

## **POSITION DESCRIPTION – Electrical Analysis Engineer**

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### **A. GENERAL**

1. Analyze problems involving large complex systems and resolve them with assistance.
2. Attend meetings and job site visits to collect the necessary information or discuss the scope of the project with the client.
3. Perform field surveys including load measurements with test and monitoring equipment.
4. Author and maintain accurate and complete notes of all meetings, telecons, and activities.
5. Promptly respond to all telephone inquiries.
6. Obtain protective device characteristic curves from manufacturers and incorporate them into the software library.
7. Update and validate the program library data for correctness.
8. Maintain in-house progress control throughout study.
9. Produce own documents, reports, tables, charts, and letters and help on producing Standards for the office.
10. Coordinate study progress and cost overrun with the supervisor.
11. Advise the accounting department when a project is complete and must be invoiced.

### **B. PRE-STUDY PHASE**

1. Work with customer and contractor in determining data requirements.
2. Assemble and compare the study reference material with the job criteria and specifications.
3. Review the information and make a list of the missing data.
4. Contact client, contractor, and the equipment manufacturers to obtain the missing data.
5. Contact power companies for upstream protection and fault information.
6. Assist in field data collection and direct others for the same.

### **C. POWER SYSTEM STUDIES**

1. Perform code review and resolution of problem areas.
2. Perform complex analytical studies, investigations, and consulting services. Studies shall include use of SKM and ETAP and AMPCALC Systems programs for short circuit, coordination, arc flash, load flow, duct-bank rating, ground grid design, power factor correction, motor starting, and harmonics.
3. Analyze customer facility to appraise adequacy of their operation in order to increase the production or decrease maintenance cost.
4. Design, redesign, or modify equipment protections to improve service to customers.
5. Produce calculations and setting tables using office standard software.
6. Work on all voltage classes of protection and relaying from 34.5kV down.

### **D. MARKETING**

1. Meet the clients for marketing future projects or pricing a current project.
2. Analyze customer equipment or facilities to appraise adequacy of current operation and

- recommend the necessary studies to the client.
3. Prepare written quotations and determine prices jobs.

E. FREQUENCY OF CONTACT

Contact	Purpose	Frequency
Principal	Work progress, assistance and guidance	Weekly
Customer	Obtain technical information	As Required
Vendors	Obtain product information	As Required
Contractors	Answer site related information	As Required
KSG Staff	Assist in studies for KSG design projects	As Required

F. DIRECTION OF OTHERS

1. Provide technical assistance to designers and engineers in the performance of their work for short circuit and load flow studies.
2. Coordinate work of others to meet project deadline requirements.
3. Foster a team environment in all staff matters.
4. Develop and instruct training courses for customers and other candidates.
5. Assist engineers in solution of the problems and provide technical guidance and assistance where necessary.
6. Guide field operators in data collection.

G. DIRECTION RECEIVED

1. Minimal direction required.
2. Work under the supervision of a principal or project manager.

H. EDUCATION REQUIRED

1. Four (4) year degree in Electrical Engineering.
2. Satisfactory completion of the EIT.

I. EXPERIENCE REQUIRED

1. Four (4) years in power system analysis.
2. Good knowledge of the National Electrical Code and NESC.
3. Knowledge of electrical power systems principles and application.
4. Awareness of industry requirements related to operation and product.

**LOCATION: GLENDALE, CA OR THOUSAND OAKS, CA**