

Hydro I&C Tech II | Job Code - HDP334

JOB SUMMARY

Job Title	Reports To (Job Title)
Hydro I&C Tech II	N/A
Job Type	Job Level
Technical/Craft	Learner

Summary

This position is a multi-skilled role that requires qualification within the IC&E job family as well as qualification in two secondary skillsets (Operations and Mechanical) as outlined in REN-TPG-MU-TC-0001.

This position is responsible for operation, monitoring, preventive maintenance, clerical duties, facilities maintenance, project support and oversight and repair of basic mechanical, electrical, and instrumentation equipment associated with the safe and reliable operation of Hydro stations. Must be familiar with emergency procedures to follow during periods of abnormal operations. Accountable for knowing and adhering to all location safety procedures including red tagging and personal protective equipment.

Responsibilities:

- Perform monitoring, testing, maintenance/performance checks, calibration of mechanical, pneumatic and electronic systems.
- Take/give instruction on operating units locally or remotely in accordance to PU&A policies
- Operate test equipment such as voltmeter, Hart Communicator, GE/Fanuc Hand Held Monitor, RTD Tester, Specific Battery Tester, pressure gauges, voltage/current sources, and temperature sources.
- Troubleshoot and/or monitor via PLC's
- Troubleshoot, repair and calibrate pressure transmitters, RTD's, valve positioners, valve actuators.
- Troubleshoot, repair, and calibrate all other station monitoring, recording and unit systems, station/generator alarms, forebay/tailrace gages, etc.
- Prepare, set up and conduct plant equipment performance testing. Review data and report abnormalities in Maximo work order system
- Understand and use plant drawings, blueprints and manuals, site specific procedures, Process Information (PI)
- Monitor equipment performance through tests and analysis.
- Operate powerhouse cranes/hoist (including intakes and spillways), forklifts and trucks.
- Execute equipment startups and shutdowns of all major and auxiliary equipment and systems in the plant, following PU&A standards
- Able to line up systems for various mode of operations (e.g. startup, shutdown, motor, low load, emergency, etc.)
- Perform lockout/tagout on station equipment to protect workers from hazardous energy.

- Perform minor mechanical maintenance tasks on valves, pumps and motors
- Perform data entry work to maintain accurate logs and records associated with the operation of auxiliary equipment, operator rounds logs, checklists, etc.
- Perform Housekeeping and other Facilities Maintenance tasks including janitorial
- Utilize computers and/or tablets to perform basic functions such as timesheet entry, complete computer-based training modules, read company email, closeout work orders in Maximo, etc.
- Generate, complete, and reference work orders in Maximo
- Perform inspections and measurements on dams, spillways and inspection galleries
- Understand and enforce BES site requirements.
- Understand and use of Microsoft Office tools, i.e. Outlook, Teams, Excel, Word, etc.
- Perform LOTO (Lockout Tagout) duties consisting of Work Control Center, Program Owner, LOTO Desk, Owner Control Group (OCG), Work Leader (WL), Protected Persons (PP)
- Write and review site specific procedures
- Understand and enforce FERC, NERC and NERC CIP compliances relevant to station
- Provide support, training and mentoring of developing Techs
- Communicate with internal/external customers

Basic Qualifications:

- Associates Electronics or Electrician and 3 years of related experience
- In lieu of degree, High School Diploma or GED and 5 years of related experience
- Experience with troubleshooting electrical/instrumentation equipment
- Experience reading electrical diagrams, schematics, and one-line drawings.
- Experience utilizing electrical/instrumentation test equipment
- Experience with switching and clearing electrical equipment
- Experience with mechanical, hydraulic and pneumatic applications
- Experience with seals, pumps, valves and bearings
- Experience with PC's and other computer equipment
- Demonstrated ability to use electrical drawings and schematics to troubleshoot problems.
- Demonstrated ability to perform mechanical maintenance work task
- Demonstrated knowledge of PLC's.
- Demonstrated initiative to take leadership roles and act as a team player.
- Demonstrated active usage of human performance improvement tools - i.e. pre-job briefs, SOS cards, procedure adherence, STOP when unsafe/uncertain, etc.

RESPONSIBILITIES

- Perform monitoring, testing, maintenance/performance checks, calibration of mechanical, pneumatic and electronic systems.
- Operate test equipment such as voltmeter, Hart Communicator, GE/Fanuc Hand Held Monitor, RTD Tester, Specific Battery Tester, pressure gauges, voltage/current sources, and temperature sources.
- Troubleshoot, repair and calibrate pressure transmitters, RTD's, valve positioners, valve actuators.
- Troubleshoot, repair, and calibrate all other station monitoring, recording and unit systems,

- station/generator alarms, torque/torque gages, etc.
- Prepare, set up and conduct plant equipment performance testing. Review data and report abnormalities in Maximo work order system
- Understand and use plant drawings, blueprints and manuals.
- Monitor equipment performance through tests and analysis.
- Operate powerhouse crane, forklifts and trucks.
- Perform lockout/tagout on station equipment to protect workers from hazardous energy.

QUALIFICATIONS

Basic/Required Qualifications

Required Education

Type of Degree	Field Of Study
Associates	Electronics
Associates	Electrician

Required Work Experience

Min Required Related Experience	3 Years
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Professional Certifications or Licenses

Certification Name
N/A

Additional Certifications or Licenses

Certification Name
N/A

In Lieu of Degree

Education

Not
Applicable

Years of Experience

5 Years

Preferred Qualifications

Preferred Education

Type of Degree	Field Of Study
N/A	N/A

Preferred Work Experience

Years of Related Work Experience	N/A
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Professional Certifications or Licenses

Certification Name
N/A

Additional Certifications or Licenses

Certification Name
N/A

ADDITIONAL DETAILS

Preferred Qualifications

- Demonstrated knowledge of logic relaying and protective relaying
- Proficient in PLC logic
- Demonstrated knowledge of excitation systems
- Trained to level of LOTO Desk qualifications
- Hydro specific operations experience
- Knowledgeable of NERC, NERC CIP and FERC Compliance

Working Conditions

- Occasional overtime including weekend work and holidays
- Generally, a 4-10 schedule for Conventional Hydro Sites with weekly rotating callout assignments
- Pumped Storage Hydro Sites is a 12 hour per day and 36/48 weekly rotating day and night shift
- Must be able to work at heights, from suspended work platforms and in confined spaces
- Able to lift 50 lbs, extensive walking, bending, stooping, squatting, and climbing.
- Exposure to electromagnetic fields (EMF).
- May be exposed to high stress situations and required to be available for emergency response as needed
- Occasional worksite rotations
- Combination of inside and outside powerhouse responsibilities
- Be able to work alone, as well as, in a team environment

Specific Requirements

- Must have a valid driver's license
- Must successfully complete EEI's Plant Operator Selection System (POSS), and Power Plant Maintenance Selection System (MASS)
- Must successfully complete a Power Plant Physical Abilities Assessment
- Required to pass physical
- Ability to work around equipment that generates electromagnetic fields (EMF).
- This position contains a weight restriction of 275 pounds as an essential function of the job. The purpose of this restriction is to ensure that all weight rated equipment is used in an appropriate and safe manner within maximum allowed weight loading.
- Must live within approximate 30 mile radius of assigned station
- Capable of passing background check for NERC CIP

REPORTING RELATIONSHIPS

Will this role have direct reports?

No

NATURE OF THE JOB

- | | |
|---|-----|
| 1.Tasks are straightforward, routine and often repetitive | N/A |
| 2.Tasks follow set guidelines or procedures | N/A |
| 3.Employee must compare alternative courses of action and make a decision after considering options | N/A |
| 4.Employee receives clear instructions from supervisor regarding what to do and how to do it | N/A |
| 5.Employee has the authority to make significant choices and decisions without specific guidance or direction from the supervisor | N/A |