety of foundations: Concrete pier, concrete slab, Rock anchors, direct embed, culverts, vibratory caissons, and micro piles
- Creating plan & profile drawings
- Creating phasing diagrams
- Understanding equipment connection system diagram
- Understanding design tensions (perform and coordinate with substations and underground civil)
- Sizing and Selecting Conductor and OPGW
- Conductor types: ACSR, ACSS, ACCR, ACAR, Cooper, AAC,
- OPGW & ADSS fiber communications
- Sizing and Selecting GOAB switch
- Sizing and selection Insulators
- Experience with specifying and procuring transmission equipment (listed below).
- Understand and be able to work within a schedule and manhours budget
- Familiar with applicable NESC and IEEE/ANSI standards
- Transmission equipment includes but is not limited to: Steel Poles, Wood Poles, Concrete Poles, Towers, Composite Poles, GOAB Switches, Insulators, Misc. Hardware, Conductor, Phase Spacers, aerial marker balls, flight diverters, arrestors fiber optic cable, and ADSS cable.
- Prepares or oversees complex engineering calculations such as: Structure loading, ROW calculations Thermal rating, IEEE steady state temperature and conductor calculations, blowout and departure angles, wind and weight span, phase to phase and phase to ground.
- Actively coordinate with others on the team
- Delegate and supervise work of younger engineers
- Communicate with upper management and provide status updates on engineering design activities.
- Experience in overhead and underground distribution as well as underground transmission line is a plus but is not necessary

## **Key Responsibilities**

## **Engineering Standards:**

Continues to learn and remains current on departmental design guides, standards, systems, applicable engineering codes and Black and Veatch policies and procedures.

Applies to assigned tasks as appropriate.

### **Quality/Continuous Improvement:**

Begins to independently apply knowledge and complies with Black and Veatch quality program relative to assigned tasks. Supports continuous improvement and change management efforts.

Create and maintain knowledge database of historical data from bid jobs to better facilitate efficient proposal response.

### **Engineering Production:**

Prepares a variety of moderately complex engineering deliverables.

Performs complex research and develops recommendations for equipment and/or materials selection. Collects, assimilates, and manages data for engineering work.

Prepares complex engineering calculations following standard methods and principles.

Understands and adheres to budget, schedule, and quality requirements. Recognizes, defines and resolves problems within assigned area.

May provide direction and guidance to others.

### **Project Coordination:**

Assigns tasks to and coordinates with other internal/external team members on less complex projects. Initiates contact with other disciplines as needed to identify and coordinate details of the work.

### **Client Focus:**

Actively seeks to understand client interests and drivers through normal client contact and through interaction and communication with project leadership.

Applies understanding of client interests and drivers to their own behavior and performance of the work under his/her responsibility. May provide support to business development or pursuit activities.

### **Knowledge Sharing, Innovation and Technology:**

Shares current knowledge of latest technology and processes. People Management “ (supervision, career development, training, mentoring):

May assist with performance management process, mentoring, recognition, and any corrective actions required.

### **Management Responsibilities**

Individual Contributor

### **Preferred Qualifications**

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+ Written Communications

+ Informing

+ Listening and Dealing with Ambiguity

+ Intermediate knowledge of engineering design principles and applicable design guides and standards related to assigned engineering discipline

### **Minimum Qualifications**

Requires a bachelor's degree in engineering from either a recognized accredited program in their home country or the country in which the professional is practicing. Minimum of 3 years related work experience All applicants must be able to complete pre-employment onboarding requirements (if selected) which may include any/all of the following: criminal/civil background check, drug screen, and motor vehicle records search, in compliance with any applicable laws and regulations.

### **Work Environment/Physical Demands**

Typical office /work from home environment: Sitting/standing/computer usage for extended periods of time. Speaking/Listening. Ability to utilize audio/video-conferencing software for internal/external communication purposes.

### **Competencies**

Decision quality

Action oriented

Collaborates

Communicates effectively

Demonstrates self-awareness

### **Salary Plan**

ENG: Engineering

### **Job Grade**

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