



### **POSITION DESCRIPTION**

**Position Title:** Senior I&C Project Engineer

Cluster / Business Unit / Division ANSTO Maintenance and Engineering (AME)
Section or Unit: Engineering Delivery and Special Projects

Classification: Band 7
Position Description Number: PD-1386
Work Contract Type: Professional
STEMM/NON-STEMM: STEMM

### **POSITION PURPOSE**

The primary objective of the Senior I&C Project Engineer is to utilise specialised engineering judgement, expertise and project management skills to design, develop and deliver engineering products and solutions to meet ANSTO project objectives and achieving all project and customer technical, manufacturing, testing, commissioning, budgetary, safety, regulatory and quality assurance requirements are met.

#### 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 Maintenance and Engineering (AME) provides comprehensive project management, professional engineering, technical and safety and reliability services and support for both commercial and research areas of the organisation.

The Engineering Delivery and the Special Projects are responsible for the delivery of large, complex, multidisciplinary, strategic and/or commercial programs and projects, requiring a high level of ANSTO Executive stakeholder involvement and regulatory interaction.

The Senior I&C Engineer reports to one of the AME Portfolio and Program Managers. The position holder is an expert in the delivery of infrastructure projects and processes. The position has a number of indirect and direct reports and provides leadership, supervision and guidance to a number of project teams which will include engineers, technical staff, site supervisors, consultants and contractors.

The position must establish professional relationships with internal clients within ANSTO as well as external clients, suppliers and construction industry regulators. The position may also undertake contract negotiations with international customers, regulators and suppliers.

#### **ACCOUNTABILITIES & RESPONSIBILITIES**

### **Key Accountabilities**

The key accountabilities for this position include:

- Provide quality project management and technically sound engineering services with the aims of satisfying the client requirements and all associated safety, quality assurance, commercial, technical, and regulatory requirements.
- Build quality working relationships with internal and external stakeholders, customers, suppliers
  and contractors and proactively respond to and resolve customer issues and complaints efficiently
  and effectively. Provide engineering and design analysis, justification of design and safety features

- and review of engineering work including developing proposals, concepts, detailed designs, manufacturing, installation and commissioning.
- Demonstrate skills and ability in leadership, communication, provisions of constructive feedback, mentoring, coaching, conflict resolution and negotiation to develop and train staff including sharing of specialised knowledge.
- Manage the preparation, revision, modification and approval of specifications, drawings and other
  documents as appropriate, and ensure that designs are carried out and reviewed by competent
  discipline specialists.
- Keep abreast of developments and trends in the nuclear industry, with the aim of supporting ANSTO's commercial interests and identifying and supporting opportunities as well as proactively adapting the project delivery service to assist ANSTO with evolving business challenges.
- Proactively identify and manage OHS&E risks and hazards during demolition and construction of new infrastructure. In addition ensure appropriate supervision of installation and construction work is maintained to certify that the prescribed standards of workmanship have been adhered to.
- Commission new installations and undertake post-implementation review/inspection of completed
  works to ensure that all appropriate environment and technical standards, regulatory requirements
  and customer expectations and requirements have been met.
- Manage multiple process, safety related and GMP instrumentation and control aspects on ANSTO projects from conception, including the development of project ideas, undertake scoping and costing, and team supervision ensuring work is delivered on time and budget.
- Undertake engineering design analysis, justification of design and safety features and review of
  engineering work including proposals, concepts, detailed designs, manufacturing, installation and
  commissioning, operation and maintenance issues.
- Manage all application software development including planning, specifying, implementing, commissioning and documenting all project control system functionality either directly via the ANSTO I&C team or through external software developers employed by the DD&C contractors.
- Utilise judgement and technical experience to undertake technically challenging development and design which require constant learning to keep abreast of technological and statutory changes.
- Undertake research and development and contribute to improvements in engineering by conceptualising and creating new and one off innovative product solutions for clients.
- Undertake risk management, consider cost and benefits of proposed solutions, seek new solutions, and develop new techniques and methods.
- Overseeing the development of all documentation required to support, design reviews, safety assessments, manufacturing and quality control, installation, commissioning, training, operation and maintenance activities.
- Undertake additional duties as required 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, operations, project planning and allocation of resources.
- The position is fully accountable for the accuracy, integrity and quality of the content of his/her work provided, 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.
- 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:

- Develop, engage and retain capability and expertise of key staff for the duration of projects.
- Translate conceptual requirements into practical and functional infrastructure that satisfies internal or external, commercial project stakeholders.
- Ensuring relevant Australian, international, GMP and nuclear standards and, environmental, safety and regulatory requirements are satisfied and met.
- Utilise good communication skills and adapt to a demanding scientific environment.
- Developing and maintaining the necessary infrastructure for safe and reliable operation of the new equipment and integration of newly sourced or manufactured equipment with existing infrastructure, equipment and systems.
- Assisting with commissioning and calibration of new equipment and systems.
- Training end users in the use and operation of equipment.

### **KEY RELATIONSHIPS**

Who	Purpose		
Internal			
Manager/Executive	<ul> <li>Receive guidance and direction</li> <li>Provide expert, authoritative and evidence based advice</li> <li>Staff engagement and quality recruitment</li> <li>Negotiate and report on budgets and resources consistent with strategic plans and goals</li> <li>Recommend and gain endorsement for plans and goals and other initiatives</li> </ul>		
Work area team members	<ul> <li>Provide expert advice and analysis on a full range of matters</li> <li>Contribute to group decision making processes, planning and goals</li> <li>Collaborate and share accountability</li> <li>Negotiate and resolve conflicts</li> </ul>		
Indirect Reports (project team)	<ul> <li>Provide leadership, guidance and support</li> <li>Set performance requirements and manage performance and development (where appropriate)</li> <li>Engage to monitor trends, performance and progress for projects and evaluate further support which may be required to ensure project delivery</li> </ul>		
Other departments	• -		
External			
Title, group, committee, industry or business	• -		
Title, group, committee, industry or business	• -		

## **POSITION DIMENSIONS**

Staff Data	
Reporting Line	Reports to one of the AME Portfolio and Program Managers
Direct Reports	3 to 5
Indirect Reports	May vary depending on the projects and work allocated

Financial Data (2020/2021)	
Revenue / Grants	-
Operating Budget	-

Staffing Budget	-	
Capital Budget	As defined by the projects allocated	
Assets	-	

Special / Physical Requirements		
Location:	Lucas Heights	
	Working in different areas of designated site/campus as needed	
Travel:	May be required to travel to different ANSTO sites from time to time	
	May be required to travel both internationally and nationally	
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer)	
	Public speaking	
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions	
Hours:	Willingness to work extended and varied hours based on operational requirements	
	After hours work may be required for short and infrequent periods	
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements Obtain and maintain appropriate federal government clearance	

Workplace Health & Safety				
Specific role/s as specified in AP- All Workers				
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**

This role reports to one of the AME Portfolio and Program Managers within ANSTO Maintenance & Engineering. There are direct reports and also indirect reports may be allocated based on the project or work.

# **KNOWLEDGE, SKILLS AND EXPERIENCE**

- 1. Degree in an engineering discipline or related tertiary qualification supplemented by extensive relevant project engineering experience.
- 2. Significant experience as a project engineer including prior experience delivering engineering solutions for an industrial, manufacturing or nuclear facility.
- 3. Significant experience in the design, specification, procurement, assembly, testing, installation and commissioning of designs in a regulated GMP, safety related and nuclear environments.
- 4. Significant knowledge of instrumentation and control systems design in nuclear applications.
- 5. Proven problem solving ability in delivering creative and systematic solutions.
- 6. Demonstrated ability to manage large projects and utilise project and systems engineering management methodologies to deliver quality and fit-for-purpose outcomes.
- 7. Demonstrated experience as a senior member of a team.
- 8. Demonstrated experience in leading a multidiscipline team of professional, technical, drafting and trade staff.
- 9. Experience in customer management.
- 10. Technical skills including computing skills and analytical skills.
- 11. Business acumen, ability to think strategically and ability to influence and negotiate.
- 12. Strong team focus.

# **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		Delegated Authority	
Name:	Alamin Hossain	Name:	Dave Filipetto
Title:	AME Portfolio and Program Manager	Title:	General Manager- ED&SP
Signature:	Alamin Hossain	Signature:	
Date:	29/7/2021	Date:	