Location:

This position is assigned onsite at Karn 3&4 in Essexville, MI. Candidate must be within commutable distance from the location or willing to relocate (relocation package available for those who qualify).

We are looking for: **Plant Sr Electrical Engineer**

The Plant Senior Electrical Engineer is responsible for engineering and design to support the sustainable operation of our distribution, generation, and storage system. This role works with teams across the organization and external stakeholders and leads complex technical projects and may manage the work of lower-level engineers and technicians as required.

Consumers Energy's Generation Planning Group provides engineering and technical support to Consumers Energy fossil, hydro, and renewable power generating assets in Michigan's Lower Peninsula. The D.E. Karn Generating Station is a 1240-MW, two-unit, multi-fuel power plant located in Essexville, MI.

The Karn Site Electrical Engineer is responsible for engineering and design to support the sustainable operation of our distribution, generation, and storage system. This role works with teams across the organization and external stakeholders and leads complex technical projects and may manage the work of lower-level engineers and technicians as required.

The knowledge and skills involved with this position include but are not limited to:

- Knowledge of applicable codes related to electronic engineering
- Proficient in design and calculation software
- Written and verbal communication skills Organizational skills and attention to detail
- Analytical and problem-solving skills
- Knowledge of the theory and practice of electric utility distribution planning, construction, operation, and maintenance

- Working knowledge of electric utility operation (i.e., generation, transmission, and distribution of three phase alternating current power)

We encourage you to apply if you have:

- Bachelor's Degree in Engineering from an ABET accredited university with four (4) or more years of applicable engineering experience
    - **[OR]** Bachelor's Degree in Engineering from a non-ABET accredited university plus a Professional Engineering license with four (4) or more years of applicable engineering experience

In this role, you will be responsible for:

- Design, control, and implement electrical systems and products and serve as the primary point of contact with clients for all electrical engineering project matters
- Manage the development and implementation of electrical systems
- Designing, maintaining, implementing, or improving electrical instruments, facilities, components, equipment products, or systems for industrial, commercial, or domestic purposes
- Performing a wide range of engineering tasks by operating computer-assisted design or engineering software and equipment
- Collaborate with customers, coworkers, and others to discuss existing or potential engineering products or projects and monitor project progress and budget, and prepare reports for upper management
- Ensuring that installation and operations conform to standards and customer requirements by preparing electrical systems specifications, technical drawings, or topographical maps and investigate and resolve project issues in a timely manner
- Establishing construction, manufacturing, or installation standards or specifications by performing a wide range of detailed calculations
- Ensuring compliance with specifications, codes, or customer requirements by directing or coordinating installation, manufacturing, construction, maintenance, documentation, support, or testing activities
- Writing reports and compiling data regarding existing and potential electrical engineering projects and studies and provide technical support to other departments and personnel as needed
- Preparing specifications for purchases of electrical equipment and materials and estimating material, labor, or construction costs for budget preparation
- Provide support to plant operations, maintenance, and engineering to help resolve system and equipment problems. This includes:

    - Monitoring operational trends, predictive monitoring trends, preventive maintenance and inspection results, equipment and condition indicator data, life-cycle input, repeat maintenance, input from operations, input from regulatory and strategy organizations, etc., to identify performance issues and/or needs for action
    - Ensuring that corrective actions are identified, justified, appropriately scheduled, and completed
    - Developing strategies and justifications for equipment life-cycle management and to improve system and component performance consistent with the corporate business plan to ensure safety, compliance, and reliability
    - This includes problem identification; development of solutions; development of cost estimates, justifications, and timing requirements; and providing input to the Financial Planning Processes
    - Maintaining short-term and long-term system plans
    - Maintaining compliance with Asset Compliance Programs such as NERC, Cyber Security
- Other non-essential duties as assigned or may be necessary