POWER STATION OPERATOR

EDUCATIONAL PATHWAYS

Entry Level

UEP20122 Certificate II in ESI Generation - Operations Support.

This qualification covers the skills and knowledge required to perform operations support functions in the electrical supply industry. Functions include the operation of non-critical generation plant systems, lubricating generation plant and performing minor maintenance on electrical and mechanical equipment. It also includes cleaning power generation plant, operating mobile load shifting equipment and observing safe working practices in the workplace.

After successfully completing this qualification applicants commencing an apprenticeship as a power generator operator and would enrol into either one or both of the following qualifications depending on their job role.

UEP30122 - Certificate III in ESI Generation

This trade level qualification covers the skills and knowledge required to operate power generation plant systems, isolate power generation plant systems, and undertake routine maintenance on power generation plant and equipment in the electrical supply industry (ESI). It also includes working with civil plant and infrastructure and observing safe working practices. There are three specialisations that can be selected from depending on your job description -

- Combined Specialist -This specialisation covers the skills and knowledge required to perform operations and
- systems operations.
- Specialist - Operations - This specialisation covers the skills and knowledge required to perform operations.
- Specialist - Systems Operations -This specialisation covers the skills and knowledge required to perform systems operations.

UEP40122 - Certificate IV in ESI Generation

This qualification covers the skills and knowledge 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. It also includes working with civil plant and infrastructure and observing safe working practices.

Combined Specialist - Operations and Systems Operations - This specialisation covers the skills and knowledge required to perform operations and systems operations.

Specialist - Operations -This specialisation covers the skills and knowledge required to perform operations.

Specialist - Systems Operations -This specialisation covers the skills and knowledge required to perform systems operations.

UEP40322 - Certificate IV in ESI Generation Maintenance - Electrical Electronics

This qualification covers the skills and knowledge required to manufacture, fit, assemble, erect, operate, test, find and diagnose faults, and alter and repair electrical and electronic equipment including instrumentation systems. It does not include installation of any electrical wiring systems within an electrical installation as prescribed in current industry standards.

Functions include maintenance planning and scheduling as well as electrical wiring work if it is associated with assembling, maintaining, terminating or altering the wiring between electrical components within power generating plant or machinery. It also includes the supervision of others and the coordination of work activities.

Electrical equipment means any appliance, article, accessory, wire, fitting, cable, conduit or apparatus that generates, uses, conveys or controls, or that is intended to generate, use, convey or control, electricity above extra-low voltage (ELV).

UEP40422 - Certificate IV in ESI Generation Maintenance (Fabrication)

This qualification covers the skills and knowledge required to complete power generation work functions in the electrical supply industry. Functions include installation, fabrication, repair and maintenance of industrial pressure ves-sels and associated pipework, coded welding, welding supervision, general fabrication and the observation of safe Working practices.

For further information or advise contact
mae@agrifooditab.com.au
www.uensw.com.au

POWER STATION OPERATOR

EDUCATIONAL PATHWAYS continued

UEP40522 - Certificate IV in ESI Generation Maintenance (Mechanical)
This qualification covers the skills and knowledge required to complete power generation work functions in the electrical supply industry (ESI). Functions include the installation, repair and maintenance of plant and mechanical systems, and maintenance planning and scheduling. It also includes observation of safe working practices, supervision of others and the coordination of work activities.

UEP40622 - Certificate IV in Wind Power Generation
This qualification covers the skills and knowledge required to work in wind power generation. The skills and knowledge associated with this qualification are intended to apply to a wide range of wind power generation work, including wind farm maintenance, wind turbine maintenance and repair.
When electrical units are selected, the student must have the appropriate regulatory licence to undertake these units.

UEP50122- Diploma of ESI Generation
This qualification covers skills and knowledge to manage power generation plant systems activities, remote operation of network systems, development of operational procedures and the implementation of safe working practice for work in the electrical supply industry (ESI).
It also includes working with civil plant and infrastructure and observing safe working practices.

UEP50322- Diploma of ESI Generation (Maintenance)
This qualification covers the skills and knowledge required to manage functions in the electrical supply industry (ESI). Functions include the development of maintenance schedules, operational procedures, systems and the implementation of safe working practices. It also includes the management of projects, supervision of others and the coordination of work activities.

UEP50422- Diploma of ESI Generation Maintenance - Electrical Electronic
This qualification covers the skills and knowledge required to manufacture, fit, assemble, erect, operate, test, diagnose faults, alter and repair electrical and electronic equipment, including instrumentation systems. It does not include installation of any electrical wiring systems within an electrical installation as prescribed in current industry standards. Functions include maintenance planning and scheduling, as well as electrical wiring work if it is associated with assembling, maintaining, terminating or altering the wiring between electrical components within power generating plant or machinery. It also includes the supervision of others and the coordination of work activities.
Electrical equipment means any appliance, article, accessory, wire, fitting, cable, conduit or apparatus that generates, uses, conveys or controls, or that is intended to generate, use, convey or control electricity above extra low voltage.

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WOMEN EARNING WHILE LEARNING JOBGUIDE 2022

POWER STATION OPERATOR

CAREER PATHWAYS/SPECIALISATIONS

Power station operations manager:
A power plant operations manager manages and oversees the daily operation of a power generation plant. They monitor for efficiency and safety to ensure that all regulatory requirements are followed. Their role includes the implementation of preventative measures as well as emergency response and repairs to equipment during a break down. They also oversee the performance and safety of staff working on site in the power plant while meeting budgets and targets for output of energy.

Wind turbine technician:
A wind turbine technician's role is to undertake both scheduled and unscheduled maintenance and repairs on wind farms. The following duties are part of this job role -
Accessing wind turbine towers to inspect, maintain, or repair equipment, troubleshooting or repairing mechanical, hydraulic, or electrical malfunctions related to variable pitch systems, variable speed control systems, converter systems, and related components, inspecting the exterior and physical integrity of towers, maintaining tool and spare parts inventories required for repair, installation or replacement services, replacing worn or malfunctioning components, and keeping accurate records as well as reporting incidents and outcomes to management.

Maintenance Mechanic:
This role covers the installation and maintenance of mechanical components associated with the efficient and safe operation of a range of power generators. You will also be required to build, assemble, load test and install Diesel Generators, provide advice about equipment condition, complete service reports, conduct maintenance and repairs as well as remove defunct equipment. In addition to this you will be carrying out effective troubleshooting to minimise downtime and unnecessary repair costs.

Generation Maintenance Fabrication:
This role requires you to be able to fabricate and install components of a power generator and associated pipe work. The ability to weld a range of materials that will be under enormous pressure is an essential skill along with the capacity to trouble shoot and manufacture customised components to fit precisely. This role is often a supervisory role where you will be required to train and support less skilled employees to complete complex tasks.

For further information relating to this job. Search the following web sites by clicking on the industry logo or scanning the QR code

NECA	Clean Energy	Energy Networks
NSW Utilities & Electrotechnology Industry Training Advisory Body (NSW UE ITAB)	Green Power	MAE
For further information or advise contact **www.uensw.com.au** **Email**: tony@uensw.com.au		

POWER STATION OPERATOR

HINTS ON HOW TO APPLY FOR THIS JOB

The 11 steps below outline the process you could follow to assist you to secure an apprenticeship as a power station operator.

Step 1. identify your strengths and weaknesses, especially in maths and literacy as these are essential to being successful in a power station operators career. Intermediate maths with a solid pass mark is the minimum. Additionally, subjects like technical drawing and metalwork, woodwork or engineering will give you some basic hand spatial and situational awareness skills that employers look for.

Step 2. decide where you want to work; are you willing to relocate to get your dream job? There may be more opportunities in cities than in regional areas.

Step 3. do some research, as to who the key employers are in the utilities industry and choose the specialisation that you most like then make enquiries to see if they will take on apprentices.

Step 4. research information about these employers or companies that you would like to work for; find out what the entry requirements or essential criteria are that must be met; such as do you need to complete an aptitude or other entry test before getting an interview?

Step 5. make a shortlist of potential prospective employers to contact. You may also like to chat to your job search agent or search some of the online employment agencies such as SEEK, Jobsearch, Indeed or LinkedIn to find job vacancies for audio-visual or data communication technicians in your region.

Step 6. create a quality resume by identifying key elements that should be included therein, and incorporate your academic achievements, experience, interests and passions.

Step 7. identify and practice some interview skills with friends, parents or career advisors to learn tips on how best to perform in an interview.

Step 8. contact potential employers by writing or directly calling them to demonstrate your interest and communication skills. Prospective employers highly value self-starters and prospective career aspirants with initiative who take such steps to seek for themselves employment as an apprentice.

Step 9. talk with the prospective employer about the work they do and if they would be interested in taking you on as an apprentice. If you are still at school, you may be able to take up a school-based apprenticeship. There are opportunities available in some schools that allow you to take on a part-time apprenticeship known as a School-Based Apprenticeship or Traineeship (SBAT). Ask your school if they support this government initiative and ask the employer if they would be interested in such an arrangement. SBATs are a really good way to allow you to finish school and at the same time learn and earn as an apprentice.

Step 10. Your employer should contact the Australian Apprenticeship Support Network (AASNs) - https://www.australianapprenticeships.gov.au/ for further information on how to sign you up.

Step 11. sign up to your apprenticeship with your employer (and support of your family if you are under 18 years old) to start "learning and earning" to be a power station operator.

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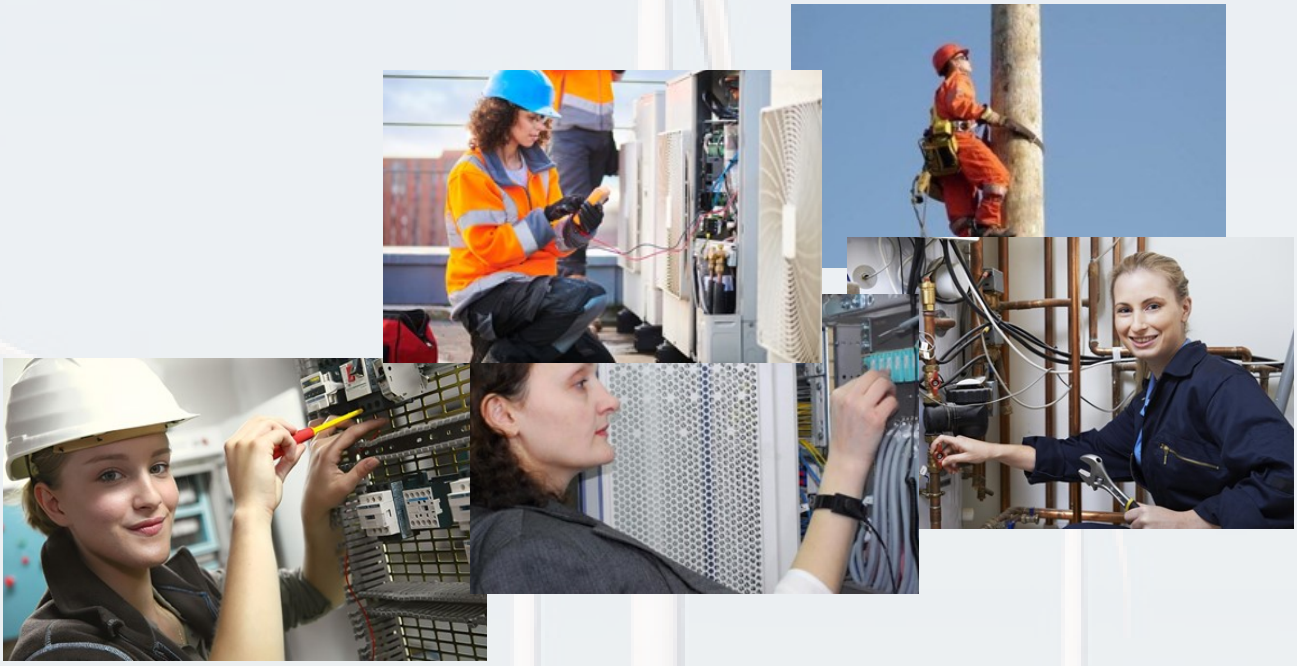
POWER STATION OPERATOR

HAVE YOU CONSISDERED THESE RELATED JOBS?

You may like to research details about these related jobs –

- ⇒ **Business equipment technician**
- ⇒ **Lift mechanic**
- ⇒ **Electrician**
- ⇒ **Electrical fitter**
- ⇒ **Refrigeration and air conditioning mechanic**
- ⇒ **Cable jointer**
- ⇒ **Powerline technician**
- ⇒ **Electronics technician**
- ⇒ **Computer systems technician**
- ⇒ **Instrumentation technician**
- ⇒ **Gas networks technician**



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