# Position Details

## Technical Services- CSOF4

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| The following information is for applicants |
| Advertised Job Title | Industrial Electrician |
| Job Reference | 93898 |
| Tenure | IndefiniteFull time or Part time (minimum 0.8FTE) |
| Salary Range | AU$89,680 to AU$101,459 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Geraldton, WA |
| Relocation Assistance | Generous rental and relocation allowance will be provided  |
| Applications are open to | Australian or New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Electrical Work Group Leader |
| Client Focus – Internal | 85 - 95% |
| Client Focus – External | 5 - 15% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Tom Cox via email: Tom dot Cox @ CSIRO dot au |
| How to apply | Apply online at <https://jobs.csiro.au/> Internal applicants please apply via **Jobs Central**If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

**Child Safety**

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](https://www.csiro.au/en/about/policies/child-safe-policy).

### Role Overview

Space and Astronomy (S&A)manages CSIRO’s world-class facilities for radio astronomy and spacecraft tracking. We are internationally renowned for our radio astronomy research and engineering expertise, and closely engaged with construction of the SKA, a $€2$ billion international project in radio astronomy sited jointly in Western Australia and South Africa.

CSIRO’s radio astronomy observatories are collectively known as the Australia Telescope National Facility (ATNF) and comprise radio telescopes at three observatories in NSW near the towns of Parkes, Narrabri and Coonabarabran.

A fourth telescope, the next-generation Australian SKA Pathfinder (ASKAP), is operated at Inyarrimanha Ilgari Bundara, CSIRO’s Murchison Radio-astronomy Observatory, in Western Australia. ASKAP is a new, world-class radio telescope comprising 36 fully-steerable antennas equipped with novel Phased Array Feed (PAFs) receivers designed and built by CSIRO. These receivers together produce 100Tb/s of raw data which are processed on site using state-of-the art Digital Signal Processing hardware, also designed and maintained by CSIRO. ASKAP is already producing high impact science results and has recently commenced its initial 5-year survey program for which it was designed, which will map the cm-radio sky to unprecedented depths of sensitivity, discovering tens of millions of new galaxies. An upgrade to the telescope called CRACO is underway, designed to detect Fast Radio Bursts and other transient sources with increased sensitivity.

We are seeking an Industrial Electrician to be part of a skilled engineering team that supports ASKAP operations. You will work under broad supervision to assist in the maintenance, operation and upgrade of a wide range of electrical systems at the observatory. The role includes participating in planning, fault finding and repair, testing and installation work.

You will be part of a multi-disciplinary engineering team located on our Geraldton site, but working at times within the broader ATNF technical team, potentially at other sites.

This is an opportunity to combine the advantages of a relaxed, ocean-side lifestyle with a leading-edge technology job at a world-class science and technology research facility.

CSIRO S&A is committed to providing a safe and inclusive work culture and implementing initiatives to improve diversity and equity within our workplaces. This role is offered on a full‐time or part‐time basis.

**Please note:** Frequent travel to the Inyarrimanha Ilgari Bundara, CSIRO’s Murchison Radio-astronomy Observatory (a remote site approximately 350km northeast of Geraldton) will be required. Visits will be typically five days in duration and require overnight stays at the Boolardy Accommodation Facility.

### Duties and Key Result Areas

* Work within a small multi-disciplinary team, sharing your knowledge and skills with other staff, to maintain the observatory electrical and electronic systems to the highest levels of availability required for the National Facility.
* Apply your knowledge and experience, working under limited direction, to undertake routine maintenance, repairs and upgrades across a range of electrical systems that include:
	+ - electrical distribution switchboards and power reticulation (up to 415V),
		- extensive system of servers and other electronics in water-cooled cabinets,
		- antenna drive systems including DC and AC motors,
		- air conditioning and refrigeration plant & equipment.
* Travel frequently to the remote site of the ASKAP radio telescope, some 350km northeast of Geraldton.
* Actively contribute to written and online documentation associated with equipment repair and maintenance, including management of system drawings and schematics, and configuration management.
* Ensure test equipment, electrical spares and components, consumables, and other workshop equipment are well stocked and maintained.
* Carry out regular safety inspections and effect prompt repairs of all electrical equipment. Keep up to date with the latest relevant electrical regulations.
* Assist in a range of site activities and interact and co-operate with other technical and non-technical staff to ensure the safe and efficient operation of the observatory systems.
* Liaise with S&A staff from other observatories to help undertake collaborative projects as required.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in accordance with good business practice, collaboration and enhancing CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Relevant trade qualifications for an Electrician.
2. Demonstrated industrial experience in the maintenance and operation of a broad range of electrical systems, preferably including power generation and distribution, servo drive systems, and refrigeration plant and equipment.
3. Practical knowledge in the design, upgrade, and installation of switchboards and electrical distribution systems to meet Australian electrical standards.
4. Demonstrated experience in planning and conducting the maintenance, repairs, fault finding and diagnosis of electrical systems, including interpretation of civil, mechanical, and electrical drawings.
5. The ability and willingness to operate elevated work platforms (EWPs) to access heights up to 25m above the ground.
6. Demonstrated ability to work safely and effectively as part of a small engineering team with minimal supervision and display a high level of initiative and self-motivation.
7. Good written and verbal communication skills and proven ability to utilise computer software packages for general correspondence and documentation updates.

## **Desirable**

1. A WA Electrical licence.
2. Experience with computer-aided drawing (CAD) techniques and computer-based analysis and report writing.
3. Industrial experience in the design, installation, and commissioning of electrical servo drive systems and/or electrical control systems involving power electronics/electrical devices, including both relay logic and PLCs.
4. A willingness to be trained and approved as one of the site’s HV switching operators.
5. A willingness to learn about other systems used for telescope operations, such as electronic and mechanical systems.
6. Qualifications/license in the operation of EWPs, Forklift, Working at Heights, Lifting and Rigging and resuscitation First Aid.

## **Required Competencies**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Recognises and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

Special Requirements

* The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate must be willing and able to work and travel outside of normal hours on occasion as part of an after-hours/on-call support system, and to assist with upgrades and maintenance. Overtime pay and/or flex leave will be applicable.

**About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) [Space and Astronomy](https://www.csiro.au/en/about/people/business-units/Space-and-Astronomy) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted

**Benefits of working at CSIRO in Geraldton**

* Short-term accommodation or rental assistance
* Flexible hours
* Four weeks (pro-rata) Annual Leave per year
* Four days (pro-rata) ‘Miscellaneous’ Leave per year, for family and personal obligations or emergencies (up to a maximum of 15 days)
* Superannuation at up to 15.4%, above the compulsory minimum of 11%
* Access to salary packaging options and health and well-being initiatives
* Unique regional location
* Ease of access to Perth via a 1-hour flight or comfortable 5 hours 30 min drive
* Benefits of country living with minimal traffic, space to breathe and affordable real estate.
* Opportunities for partners and family members with a large demand for work in mining, construction, transport and agriculture in the region
* Comfortable accommodation provided during trips to the observatory, with sought-after catering and access to a gym and pool