

## POSITION DESCRIPTION

Position Description: **Senior Integration Engineer**

Location: Wausau WI

Reports to: VP Engineering

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### **JOB SUMMARY:**

As a Senior Integration Engineer this employee must have demonstrated skills and experience in software and hardware engineering, and the proven ability to apply them in the development, testing and commissioning of integrated control systems for hydroelectric power plants. He/she shall also have experience in the interpretation of project technical specifications and in turn the ability to provide proposed solutions to meet them

Furthermore this employee must have demonstrated skills and experience leading multidisciplinary teams of engineers and technicians involved in the design, development, testing and commissioning of turbine governors, plant instrumentation and integrated control designs for new equipment and also for retrofitting of hydroelectric power plants

The Senior Integration Engineer participates and provides support in the technical specification and development of L&S Control Products, as well as in the development and implementation of FAT & SAT standards and procedures.

With his/her degree of expertise, judgment, creativity and latitude; this engineer is considered and expected to be a senior level contributor/specialist for the division

### **REQUIREMENTS:**

- BSEE / BSME with 7 years' experience with digital/hydraulic governors and automation systems for hydroelectric power plants
- Familiar with ASME, IEEE, IEC, NEC, and CSA standards applicable to the design of equipment for Power Generating Stations
- Hydroelectric power plant operations and equipment knowledge
- Strong conceptualization ability along with strong interpersonal, communication and organizational skills, including the ability to explain complex technical issues to decision-makers and project teams
- Ability to travel in excess of 30% domestically and internationally
- Competent in four (4) of L&S Engineering defined core skills and (2) additional skills
- Ability to lead multidisciplinary teams
- Able to perform all essential functions of the job

### **DESIRABLE:**

- Professional engineering registration
- Fluent in Spanish
- Experience working Internationally in the Hydroelectric Industry

### **ESSENTIAL FUNCTIONS:**

- Design and implement integrated control systems for hydroelectric power plants
- Support the Lead Integration, Electrical, Control and Mechanical Engineers in the development and implementation of control software source code, design guides, and standards
- Interpret technical project specifications as required by sales and engineering project management
- Provide technical presentations at trade shows and seminars as required
- Develop conceptual designs and description of operation for control systems
- Develop transfer functions for control systems
- Design cut-ins for electrical control systems
- Design electrical schematic, functional elementary and wiring diagrams
- Program PLCs and IEDs for control systems
- Develop hardware I/O List

- Prepare O&M manuals, factory acceptance test (FAT), installation engineering, site acceptance test (SAT) and customer training documents
- Perform design reviews as assigned
- Perform FAT, installation supervision, SAT, customer training and system commissioning as assigned
- Perform onsite inspections and project “kick-off” meetings as assigned
- Perform electrical calculations for system sizing and component selection
- Perform demolition and installation engineering
- Interpret mechanical and hydraulic drawings
- Ensure effective information handoffs
- Ensure system engineering is complete prior to handing off work for detailed engineering and design
- Minimize rework and warranty on all projects
- Utilize L&S Electric ISO system to ensure quality products and services
- Utilize and ensure compliance to L&S Electric’s PMD process and documents on all assigned projects
- Work effectively with all other project team members
- Support Engineering division as requested

**OTHER REQUIREMENTS:**

- Ability to confidently correspond with customers via oral and written means
- Ability to travel to Canada and Internationally as assigned
- Ability to work independently and in a team environment with minimal supervision and guidance
- Able to wear personal protective equipment; hearing protection, hard hat, safety glasses, etc.
- Authorized to work in the United States
- Display a positive can do attitude
- Excellent customer relations skills
- Fluent in English language
- High level organizational skills with ability to set priorities, manage multiple deadlines and work under pressure
- Possess a strong attention to detail
- Possess strong electrical and mechanical aptitude
- Proficient use of personal computer, operating knowledge of Microsoft Word, Excel and Project
- Shall sign L&S Electric confidentiality agreement
- Shall work as required to complete work requirements
- Simultaneously execute multiple projects
- Valid driver’s license, able to be insured
- Valid passport or ability to obtain one
- When on call, respond to customer service calls 24 hours a day, 7 days a week
- Willingness to learn new skills and approaches to dealing with problems
- Work effectively as an individual and in a team environment

**WORKING CONDITIONS:**

- Aerial work may sometimes be necessary
- Core working hours start at 8AM unless prior approval given. Eight (8) working hours per day are required. Overtime requires prior approval.
- Environmental conditions vary from facility to facility (i.e. heat, noise)
- Occasional lifting of heavy objects
- Uneven or slippery walking surfaces
- Work from assigned L&S office unless prior approval given
- Work is performed at the customer jobsite as well as at L&S Electric facilities