WOMEN EARNING WHILE LEARNING JOBGUIDE 2022

POWER STATION OPERATOR



Do you want to work as part of an exciting, challenging, and essential service that actively encourages women to participate and provides the following opportunities?

- develop transferable skills
- be part of the future of energy
- work around the world
- specialise in renewable energy
- advance your career
- learn new and innovative practices



OVERVIEW OF INDUSTRY

The Energy and Electrotechnology industry in Australia includes design, commissioning, installation, testing, fault-finding, servicing, maintenance, assembly and repair of electrical, electronic, computer or climate change equipment, systems, networks and components. It extends across many industry sectors such as industrial, mining, energy, renewables, domestic, commercial, construction, data, communications, fire protection, security, manufacturing, lifts, maritime, as well as power generation, transmission distribution and rail and more. New innovative technologies, automated and programmable control systems, digitisation, and information technology systems and equipment are reshaping the Energy & Electrotechnology industry, and it has become one of the most exciting cutting-edge and rewarding career choices in Australia.

WHAT DOES A POWER STATION OPERATOR DO

Power generation operators perform a wide variety of tasks to ensure optimal and safe operation of equipment that produces, distributes, and dispatches electrical power. They may operate analogue and digital control systems, auxiliary systems, monitor gauges and meters, perform routine checks, maintain, and adjust equipment and start or stop operations when necessary. They can work with thermal, hydro, solar, wind, wave, or alternate resource saving technology generators. Electricity is one of our nation's most vital resources. Australia's National Electricity Market (NEM) covers Queensland, New South Wales, Tasmania, Victoria, and South Australia. This area accounts for around 90% of Australia's electricity consumption. The NEM has 40,000 kilometres of transmission lines, it is the longest alternating current (AC) system in the world. Power generator operators play a vital role in keeping Australian homes, factories and businesses running.

"I love working as a Power Station Operator because I am part of an innovative industry that constantly changes and provides new challenges for me to meet " For further information or advise contact mac@agrifooditab.com.au





National Careers Institute

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Selection Criteria:

- *Well-developed communication and people skills *Effective English and maths skills
- *Ability to work in a team or independently
- *The ability to work with tools and machinery and complete reports

*Well- honed problem- solving skills are essential to this role

*The capacity to remain calm and to think clearly under pressure is essential.

*The capacity to maintain concentration and monitor vital equipment for long periods of time without being distracted

*Must have an eye for detail and be able to monitor complex controls and equipment

*Ability to use precise and repeated motions when working in a control room

SOME TASKS YOU MAY BE REQUIRED TO DO

- *Monitor individual operating equipment for proper operations
- *Safely start and stop generation equipment and associated auxiliary systems to bring on-line and off-line
- *Configure and manage the power system to meet the dynamic load demands considering the design and operational requirements
- *Understand and know the operating capacities and characteristics of all equipment
- *Adjust controls to regulate the flow of power
- *Perform routine log checks and inspections on equipment as well as performing basic maintenance on combustion engines and associated equipment
- *Supervise displays to regulate faults or substandard performance or commence repair protocols
- *Interpret schematic drawings to co-ordinate fluid configuration changes and fault finding
- *Perform High Voltage switching and equipment isolation
- *Provide knowledge and training support to new shift operators and provide incident/event reports

Training Requirements and Pathways

Pre- apprenticeship/traineeship qualification: <u>UEP20122 - Certificate II in ESI Generation (Operations Support)</u> or <u>UEE220111 Certificate II in Electrotechnology (Career Start).</u> Traineeships generally take between twelve to twenty-four months to complete.

Apprenticeship qualification: The trade qualification for this occupation is -

<u>UEP30122</u> - <u>Certificate III in ESI Generation</u> – which offers three specialisations to select from depending on your job role. Apprenticeships typically require 4 years to complete and once deemed competent by their RTO are issued the generation qualification.

<u>UEP40122</u> - <u>Certificate IV in ESI Generation</u> – this qualification is for those required to supervise power generation plant systems activities, remote operation of network equipment, isolation of power generation plant and equipment for work in the electrical supply industry. You may also need to obtain the following –

- driver's license
- aptitude testing

Income/opportunities

The Energy and Electrotechnology industry in Australia employs over 352,000 people with strong growth predicted for this occupation. Currently there are over 9,000 jobs for electricians advertised with a projection of 10.9% growth over the next 5 years.

Current wages:

Apprentice: \$56,000 per year

An early career Power Generator Operator with 1-4 years of experience earns an average total compensation (includes tips, bonus, and overtime pay) of AU\$90,000. A mid-career Power Generator Operator with 5-9 years of experience earns an average total compensation of AU\$110,000 some job opportunities that pay up to \$140,000 per annum (including call outs and overtime). Engineers paid up to \$220,000 per annum.

For further information or advise
contact
www.uensw.com.au









