



POSITION DESCRIPTION

Position Title:	Electrical Engineer
Cluster / Business Unit / Division	ANSTO Maintenance and Engineering (AME) / Support Services
Section or Unit:	Active Maintenance
Classification:	Band 6
Job Family:	Engineering and Technical
Position Description Number:	PD-1646
Work Contract Type:	Technical
STEMM/NON-STEMM:	NON-STEMM

POSITION PURPOSE

The primary objective of the Electrical Engineer is to provide professional electrical engineering direction and subject matter expertise for the monitoring and maintenance of electrical systems and infrastructure at ANSTO in order to maintain the integrity and reliability of these systems, and to provide strategic planning of its ongoing improvements to reliability and development to meet the statutory requirements and standards. You will provide engineering support, maintenance requirements and subject matter expertise for electrical based systems such as, HV and LV power systems, SCADA, instrumentation, Safety Alarms, PA, Fire, control & HVAC systems. You will also be responsible to ensure adequate and effective handover is undertaken of all electrical & instrumentation projects from the AME Electrical Projects Team and to ensure all compliance, documentation, drawings, equipment labelling, maintenance strategies and requirements are received and plans created within CMMS for execution of future maintenance. In addition, some project work will be required to improve reliability, maintainability, standards and compliance of electrical and safety infrastructure.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

ANSTO's Maintenance and Engineering group (AME) is dedicated to enhancing and maintaining ANSTO's facilities and environs for operational reliability while providing a range of customer services to support ANSTO's research, business activities and projects at the Lucas Heights Science & Technology Centre, the National Medical Cyclotron at Camperdown, and the Synchrotron in Melbourne.

There are 5 x main business units within the broader AME group: -

- Engineering Capital Programs and Delivery,
- Facilities Contracts Planning and Delivery,
- Active Maintenance support,
- Development Workshop and
- Site(s) Maintenance and Transformation.

The Electrical Engineer role is within the Active Maintenance support and reports to the Active Maintenance Manager.

The position's key internal customers include employees across ANSTO requiring specialised electrical and calibration maintenance support. External customers include a variety of suppliers and contractors.

ACCOUNTABILITIES & RESPONSIBILITIES

The key accountabilities for this position include:

- The effective planning and implementation of the maintenance and project activities across ANSTO;
- Consult with relevant stakeholders to develop, define and document agreed workflows to improve the Site & Active Maintenance units electrical processes and systems;
- Oversee the management and resolution of compliance & safety issues related to Electrical, Public Address & Fire Systems and SCADA and PLC Safety Systems;
- Establish quality working relationships and ongoing communication with clients external to the unit;
- Respond to and resolve escalated customer issues and complaints to resolve quality issues and ensure customer expectations are met;
- Ensure the work of the team fully complies with ANSTO quality and environmental frameworks, safety procedures and Standards & Regulatory requirements;
- Review electrical & instrumentation project handovers, documentation and maintenance requirements and sign off maintenance strategies including infield inspections to ensure equipment installed complies to safety and maintenance requirements/accessibility.
- Rationalise maintenance procedures and refine preventive maintenance plans on a basis of cost effectiveness and measurable outcomes;
- Provide technical support on ANSTO's HV and LV electrical reticulation system;
- Provide technical support on control system designs, modifications and upgrades within Site & Active Maintenance works and projects;
- Develop multi-year capital expenditure budgets & plans for aging, non-compliant and end of life electrical infrastructure such as electrical controls and distribution boards, SCADA & PLC Systems, PA & Fire Systems
- Undertake electrical and safety projects as delegated and prepare specifications, scope, timeline, budgets, procurement plans and implement in consultation with site subject matter experts and project stakeholders.
- Oversee the planning and coordination of all complex electrical project and maintenance works undertaken by the unit;
- Drive continuous improvement and personnel development by mentoring, training coaching and encouraging the sharing of knowledge and experiences within the AME Maintenance unit;
- Review and identify opportunities to improve electrical, safety, quality assurance, documentation, maintenance and ensure compliance;
- Conduct safety, technical and Electrical audits;
- Monitoring of equipment on condition monitoring (such as HV kiosks) and respond to alarms and resolve within reasonable timeframes to rectify based on risks.
- Capture data appropriately within CMMS for equipment on condition monitoring and use this data for future reviews and improvements to maintenance strategies & plans.
- Promote a strong safety culture including safety risk assessments, non-ANSTO staff inductions and management presentations;
- Undertake additional relevant duties, from time to time, and during periods of leave of other staff.

Decision Making

- The position works within a framework of legislation, policies, professional standards and resource parameters. Within this framework the position has some independence in determining how to achieve objectives of the unit, including deciding on methods and approaches, for maintenance, operability and reliability of site electrical infrastructure.
- The ANSTO values, organisational corporate plan, business plan, operational excellence program, AME strategy and Active Maintenance Support objectives provide the context for the position
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to clients, building managers, other engineers and maintenance staff, and is required to ensure that decisions are based on sound evidence, but at times may be required to make effective judgements under pressure or in the absence of complete information or expert advice.

- Determine key work priorities within the context of agreed work plans and will consult with the
- Active Maintenance Manager on complex sensitive and major issues that have a significant impact on the (section/unit).
- Makes independent decisions in consultation with manager regarding compliance and maintenance of electrical infrastructure
- Makes independent decisions with regard to ensuring electrical safety
- Makes informed recommendations with regard to future strategic upgrade of electrical ??Infrastructure to meet regulatory compliance, maintainability and standards.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

The major challenges for this position include:

- Developing and implementing an effective framework to ensure that electrical works are carried out in accordance with relevant safety regulations and to a high standard
- Improving customer service, response times and continually delivering efficiencies to the way electrical maintenance activities are safely undertaken
- Maintaining and improving the aging electrical infrastructure across site.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager/Supervisor	<ul style="list-style-type: none"> • Receive guidance and direction • To escalate complex issues / concerns for decision making
Work area team members	<ul style="list-style-type: none"> • Communicate ideas, issues, plans, and concerns effectively. • Contribute to group decision making processes, planning and goals • Collaborate and share accountability • Negotiate and resolve conflicting priorities.
Direct Reports	<ul style="list-style-type: none"> • Nil
Other departments (name)	<ul style="list-style-type: none"> • Plan & organise calibration and maintenance
External	
Contractor	<ul style="list-style-type: none"> • Nil
ARPANSA/TGA/Other compliance within areas of responsibility	<ul style="list-style-type: none"> • Ensure compliance within areas of responsibility

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Active Maintenance Manager
Direct Reports	Nil
Indirect Reports	Nil
Special / Physical Requirements	
Location:	Predominantly Lucas Heights and occasionally Camperdown. Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time

Physical:	<p>Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer)</p> <p>Labour intensive physical requirements (sitting, standing, frequent manual handling)</p> <p>Standing for long periods</p> <p>Frequent movements (climbing, stooping, kneeling, crouching, crawling)</p> <p>Working in a noisy environment</p> <p>Industrial facility physical requirements (lifting, standing for long periods, maintaining and installing equipment)</p> <p>Wearing personal protective equipment for the handling of hazardous and/or radioactive materials</p> <p>Occasionally working in confined space environment including wearing respiratory equipment</p>
Radiation areas:	<p>Required to work in radiation areas under tightly regulated conditions</p> <p>Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions</p> <p>Perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions</p>
Hours:	<p>Willingness to work extended and varied hours based on operational requirements</p> <p>After hours work may be required on a regular basis</p> <p>Weekend work may be required on a regular basis</p> <p>Start and Finish times may vary depending on production requirements.</p>
Clearance requirements:	<p>Satisfy ANSTO Security and Medical clearance requirements</p> <p>Obtain and maintain appropriate federal government clearance</p>

Workplace Health & Safety

Specific role/s as specified in AP-2362 of the ANSTO WHS Management System

Managers / Leaders / Supervisors
 Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

ORGANISATIONAL CHART

As per SAP Organisational Chart

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in Electrical Engineering.
2. Substantial experience with Electrical maintenance systems
3. Experience in managing projects and delivery desirable but not essential. Sound knowledge of both HV, LV electrical distribution & protection, SCADA, PLC and Safety Control Systems.
4. Experience with Good Manufacturing Practices (GMP) and knowledge of relevant nuclear and pharmaceutical production regulations and legislation.
5. Proven ability in delivering electrical maintenance solutions through providing technical expertise and problem solving .
6. Demonstrated ability to effectively communicate to a wide audience including tradespeople, professionals and management.

7. Knowledge of Australian Standards, electrical safety procedure & statutory requirements and ability to research and apply them within the workspace,
8. Demonstrated ability to encourage a strong safety culture.
9. Experience within computerised maintenance management software systems; SAP Plant Maintenance is an advantage.
10. Pro-active, deadline driven, and reliable in following through with actions.
11. Strong time management, planning and organisational skills.
12. Good computing skills and ability to use Microsoft Office suite programs such as Word, Excel, Power Point, and Outlook.

VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position. Line manager is the direct manager of the position. Delegated authority is the most appropriate senior manager within the Business Area (General Manager or Head , in the absence of these roles within the structure, it must escalate to the Group Executive).

Line Manager		Delegated Authority	
Name:	Nilesh Kumar	Name:	Mark Moore
Title:	Active Maintenance Manager	Title:	General Manager
Signature:		Signature:	
Date:	09/01/2023	Date:	