



POSITION DESCRIPTION

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|---|---|
| Position Title: | OPAL Reactor Engineer |
| Cluster / Business Unit / Division | Nuclear Operations and Nuclear Medicine |
| Section or Unit: | OPAL Operations |
| Classification: | Band 5 |
| Job Family: | Engineering and Technical |
| Position Description Number: | PD-0668 |
| Work Contract Type: | Technical |
| STEMM/NON-STEMM: | STEMM |
| STEMM CATEGORY: | Engineering |

POSITION PURPOSE

The primary objective of the OPAL Reactor Engineer to support the safe and efficient operation of the reactor facility whilst developing as a potential OPAL Shift Manager. This includes the provision of engineering advice to the shift operations staff, maintenance and utilisation personnel within the facility. The Reactor Engineer provides engineering expertise and reactor engineering knowledge of reactor systems and the safety case.

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.

The Nuclear Operations division operates the OPAL reactor for the purpose of supporting the strategic objectives of ANSTO. This includes the provision of neutron beams to the Australian Centre for Neutron Scattering (ACNS) and irradiation services for Nuclear Medicine for radiopharmaceutical production and other industrial and academic customers.

The OPAL Operations team consists of a number of shift managers and shift operations staff responsible for the day-to-day operations of the OPAL reactor. The OPAL Reactor Engineer, after completion of appropriate training will be required to work on a rotating 24hr, 7 day shift roster, as required.

The OPAL Reactor Engineer role is a career development role and it is expected that reactor engineers work towards the attainment of Shift Manager authorisation.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Monitor the state of OPAL plant and equipment from a computer based monitoring system or from the field to ensure operational systems are working correctly.
- Safely and efficiently operate the OPAL reactor from within the main control room or from the field in accordance with approved procedures and instructions including functional testing of plant and equipment, performance of routine surveillances, responding to incidents and reporting.
- Attain and develop in-depth knowledge of all reactor plant and associated systems and seek opportunities to improve the safety and efficiency of reactor operations.
- Utilise engineering judgment and knowledge of the OPAL reactor to suggest potential improvements with the aim of improving plant reliability, operational processes and ensuring the safe and efficient of the OPAL reactor.

- Contribute to safe and efficient operation of the OPAL reactor through the application of technical expertise, proactive attitude and demonstration of excellent safety practices.
- Contribute to the safe and efficient operation of OPAL production facilities and processes.
- Apply engineering and reactor systems knowledge to proactively investigate, analyse and evaluate methods of improving the safety and efficiency of reactor systems.
- Lead or provide assistance to projects related to modification, testing and commissioning of reactor systems.
- Ensure work fully complies with the quality and environmental frameworks, safety procedures and standards, regulatory requirements and management procedures.
- Support the Shift Manager in coordinating the day to day work program by prioritising tasks and working as a team to ensure the production program is met.
- Coordination and development of shutdown scheduling and planning.
- Support the Shift Manager in responding to operational events by utilising analytical and diagnostic skills to identify and resolve potential problems and provide proactive solutions.
- Perform defined radiological protection and surveillance tasks
- Contribute to the continuous improvement of the business management system (BMS) to ensure documentation meets regulatory requirements.
- Make recommendations to the Shift Manager regarding suggested improvements in operating practices, or project/ task outcomes.
- Co-ordinate, mentor and train other OPAL Operational staff on practices, processes and procedures, including work safety practices.
- Fulfil WHS responsibilities as specified in AG-2362 of the ANSTO WHS system.
- Undertake additional duties as required and during period of leave of other staff.

Decision Making

- The position works within a framework of legislation, policies, professional standards, risk assessments and instructions. Within this framework the position has some independence in determining how to achieve objectives of operations within the OPAL Reactor, including deciding on methods and approaches, operations, project planning, scheduling and risk management.
- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the Reactor Operations Business Plan and objectives provide the context for the position.
- position is fully accountable for the accuracy, integrity and quality of the content of advice provided to the Shift Manager, 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.
- Consults with management on decisions which will substantially alter the outcomes, timeframe or requirements of work plans, any issues or conflicts arising in the course of undertaking duties, and all matters which require a higher delegated authority for approval.
- The position determines key work priorities within the context of agreed work plans and will consult with the Shift Manager or Operations Manager on complex, sensitive and major issues that have a significant impact on safe and reliable operations.
- 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

- Maintain engineering knowledge of OPAL plant modifications and operating practices with the aim of improving the safety and efficiency of the facility.
- Attain and maintain accreditation as Reactor Engineer for the control of reactor operations.
- Work towards the attainment of Shift Manager authorisation as a career development opportunity.
- Establish strong relationships within OPAL teams and across client groups.

KEY RELATIONSHIPS

| Who | Purpose |
|--|--|
| Internal | |
| Shift Manager and Operations Manager | <ul style="list-style-type: none"> • Receive guidance and direction • Provide expert, authoritative and evidence based advice • Escalate issues requiring management input and propose solutions • Routine review of development program towards Shift Manager |
| Operations | <ul style="list-style-type: none"> • Provide expert advice and analysis on a full range of matters • Contribute to group decision making processes, planning and goals • Negotiate and resolve conflicts |
| Engineering, Maintenance, Utilisation, Health Physics, AME | <ul style="list-style-type: none"> • Report on technical issues and support their resolution • Collaborate with, lead, and support projects • Communicate and collaborate to manage the program of work • Work collaboratively to manage risk |
| External | |
| Contractors | <ul style="list-style-type: none"> • Work collaboratively to manage risk • Provide a level of oversight |

POSITION DIMENSIONS

| Staff Data | |
|-------------------|--|
| Reporting Line | Reports to the OPAL Operations Manager |
| Direct Reports | Nil |
| Indirect Reports | Nil |

Special / Physical Requirements

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|-------------------------|---|
| Location: | <p>Lucas Heights</p> <p>Working in different areas of designated site/campus as needed</p> |
| 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>Occasional labour intensive physical requirements (sitting, standing, manual handling)</p> <p>Working in a loud environment</p> <p>Industrial facility physical requirements (lifting, manual handling, working at heights, standing for long periods, operating equipment)</p> <p>Wearing personal protective equipment for the handling of hazardous and/or radioactive materials</p> <p>Occasional use of breathing apparatus</p> |
| Radiation areas: | <p>May be 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>Shift work</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- All Workers

2362 of the ANSTO WHS Other specialised roles identified within the guideline a position holder Management System may be allocated to in the course of their duties

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in Engineering or Science
2. Accreditation and authorisation as an OPAL Reactor Engineer
3. Ability to operate plant and equipment from the field or from a computer based control system
4. Demonstrated ability to proactively apply analytical and diagnostic skills to seek and resolve potential problems
5. Experience in a highly regulated operations environment
6. Knowledge of research reactor design, operating systems and safety case
7. Demonstrated knowledge in safe work practices and safety culture
8. Ability to plan and prioritise day to day work schedules
9. Work in a team environment promoting a safety first attitude
10. Strong verbal and written communication skills, including experience in the preparation of written technical reports and presentations
11. Demonstrated experience in following policy, procedures and instructions as directed by the Shift Manager or Operations Manager

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: | Jason Chakovski | Name: | David Vittorio |
| Title: | OPAL Operations Manager | Title: | General Manager OPAL Reactor |
| Signature: | | Signature: | |
| Date: | | Date: | |