

# Electrical Engineer – Bakersfield

## Description

As energy availability becomes increasingly critical, there's no end to the scope and significance of your work — and to where it can take you at Stantec. Every day, we're problem-solving and collaborating on projects that are as challenging as they are impactful. Whether designing new EV charging or CNG delivery systems, a transformational cross-country pipeline, optimizing facilities, verifying the safety and reliability of an asset, or in the field overseeing construction projects, you'll be joining a team of recognized industry experts on work that's critical to our clients and our communities. The Energy industry is changing — and we're helping clients stay ahead of the change. Join a team that's working together with industry to deliver innovation for the long term on some of the most important and interesting projects around the world.

We are currently seeking an Electrical Engineer to join our Electrical, Instrumentation, & Controls group in the Bakersfield, CA or optionally to be located in our Pasadena, CA office.

## Your Opportunity

Although the position is in the Oil & Gas Business Line of Stantec, because of the nature of our work, we are seeking someone with general industrial, commercial, or O&G electrical experience. The role of Electrical Engineer is to work on smaller electrical only projects, and as a team member for larger multi-discipline projects. The Electrical Engineer should be able to evaluate, select, specify, and engineer certain electrical power and lighting systems or products for a project. An Electrical Engineer will perform a variety of tasks which may include design, specification, calculations, and field work.

## **THIS POSITION CAN WORK OUT OF BAKERSFIELD OR PASADENA CALIFORNIA LOCATIONS.**

## Your Key Responsibilities

- Develops electrical calculations, equipment data sheets, electrical specifications, single line diagrams, hazardous area classification studies, grounding calculations and drawings, lighting plans and supports the Project Manager as needed to manage the project scope, budget, staffing and schedule.
- Develop electrical computer models using computer software (ETAP, SKM, EasyPower, etc.), perform related analysis, and create suitable reports based upon those models results (for load flow, short circuit, coordination, arc flash, harmonic analysis, equipment, and component sizing, etc.)
- Develop electrical designs for various voltage systems, including LV and MV systems.
- Prepare or update, specifications, procedures, material requisitions, and electrical construction documents.
- Support design and drafting team members in the development of all power system drawing deliverables related to the construction and modification of our client's

facilities. Assists in the development of a design through sketches, electronic models, diagrams, and other visual formats. Drawings such as the following would be developed:

- single line diagrams
  - grounding plans and details
  - lighting plans and details
  - cable and conduit schedules (cable, conductor sizing)
  - hazardous area classification plans and details
  - control panel layouts
  - conduit routing
  - motor power and control schematics
  - field wiring
- Provide technical support to the client for the resolution of operational problems.
  - Ensure that project systems are designed for optimum safety and reliability, ease of operability, fabrication, construction, and installation, and in accordance with accepted codes, standards, and client requirements.
  - Participates in client project requirement meetings, value analysis, and basic cost estimating.
  - Coordinates with other disciplines to ensure compatibility with the design intent.
  - Assists in the review of electrical shop drawings and vendor submittals, may attend and support factory acceptance tests, responds to requests for information, prepares site observation reports, and performs other contract administration tasks.
  - Assists with the development of job specific discipline specifications.
  - Assists in the evaluation and selection of electrical systems and materials.
  - Attends project coordination meetings with internal team members and/or external consultants.
  - Performs calculations to analyze and design electrical system components using company standard software and proprietary manufacturer software.

#### **Qualifications:**

- P.E. license in California (required)
- Prepare Electrical Permit package and provide Electrical "PE" Stamp for electrical drawings and documents.
- Experience and knowledge of industrial and commercial related electrical project work.
- Have a thorough understanding of electrical systems, means and methods, materials, and industry standards.
- Understanding of all phases of project document production and the relationship between electrical drawings and specifications.
- Recognizes when technical problems are developing and initiates appropriate corrective actions.
- Ability to participate and collaborate in project team setting and to engage in creative and critical thought.
- Ability to work in multicultural working team, and to be assigned to other Stantec offices per limited time period.

- Ability to check the work of others for accuracy and completeness and manage time to meet project budget and schedule.
- Possesses excellent time-management skills. Thorough understanding of task assignment and schedule, budgeting and efficient use of time and resources.
- Excellent oral and written communication skills. Presentation skills a plus
- Standards
  - Knowledge and application of National Electrical Code (NFPA 70), Electrical safety Standard in the Workplace (NFPA 70-E), ANSI, NETA, NEMA and other applicable industry codes and standards as they apply to electrical specification and design.
  - Knowledge and application of American Petroleum Institute Standards is a plus (API RP 540, API STD 541, API STD 547, API RP 552, API RP 500).
  - Knowledge and application of Institute of Electrical and Electronic Engineers (IEEE) as IEEE STD 141, IEEE STD 142, IEEE STD 242, IEEE STD 519, IEEE STD 841.
- Software
  - Experience working in computerized technical software such as: ETAP, SKM, PLS CADD, EasyPower, AGI32.
  - Requires competence with Microsoft Office Suite software, particularly Excel.
- Must have good driving record and valid Driver's License.
- Prior to employment with Stantec, this position will require the successful passing of a drug and alcohol screen.

## **Education and Experience**

Bachelor's degree or equivalent in Electrical Engineering and Licensed Professional Engineer.  
Minimum of 7 – 15 years of experience.

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