



## POSITION DESCRIPTION

<b>Position Title:</b>	OPAL Project Engineer <ul style="list-style-type: none"><li>• Mechanical</li><li>• Chemical / Process</li><li>• Electrical</li><li>• I&amp;C</li></ul>
<b>Institute / Division / Business Unit:</b>	Nuclear Operations and Nuclear Medicine
<b>Section or Unit:</b>	Engineering & Maintenance
<b>Classification:</b>	Band 5 / 6 (Linked Role)
<b>Position Description Number:</b>	PD-1673
<b>Work Contract Type:</b>	Professional

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### Primary Objective

The primary objective of the OPAL Project Engineer is to perform tasks relating to capital funded projects relevant to the OPAL reactor, including asset acquisition, renewal, modification, redesign, upgrade or improvement projects that support the achievement of reliability and availability targets for the OPAL reactor and the ongoing compliance with safety, environmental and regulatory requirements.

### Organisational Environment

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific services and providing specialised advice to government, industry, academia and other research organisations.

The Nuclear Operations & Nuclear Medicine Division is responsible for the operation of the OPAL research reactor, management of nuclear waste and radiation protection services. The Nuclear Operations & Nuclear Medicine Division comprises of two groups Reactor Operations and Nuclear Services.

The Reactor Operations business unit operates the OPAL reactor for the purpose of supporting the strategic objectives of ANSTO. This includes the provision of neutron beams to the Bragg Institute and irradiation services for Australian Radioisotopes for radiopharmaceutical production and other industrial and academic customers.

The function of the OPAL Engineering & Maintenance Section is to plan and conduct plant maintenance, manage and implement plant modification projects, provide engineering support and maintain engineering documentation for the OPAL Reactor Facility so as to optimise the reliability and availability of the reactor and its associated systems, and ensure ongoing compliance with safety, regulatory and statutory requirements.

### Position Environment

The OPAL Project Engineer reports to the relevant OPAL Engineering Group Leader (I&C or Mech / Process) and works with a team of engineers and technicians from a variety of disciplines (such as Mechanical / Process, Electrical, I&C, etc).

The position's key internal customers include OPAL System Engineers, Project Managers, OPAL Operations and Utilisation teams, OPAL Management and business units which utilise OPAL. Key internal service providers include WHS and Radiation Protection staff,

Engineering & Capital Programs (ECP) and OPAL Configuration Management Group. External stakeholders include regulators (e.g. ARPANSA) and external suppliers and contractors.

### **Key Accountabilities**

The key accountabilities for the position include:

- Prepare feasibility studies, options analyses, cost estimates and capital investment / business cases for capital investment projects / tasks.
- Management of assigned capital investment projects, or specific project tasks, including management of cost, schedule, scope and quality in accordance with project management processes and procedures.
- Undertake project engineering, including engineering design / development, design review, verification and validation, risk assessment, safety analysis, manufacturing and procurement, installation and commissioning, project completion / close-out.
- Complete QA, configuration, change management and project documentation in accordance with BMS processes and procedures
- Develop integrated logistics support provisions including management systems and processes, operation and maintenance strategies / plans, technical documentation & manuals, procedures & work instructions, training documentation, spare parts, tools and equipment.
- Ensure engineering activities and solutions comply with the OPAL operating licence, regulatory and statutory requirements, the ANSTO WHSE management system and the ANSTO / OPAL BMS.
- Consult and collaborate with a diverse range of managers, engineers, technicians, operators and scientists within ANSTO to develop comprehensive and practical engineering solutions to OPAL operating and maintenance issues.
- Undertake additional duties as required and during periods of leave of other staff.
- Fulfil OHSE responsibilities as specified in AG-2362 of the ANSTO WHSE system.

The additional key accountabilities for the Band 6 position include:

- Undertake the above key accountabilities independently with little or no direct supervision.
- Demonstrated competence in reactor engineering through demonstrated engineering knowledge, experience and practice.
- Independently exercise sound individual judgement and apply extensive engineering knowledge and experience to troubleshoot, investigate and resolve complex engineering systems and problems.
- Utilise judgement to independently assess priorities of tasks to optimise the allocation of resources.
- Ability to lead and coordinate small teams of engineers and technicians to achieve outcomes with little or no supervision.
- Provide feedback and contribute to the process of continual improvement in safety, reliability and efficiency, and individual knowledge and competency.
- Ability to coach, mentor and co-ordinate other engineering staff.

Requirements for Transition from Band 5 to Band 6:

- Minimum 2 years or equivalent experience in a similar industrial plant engineering role
- Demonstrated capability to fulfil the key accountabilities for the Band 6 position as listed above.

The transition from Band 5 to Band 6 will occur following a recommendation from the relevant supervisor, assessment by management and approval from General Manager, Nuclear Operations. Transition is not automatic and ability to perform Band 6 accountabilities will need to be demonstrated and assessed.

### **Challenges**

The major challenges for this position include:

- Conceiving, designing and delivering innovative & creative solutions to complex reactor plant system issues where there may be few precedents.
- Integration of systems in a complex and unique nuclear plant which requires in depth plant knowledge of the OPAL multipurpose facility
- Developing nuclear engineering knowledge and maintaining currency of professional knowledge.
- Ensuring adherence to stringent nuclear regulations and applicable codes, standards & practices including those relating to safety & nuclear technology.
- Addressing nuclear safety, radiation safety and WHS safety implications in an environment that has multiple and often conflicting requirements.
- Integrating the needs of multiple stakeholders with often conflicting requirements

### **Special Requirements/ Physical Requirements**

- Working in different areas of ANSTO as needed
- Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions
- Willingness to work extended and varied hours based on operational requirements.
- Satisfy ANSTO Security and Medical clearance requirements.

### **Delegations**

The levels of authority delegated to this position are those approved and issued by the Executive Director. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

### **Work, Health & Safety Accountabilities, Responsibilities and Actions**

ANSTO is committed to delivering excellence in WHS performance based on ANSTO's core values. All employees are responsible for undertaking their activities in a safe manner and co-operating and complying with WHS requirements and to improve WHS in their workplace by taking a proactive approach to WHS, using appropriate controls, working safely to reduce risk to self and others, and reporting unsafe work practices, equipment, incidents and near misses.

The specific role, as specified in AG-2362 of the ANSTO WHS Management System, which defines the accountabilities, responsibilities and actions allocated to this position is:

- All Workers; and
- other specialised roles identified within the guideline the position holder may be allocated to in the course of their duties.

### Knowledge, Skills and Experience

The knowledge, skills and experience requirements for the position include:

		<b>Band 5</b>	<b>Band 6</b>
1.	Degree or higher in Engineering relevant to discipline	E	E
2.	Technical knowledge in plant systems applicable to nuclear research reactors	E	E
3.	Industrial engineering experience in a field relevant to discipline and relating to plant systems applicable to nuclear research reactors	D	E
4.	Project management experience relevant to discipline.	D	E
5.	Experience in and aptitude for preparing high quality technical and project documentation	E	E
6.	Problem solving skills and the ability to assess and resolve technical issues	E	E
7.	Excellent interpersonal and communication skills, and ability to develop and maintain productive working relationships	E	E
8.	Awareness of WHS legislation, safe work practices and safety management systems	E	E
9.	Understanding of the principles of asset management, systems / reliability engineering and continuous improvement processes	D	D
10.	Knowledge of OPAL reactor plant systems and associated procedures and regulatory processes	D	D
11.	Experience working under a strict quality assurance system in a tightly regulated environment	D	E
12.	Ability to work independently with little or no direct supervision, ability to assess task priorities, manage time, meet deadlines and reliably follow through with actions	D	E
13.	Ability to lead and coordinate small teams and the ability to coach and mentor other staff	D	E

\* E = Essential; D = Desirable

### Organisation Chart

See attached.

### Verification

This section verifies that the Institute Head / General Manager or delegated senior officer within the division has read the Position Description and is satisfied that it accurately describes the position

Signature and date .....