

## JOB DESCRIPTION

Job Title: ASSOCIATE ENGINEER - SCADA Date: 09/20/16

TRANSMISSION AND DISTRIBUTION Department: Grade: 10

Reports to: SUBSTATION OPERATIONS SUPERVISOR Status: Exempt

### I. SUMMARY OF POSITION:

This position will perform any and all engineering functions related to T&D. The Associate Engineer will progressively be responsible for the development and maintenance of the SCADA/EMS system. This position will also assist with T&D and Production operations.

Describe the major job activities in order of importance for which this job is held accountable.

Specific duties/responsibilities/functions
Support software & hardware development, assists in maintenance and upgrades on the SCADA/EMS system. This includes substation RTU's (remote terminal units), relays, field devices, and various forms of communication. Investigates and resolves any SCADA related field devices in question.
Works with Production personnel to ensure that the SCADA and AGC (automated generation control) is fully operational. Interfaces with Operations to improve any SCADA displays and/or processes.
Interfaces with IPP's (Independent Power Producers), large power customers, and renewable energy providers, on communications or SCADA related issues.
Assists T&D and Production personnel with project development and implementation including any troubleshooting and development of operating policies and procedures.
Assist in outage restoration, writing switching programs, and other responsibilities as assigned.
Performs administrative and budgetary work as necessary.
Performs all other duties as assigned.

# **II. DIMENSIONS** (for supervisor level and above):

Operating Budget (T&D total): \$2,300,000 Capital Budget (T&D total): \$13,000,000

# of Direct Reports: 0

# of Indirect Reports (including contractors and temporaries): 1

Annual Sales Objectives (KIUC total): \$188,000,000

Annual Revenues (KIUC total): \$188,000,000

Impact of Job: *Check Box:* Members ☐ Board ☐ President ☒ Department Heads ☒ Employees ☒ Other: ☐ Other:

### **III. JOB SPECIFICATIONS:**

## 1. Kind and length of experience:

Up to three (3) years' experience in Power Generation and Electric Utility Control Systems, specifically:

Energy Management Systems (EMS)

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- Supervisory Control and Data Acquisition (SCADA) systems
- Database programming
- Network administration

# 2. Specialized Knowledge

- Developing knowledge of electric power transmission and distribution, system equipment and control, including breaker control and monitoring, transformers, and electric system switching operations.
- Developing knowledge of electric power generation.
- PC skills including all Microsoft Office applications.
- Knowledge of database programming.
- Knowledge of programming languages.
- Knowledge of DNP3 and various networking protocols.

## 3. Knowledge/education/certification/license requirements:

Bachelor of Science degree in Computer or Electrical Engineering, or equivalent combination of education and experience.

## 4. Language Skills:

- Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations.
- Ability to write reports, business correspondence, and procedure manuals.
- Ability to effectively present information and respond to questions from groups of managers, employees, customers, vendors, contractors, and the general public.
- Must take initiative and possess excellent interpersonal and organizational skills to handle multiple priorities.
- Ability to work well on a team.
- Ability to work with personnel in a positive manner and respectful atmosphere

## 5. Mathematical Skills:

- Ability to work with mathematical concepts such as probability and statistical inference.
- Ability to apply complex mathematical concepts related to utility operations and engineering.

# 6. Reasoning Ability:

Ability to define problems, collect data, establish facts, and draw valid conclusions.

### 7. Physical Requirements:

The physical demand described here is representative of those that must be met by an employee to successfully perform the essential functions of this job.

- While performing the duties of this job, the employee is regularly required to sit; use hands to handle or feel objects, tools, or controls; and talk and hear.
- The employee is required to walk, bend, and reach with hands and arms.
- The employee must occasionally lift, carry and/or move up to 75 pounds.
- The employee may need to travel to KIUC locations.

## 8. Environmental Factors:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

- The noise and dust level in the work environment is as could be encountered in normal commercial/industrial sites.
- The employee is occasionally exposed to extreme heat and cold, may be required to work at heights over 15ft.

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The employee may be required to work extended hours, weekends, and must respond to system emergencies on a 24-hour basis.

#### IV. PROBLEM SOLVING:

#### 1. **Typical Problems:**

Assist in programming the SCADA system and configuring new and existing hardware. Checking for communications problems. Identify questionable RTU and instrumentation points.

#### **Most Complex Problems:** 2.

Investigate questionable readings from monitoring devices, facilitate the restoration of the power grid, apply and integrate new microprocessor based relaying to the system, restoring SCADA/EMS from a system failure, implementing and designing SCADA systems

## V. AUTHORITY AND DECISION MAKING:

- 1. What typical decisions does this job have complete authority for making? Emergency restoration of SCADA/communication failures
- 2. What typical decisions must be referred to others for approval? To whom do you refer these decisions?

Company policy, and capital expenditures above \$2,500; referred to Substation Operations Supervisor.

## VI. LIST KEY CUSTOMERS:

Position little	External/Internal
All KIUC employees	Internal
Production Staff	Internal
Transmission & Distribution Staff	Internal
IPP	External
Vendors	External

Signature:	/s/ Cameron Kruse	Date:	10/5/2016	
	Immediate Supervisor	-		

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Date Evaluated:	04/14/2014	Evaluated By: Dep	ot. Heads/HR			
Grade:	10	Points: 1011			☐ Non-Exempt	
Department Head Signature: /s/ Carey Koide		Date:	10/5/2016			
President & CEO Signature:	/s/Davi	d Bissell		Date:	10/5/2016	

<sup>\*</sup> This job description documents the general nature and level of work but is not intended to be a comprehensive list of all activities, duties and responsibilities required of job incumbents. Consequently, job incumbents may be asked to perform other duties as required. The percentage allocation of job duties is subject to change based upon business needs. The information documented on the Job Description is not to be considered final until it is reviewed and approved by the President & CEO.