SKILLS FRAMEWORK FOR ENERGY AND POWER

SKILLS MAP - MULTI-UTILITY OPERATIONS SENIOR TECHNICAL OFFICER

<table>
<thead>
<tr>
<th>Sector</th>
<th>Energy and Power</th>
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</thead>
<tbody>
<tr>
<td>Sub-sector</td>
<td>Electricity</td>
</tr>
<tr>
<td>Track</td>
<td>Power Generation</td>
</tr>
<tr>
<td>Sub-track</td>
<td>Multi-Utility Operations</td>
</tr>
<tr>
<td>Occupation</td>
<td>Technical Officer</td>
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</tbody>
</table>

### Job Role Description

The Multi-Utility Operations Senior Technical Officer supervises the day-to-day power plant operations, supervises inspections, tests and equipment changeover. He/She also performs first line maintenance works. In addition, he updates and reports relevant data, defects and deficiencies. He conducts on-the-job training when required and identifies appropriate training and development courses for staff to develop capabilities in the team.

He issues work orders for Permits-to-Work, and supervises works according to Safe System of Work (SSoW) practices. In times of emergency, he implements emergency response plans and relevant safety procedures. He also supervises the Emergency Response Team on site incident management. He works at the power plant station and may be required to perform shift work.

He is a good team player and has good leadership skills in guiding team members. He is also systematic and able to respond to situations quickly in times of faults or outages.

### Critical Work Functions and Key Tasks / Performance Expectations

<table>
<thead>
<tr>
<th>Critical Work Functions</th>
<th>Key Tasks</th>
<th>Performance Expectations (For legislated / regulated occupations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administer safe work practices</td>
<td>Supervise works according to Safe System of Work (SSoW) practices and safety regulations</td>
<td>In accordance with:</td>
</tr>
<tr>
<td></td>
<td>Supervise contractors on safe work practices</td>
<td>• Work at Height Certification</td>
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<td></td>
<td>Issue work orders for Permits-to-Work</td>
<td>• Confined Space Supervisor Certification</td>
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<td>Conduct safety checks in the workplace</td>
<td>• Class I Boiler attendant Certification</td>
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<tr>
<td>Manage responses to emergencies and crises</td>
<td>Implement emergency response plans and relevant safety procedures</td>
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<tr>
<td></td>
<td>Supervise the Emergency Response Team on site incident management</td>
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<tr>
<td>Perform plant operational works</td>
<td>Supervise the day-to-day plant operations according to operational guidelines and regulatory requirements</td>
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<td></td>
<td>Perform high-voltage switching operational works</td>
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<td></td>
<td>Supervise mechanical and electrical isolation activities of equipment</td>
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<td></td>
<td>Investigate operational issues</td>
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<td></td>
<td>Track processes and plant statuses to ensure that it is functioning within operational limits</td>
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</tr>
<tr>
<td></td>
<td>Supervise plant inspections, tests and equipment changeover in accordance with operational procedures and schedules</td>
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<td></td>
<td>Prepare relevant operational and compliance documents</td>
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<tr>
<td>Perform frontline plant maintenance works</td>
<td>Investigate all defects, deficiencies and abnormalities</td>
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<td></td>
<td>Perform first line maintenance works</td>
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<td></td>
<td>Raise fault notification requests to relevant maintenance team for attention</td>
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<tr>
<td>Administer staff and organisational development</td>
<td>Identify appropriate training and development courses for staff</td>
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<td></td>
<td>Perform on-the-job training</td>
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### Technical Skills and Competencies

<table>
<thead>
<tr>
<th>Skills and Competencies</th>
<th>Generic Skills and Competencies (Top 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomous Systems Technology Application</td>
<td>Level 3 Problem Solving</td>
</tr>
<tr>
<td>Business Intelligence and Data Analytics</td>
<td>Level 3 Communication</td>
</tr>
<tr>
<td>Continuous Improvement Management</td>
<td>Level 3 Sense Making</td>
</tr>
<tr>
<td>Corrective Maintenance Management</td>
<td>Level 3 Leadership</td>
</tr>
<tr>
<td>Crisis Management</td>
<td>Level 4 Teamwork</td>
</tr>
<tr>
<td>Emergency Response Management</td>
<td>Level 3</td>
</tr>
<tr>
<td>Hazards and Risk Identification and Management</td>
<td>Level 3</td>
</tr>
<tr>
<td>Internet of Things Management</td>
<td>Level 3</td>
</tr>
<tr>
<td>People Capability Development</td>
<td>Level 3</td>
</tr>
<tr>
<td>Permit Management</td>
<td>Level 3</td>
</tr>
<tr>
<td>Power Generation Process Control and Monitoring</td>
<td>Level 3</td>
</tr>
<tr>
<td>Power Plant Incident Investigation Management</td>
<td>Level 4</td>
</tr>
<tr>
<td>Power Plant Inspection Management</td>
<td>Level 4</td>
</tr>
<tr>
<td>Power Plant Operations Management</td>
<td>Level 4</td>
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</tbody>
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<tr>
<th>Programme Listing</th>
<th>For a list of Training Programmes available for the Energy and Power sector, please visit: <a href="http://www.skillsfuture.sg/skills-framework/energyandpower">www.skillsfuture.sg/skills-framework/energyandpower</a></th>
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</thead>
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The information contained in this document serves as a guide.