

# SYSTEM PLANNING ENGINEER

#### I. POSITION SUMMARY:

The System Planning Engineer will serve the members and support the goals of Jefferson Energy Cooperative by effectively and efficiently providing the technical expertise in systematically updating, maintaining and planning for the expansion of the corporate distribution system.

#### II. REPORTING RELATIONSHIPS:

A. Reports to: System Engineering Supervisor

B. Supervises: None.

## III. MAJOR RESPONSIBILITIES/ ESSENTIAL FUNCTIONS OF POSITION:

(If this is a Trainee position, a reasonable amount of time will be allowed for learning. The Key Responsibilities and Performance Standard Description is the expectation for a fully qualified person in this position.)

- A. Develops effective short/long range engineering work plans.
- B. Keeps system configuration and bus data up to date in JEC's engineering models.
- C. Develops justifications for additional substation capacity and completes reports for ITS transmission capacity.
- D. Completes effective capacitor studies.
- E. Accurately maintains engineering analysis computer hardware and software.
- F. Maintains and coordinates optimum system configuration.
- G. Prepares and recommends the annual work program (electric plant additions and system improvements) for the system.
- H. Reviews substation loading reports and maintains growth trends for each substation together with a change-out schedule for all substation equipment.
- I. Maintains load growth trend data for all areas of the system and analyzes



its significance in relation to existing electric plant capability.

- J. Conducts voltage condition surveys over the system and analyzes results to determine if voltage is adequate and when necessary initiates action to correct any undesirable voltage conditions.
- K. Reviews and analyzes system outage records and reports to determine if plans are needed for any plant changes or additions to provide the desired standard of electric service and service continuity.
- L. Provides motor starting calculations and available fault current data to members/consumers, consultants and operating personnel.
- M. Assists in staking of system improvement, work plan, and member extension jobs.
- N. Prepares composite coordination curves of all protective devices for all substations.
- O. Ensures that all protective equipment has the proper fault interruptive rating.
- P. Develops accurate fault current calculations.
- Q. Reviews at least annually the coordination scheme of all sectionalizing devices in the system and makes recommendations for changes to effect better coordination.
- R. Provide Technical Assistance and Support to Other Personnel.
- S. Takes part in the cooperative's "on call" system.
- T. Create switching orders for significant switching events that minimize effects on members and follow proper JEC energy source control procedures.
- U. Produce area and street lighting designs for members or perspective members.
- V. Works with all Cooperative's employee to promote the "team" concept at all times.
- W. Makes himself/herself available for any work that may be required at times other than normal working hours.



- X. Performs the duties of this position in a manner which is in accordance with established policies, practices and procedures so as to make a maximum contribution to the objectives of Jefferson Energy.
- Y. Attends job training and safety meetings.

**NOTE:** The above are major responsibilities/ essential functions of this position. They are not intended to cover each aspect of the position as the scope, duties, and functions of a given position may change or be temporarily altered based on the business needs of JEC. The basic requirement of every position is to perform all tasks as assigned by the supervisor.

The **SYSTEM PLANNING ENGINEER** shall be required to perform any other duties assigned in order to fulfill the objective of the cooperative.

## IV. EXTERNAL RELATIONSHIPS:

- A. OPC/GTC/GSOC: Substation and Transmission related subjects. Power Quality Services. Wholesale Power Bill/Rate Subjects. Power Supply Restoration
- B. RUS: RUS field representative construction work plan/long range plan approvals.
- C. Other Electric Utilities (co-ops and investor-owned): Territorial and joint use issues.
- D. Consultants: Provide technical data counsel and review study results. Negotiate agreements for services.
- E. Contractors: Negotiate construction contracts and coordinate bid process for facilities.
- F. Government Agencies: Oversee relationship and contracts handled by technicians.
- G. Local engineering firms: contacts for future and existing members/consumers.
- H. Law firms: Territorial matters, union matters, and member/consumer claim matters.



# POSITION SPECIFICATIONS SYSTEM PLANNING ENGINEER

# Job Knowledge, Training Experience:

## **Required:**

Bachelor's Degree in Engineering.

#### **Preferred:**

Bachelor's Degree in Electrical Engineering or Electrical Engineering Technology.

#### **Abilities and Skills:**

# **Required:**

Personal computer based skills with knowledge of Microsoft Office Products.

Ability to become proficient in operating distribution equipment for overhead and underground systems.

Excellent oral and written communication skills.

Ability to research materials and system coordination devices.

Ability to develop skill to operate and program a SCADA system.

Ability to effectively perform duties with minimal supervision.

Valid Georgia driver's license.

## **Preferred:**

Engineer in Training Certification (Must be obtained within one year).

Previous experience with developing short-range and long-range construction work plans.

Previous experience with layout, design and operation of an electrical distribution system.

Previous experience with using an engineering analysis package for electrical distribution system studies.

## **Physical Effort and Working Conditions:**

Must be able to stand, walk and stoop.

General office environment, some field work; requires some time in excess of normal hours during peak system load time and during emergency power outage situations.

Jefferson Energy Cooperative is a drug free workplace. After an offer of employment has been made, a pre-employment drug screen is required.