
	LONGVIEW POWER PLANT POLICY AND PROCEDURES MANUAL		
	Title: Instrumentation, Controls, and Electrical (IC & E) Technician (Level 2)		
Procedure Number: L1 - ADM - 1JD - IC2 - R	Rev. Number: 0	Rev. Date: 4-20-2009	Page Number: 1 of 5

[Job Summary \(Why does job exist?\)](#)

The IC&E Technician (Level 2) is responsible for all electrical, instrument, and control activities of the plant. The position reports directly to the Instrumentation & Controls Supervisor and indirectly reports to the maintenance manager. The IC&E Technician (Level 2) is responsible for troubleshooting, testing, maintenance, calibration, and proper operation of all instrumentation, control systems (specifically Siemens SPPA-T3000 with Automation Server (S7-400-4H) , and Turbine Control System (SIMATIC FM458)) , switchgear, batteries and electrical support systems, and electrical equipment in the plant. Some of the common duties will be but not limited to, valve repair/actuator replacement, lubrication of equipment, filter changing & cleaning, system leak repair, component & driver alignment, bearing repairs & replacement, component replacement, general industrial maintenance, housekeeping, training and troubleshooting of systems. This person will follow the Plant Safety Procedures and the Plant LOTO or (Lock-out Tag-out System) at all times. The position will be supporting the Longview Power plant Start-Up / Commissioning, Maintenance and Operational readiness of the 700 MW Super-Critical Coal Fired Generating Station, including but not limited to Fuel Systems, Ash Handling, Scrubber System, Steam Turbine Generator, Auxiliary Equipment, Boiler and Auxiliaries, Mills, Crushers, and other plant equipment.

[ESSENTIAL DUTIES AND RESPONSIBILITIES](#)

- Troubleshoot, inspect, test, maintain, repair, clean and calibrate instrumentation and solid state and microprocessor based control equipment including plant communications equipment, programmable controllers, distributive control systems, generator excitation equipment, battery chargers, and semi-conductor devices.
- Troubleshoot, inspect, maintain, repair, test and clean electrical equipment including: circuit breakers, motor operated valves, AC&DC motors and controllers, switches, solenoid valves, and rectifiers.
- Use a wide range of test equipment, including recorders, computers, control and tuning modules, PC based software analyzer programs, oscilloscopes, data analyzers, logic test equipment, analog and digital multi-meters, meggers and other test equipment, while performing tests to identify problems and to maintain and calibrate equipment to performance standards.
- Make regular inspection rounds of plant electrical, instrumentation, and control equipment.
- Connect, disconnect, and tag out equipment and circuits for test or repair and safety of personnel and equipment.
- Assist in developing detailed preventive and predictive maintenance procedures for plant electrical, instrumentation, and control equipment.
- Install, build, or modify plant electrical, instrument, and control equipment as directed.
- Pull cable and install and bend conduit.
- Perform inspections in compliance with the national electrical code.
- Perform calibration of plant emissions monitoring equipment.
- Perform basic machine tool operations using the drill press, grinder, and lathe.
- Perform soldering on electronic components.

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- Perform rigging and some basic mechanical repairs.
- Maintain shop and storage areas in a neat and orderly fashion.
- Responsible for the safe and efficient use of materials, tools, and test equipment.
- Responsible for his/her safety and all others working around him/her.
- Responsible for, maintenance, troubleshooting, and calibration of process control systems, including pressure transducers, flow meters, temperature transmitters, level transmitters, controllers and meters.
- Responsible for cleaning work area after work is complete.
- Determine and install wiring, conduit, fixtures, transformers, and other electrical devices in the size, type, and arrangement necessary for proper and safe operation of electrical systems, circuits, and equipment.
- Coordinate activities of contractor employees involved in maintenance and repair of plant equipment.
- Comply with plant policy and procedures, in particular, those involving personnel and equipment safety.
- Perform other duties as assigned.
- Responsibly operate site vehicles; valid driver's license is required.

Job Requirements (Education, Experience, Knowledge, Skills)


- Technical College in the Instrument and/or Electrical field and/or 4 year related industrial experience.
- Knowledge of AC/DC Circuits, Machines, Electronic theory and components.
- Ability to interpret complex electrical and electronic drawings and prints.
- Strong knowledge of plant Safety & Environmental procedures.
- Knowledge in the use of personal computers and numerous software applications such as Excel, Word, MS Outlook, Powerpoint, Access, etc.
- Ability to productively work independently and as an overall integral Longview team member.
- Must have knowledge of Plant LOTO system, (Lock-out - Tag-out).
- Must have good communication skills and the ability to effectively communicate activities with other plant personnel.
- Ability to handle quick changing situations under stress and to work extended hours on short notice if and when required.
- Ability to stay current with changing technologies.

SUPERVISORY RESPONSIBILITIES

Does this job have supervisory responsibilities? No

Supervision Received:

Receives guidance with respect to general objectives; in the majority of tasks and projects assigned, determines methods, work sequences, scheduling, and methods to achieve objectives of assignments; operates within specific policy guidelines.

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Are there non-supervisory employees who report directly to this job? No

Are there subordinate supervisors reporting to this job? No

OTHER DUTIES AND RESPONSIBILITIES

- Comply with all Safety & Environmental policies, practices and procedures.
- Participate in proactive team efforts to achieve departmental and company goals.
- Perform other duties as assigned.
- Clean Shop and other work areas as assigned and/or required.
- Provide leadership to others through example and sharing of knowledge/skill.
- The I C & E Technician (Level 2) will implement the facility's maintenance programs in the electrical, instrument, and control areas.
- The I C & E (Level 2) Technician will have knowledge of High Voltage in respect to coordinating / supervising a contractor work force.
- The I C & E Technician (Level 2) will be capable of proper HV grounding through out the facility.

EDUCATION and EXPERIENCE

Level of education and experience needed to successfully accomplish the essential duties of this job.

One year certificate from college or technical school; or four years related experience and/or training; or equivalent combination of education and experience.

LANGUAGE SKILLS


Level of language (ability to read, write, and speak English) needed to successfully accomplish the essential duties of this job.

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

MATHEMATICAL SKILLS

Level of mathematical skills and abilities needed to successfully accomplish the essential duties of this job.

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

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REASONING ABILITY

Level of reasoning skills and abilities needed to successfully accomplish the essential duties of this job.

Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

COMPUTER OPERATIONS

Proficient personal computer skills including electronic mail, record keeping, routine database activity, word processing, spreadsheet, graphics, etc.

PLANNING/ORGANIZATION

Handles multiple tasks simultaneously.

CERTIFICATES, LICENSES, REGISTRATIONS


Licenses, certificates, or registrations that are required to perform the essential duties of this job.

Valid Drivers License

PHYSICAL/ENVIRONMENTAL DEMANDS

How much on-the-job time is spent in the following physical activities?

	<u>Rare</u>	<u>Occasional</u>	<u>Frequent</u>
Standing	___	___	<u>X</u>
Walking	___	___	<u>X</u>
Sitting	___	___	<u>X</u>
Using hands to finger, handle, or feel	___	___	<u>X</u>
Reaching with hands and arms	___	___	<u>X</u>
Climbing or balancing	___	<u>X</u>	___
Stooping, kneeling, crouching, or crawling	___	<u>X</u>	___
Talking or hearing	___	___	<u>X</u>
Tasting or smelling	___	<u>X</u>	___
Other: Driving	___	___	<u>X</u>
Other: Respirator Use	___	<u>X</u>	___

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Does this job require that weight be lifted or force be exerted? If so, how much and how often?

	<u>Rare</u>	<u>Occasional</u>	<u>Frequent</u>
Up to 10 lbs	—	—	<u>X</u>
Up to 25 lbs	—	—	<u>X</u>
Up to 50 lbs	<u>X</u>	—	—

WORKING CONDITIONS

Outdoors and indoor shop environment with adequate ventilation.

Wet or humid conditions (non-weather)	—	<u>X</u>	—
Work near moving mechanical parts	—	<u>X</u>	—
Work in high precarious places	—	<u>X</u>	—
Fumes or airborne particles	—	<u>X</u>	—
Toxic or caustic chemicals	<u>X</u>	—	—
Outdoor weather conditions	—	<u>X</u>	—
Extreme cold (non-weather)	<u>X</u>	—	—
Extreme heat (non-weather)	—	<u>X</u>	—
Risk of electrical shock	<u>X</u>	—	—
Work with explosives	<u>X</u>	—	—
Risk of radiation	<u>X</u>	—	—
Vibration	—	<u>X</u>	—

How much noise is typical for the work environment of this job?

Loud (examples: metal can manufacturing department, large earth-moving equipment)

TRAVEL

Minimal overnight travel (up to 10%) by land and/or air.