ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 150,000 people.

ABB Inc. in Raleigh, North Carolina has an amazing opportunity for you, if you have the knowledge and experience as a Civil and Structural Designer. This position provides support in relation to Civil & Structural engineering of electrical substation projects, both Air Insulated Switchgear (AIS) and Gas Insulated Switchgear (GIS) ranging from 34.5kV – 550kV (future possibility up to 800kV) substation projects with an emphasis on project safety, cost, quality, and on-time delivery. Designers utilize CADD software to create construction grade & permitting level design & drawing submittal packages in accordance to specifications and code requirements determined by customer, governmental, and local standards.

A safe, reliable electricity supply is at the heart of virtually every aspect of our society. Almost everything relies on it, and the power grid relies on people. The engineers, technicians and managers that are tasked with operating and maintaining our electric power systems, do vitally important work every day. You can play your part by joining ABB.

ABB is the world’s largest supplier of power systems. We work with grids and power sources all over the world to improve the reliability, efficiency and security of the electricity used by billions of people every day. To do that, we rely on a team of exceptional people who are committed to making a difference.

We provide world-class training, along with a collaborative and creative work environment and the opportunity to make your contribution in a variety of businesses in over 100 countries. If that sounds like a challenge you are willing to take on, we’d like to talk to you.

Your responsibilities

Responsibilities:

The Designer will be responsible for the preparation of substation construction project documents. The Designer will report to the Senior Designer or Senior Engineer as assigned. The Designer will support project schedules as they relate to assigned project deliverables. The Design will be responsible for communicating any project issues with the Senior Designer or Engineer and developing solutions related to same issues. The Designer will support continuous improvement policies and procedures within the engineering design department focusing on quality and project
deliverables as provided by the Senior Engineer. The Designer will provide peer design document reviews and design document reviews, which will focus on quality provided by the engineering project team, communicating results to the Senior Engineer and Senior Designer.

- Interacts with other departments and suppliers to obtain pertinent information.
- Generates design and detail sketches and CAD drawings including orthographics, plans/sections, and isometrics
- Ability to develop a complete set of construction documents including grading plans, foundation arrangements, sections, details, erosion control plans, permit drawings, elevations, orthographics, and 3D models
- Ability to perform civil design functions and calculations in structural design, earthworks, stormwater design, as well as other aspects of civil design.
- Responsible for substation civil engineering and design work under the general direction of the lead engineer with day-to-day direction from the senior engineer
- Directs designers and CAD drafters during the course of project development
- Execute detail work such as engineering calculations, developing schedules, reviewing and commenting on vendor submittals, and reviewing project design documents
- Ability to operate computer-assisted engineering and design software and equipment to perform engineering tasks
- Responsible for conceptualization and design of solutions from concept to completion
- Responsible for the layout, design, and drawing preparation for the civil engineering scope of work for substation projects
- Perform engineering calculations and designs in accordance with current codes and regulations
- Interact and communicate effectively with clients, project managers, other design disciplines, vendors, contractors, and other team members to report project status and address project-related issues.
- Provide peer-to-peer review the work of other engineers
- Provide design review work performed by designers and drafters.
- Perform quality reviews of project drawings provided by designers and drafters and evaluate for completeness and accuracy
- Visit client facilities and/or jobsites as needed to obtain information for design.
- Demonstrate skills with knowledge of procedures, practices, and compliance to company and client standards.
- Ability to perform civil design functions and calculations in structural design, earthworks, storm water design, as well as other aspects of civil design.
- Demonstrate skills with knowledge of codes and standards such as; National Electrical Safety Code (NESC), National Electrical Code (NEC), Institute for Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and Design Guide for Substations.
- Research civil equipment standards and specifications, design equipment layout with coordination between vendors and suppliers.
- Works independently (with nominal technical guidance) to perform civil substation design functions and calculations
- Coordinates with other disciplines throughout design phase of projects

Organization Profile: ABB Power System – Substations engineers and designers provides a wide variety of projects from 69 kV distribution substations up to 800 kV transmission systems, conventional AC air insulated substations as well as GIS, HVDC (Conventional, CCC, and Light concepts), and reactive power compensation (SVC and Series Capacitors).

Your background

QUALIFICATIONS
Basic Qualifications (Must have)
1. A two year degree in civil engineering or related technology degree and 2 years civil design engineering experience
2. Working knowledge of Codes and Standards applicable to substation engineering and design
3. Working knowledge of reference documents applicable to substation engineering and design
4. Working knowledge of CAD software such as AutoCAD or Microstation
5. Working knowledge of Microsoft Office products
Preferred Qualifications (Nice to have)
1. Experience in substation design preferred
2. Communication Skills – Ability to read, analyzes, and interprets engineering design codes and regulations.
3. Ability to write routine reports and correspondence.
4. Ability to speak effectively before groups of clients, contractors, and/or employees of the organization.

More about us

ABB is an Equal Opportunity and Affirmative Action Employer encouraging diversity in the workplace. All qualified applicants will receive consideration for employment without regard to their race, creed, color, ancestry, religion, sex, national origin, citizen status, age, sexual orientation, disability, marital status, family medical leave status, or protected veterans status. For more information regarding your Equal Employment Opportunity (EEO) rights as an applicant, please visit the following websites: http://www1.eeoc.gov/employers/upload/eeoc_self_print_poster.pdf or http://www1.eeoc.gov/employers/poster.cfm.

As an Affirmative Action Employer, applicants may request to review the Affirmative Action Plan of a particular ABB facility between the hours of 9:00 A.M. - 5:00 P.M. EST Monday through Friday by contacting an ABB HR Representative at 1-888-694-7762.

Protected veterans and qualified individuals with a disability may request a reasonable accommodation if you are unable or limited in your ability to use or access ABB's career site as a result of your disability. You may request reasonable accommodations by calling an ABB HR Representative at 1-888-694-7762 or by sending an email to myhrsmart@us.abb.com.

Thanks for your interest in ABB!

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