<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Process Monitoring Management</th>
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<tbody>
<tr>
<td>TSC</td>
<td>Gas Network System Management</td>
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<tr>
<td>TSC Description</td>
<td>Manage the gas network system and equipment in accordance with the relevant principles and processes</td>
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<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tr>
<td></td>
<td>EPW-MPR-2026-1.1</td>
<td>EPW-MPR-3026-1.1</td>
<td>EPW-MPR-4026-1.1</td>
<td>EPW-MPR-5026-1.1</td>
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<td></td>
<td>Apply principles and processes of operation and maintenance of gas network system and equipment</td>
<td>Implement and monitor the operation and maintenance of the gas network system and equipment</td>
<td>Develop the operation and maintenance of the gas network system and equipment</td>
<td>Formulate operation and maintenance of the gas network system and equipment</td>
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**Knowledge**
- Concepts in gas network operation and maintenance
- Application of major gas network equipment and network system
- Typical modes of failure and resolutions in gas network system and equipment
- General operating principles for gas network operation and gas market
- Risk, regulatory and legal concepts of the gas market issues and queries
- Safe equipment operation practices
- Principles and processes of gas network operation and maintenance
- Design and functionality of gas network system and equipment
- Application of gas network system and equipment
- Operating principles of the gas network and gas market
- Risks, legal concepts and implications of gas market issues and queries
- Safe operations and permit requirements
- Principles of network planning
- Principles and processes of gas network operation and maintenance
- Design and functionality of gas network system and equipment
- Application of gas network system and equipment
- Operating principles of the gas network and gas market
- Risks, legal concepts and implications of gas market issues and queries
- Principles of network planning
- Knowledge of all safety regulations and relevant authorities to work with
- Application and interpretation of principles and processes of gas network operation and maintenance
- Application and interpretation of design and functionality of gas network system and equipment
- Technical operating principles of the gas network and gas market
- Risks, legal concepts and implications of technical gas market issues and queries
- Best practices in safety aspect of operations and maintenance of gas network system
- Impacts of network planning from market and regulations
- Serve as technical expert to explain the principles and processes of gas network system and equipment
- Review the operations of System Control Centre and gas transportation network

**Abilities**
- Apply the principles and processes of gas network system and equipment
- Perform the operations of System Control Centre and gas transportation network
- Support network analysis on the capacities for booking by shippers
- Implement the principles and processes of gas network system and equipment
- Supervise the operations of System Control Centre and gas transportation network
- Analyse the principles and processes of gas network system and equipment
- Manage the operations of System Control Centre and gas transportation network
- Serve as technical expert to explain the principles and processes of gas network system and equipment
- Review the operations of System Control Centre and gas transportation network
### SKILLS FRAMEWORK FOR ENERGY AND POWER

**TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

<table>
<thead>
<tr>
<th>Range of Application</th>
<th>Range of application includes, but is not limited to:</th>
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<tbody>
<tr>
<td></td>
<td>• Gas network system and equipment</td>
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<tr>
<td></td>
<td>• Supervisory Control and Data Acquisition (SCADA)</td>
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<td></td>
<td>• Gas Transportation IT System Solution (GTSS)</td>
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<td>• Online pipeline simulation</td>
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<td>• Global fleet management systems</td>
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<td>• Gas and electricity mapping systems</td>
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- Check the completeness of Permit-to-Work applications received for maintenance and repair works in the gas network
- Identify measures to resolve abnormalities in the network system
- Respond to reported system faults
- Support the preparation of management reports on market operations, injection tolerance and nomination divergence
- Follow up on customers’ requests and queries
- Support in report generation related to gas market operation
- Perform network analysis on the capacities for booking by shippers
- Perform system-level checks of in-processing Permits-to-Work
- Sign off permits and ensure safe operations
- Implement measures to resolve abnormalities in the network system
- Investigate reported system faults
- Prepare management reports on market operations, injection tolerance and nomination divergence
- Monitor responses to customers’ requests and queries to minimise lapses in the delivery of services
- Generate reports related to gas market operation
- Implement network analysis on the capacities for booking by shippers
- Develop measures to resolve abnormalities the network system
- Analyse reported system faults
- Develop management reports on market operations, injection tolerance and nomination divergence
- Analyse customers requests and queries to identify trends and minimise lapses in the delivery of services
- Enhance reports related to gas market operation
- Enhance safe working practices in the operation and maintenance of gas network system
- Lead the network technical analysis on the capacities for booking by shippers
- Manage Permits-to-Work based on standard operating procedures to ensure network security
- Review technical aspects of Permits-to-Work for maintenance and repair works in gas network
- Implement improvements in safety culture
- Review response processes and measures to resolve abnormalities in the network system
- Provide technical advice to feedback received on reported system faults
- Supervise the technical contents of management reports on market operations, injection tolerance and nomination divergence
- Advise on customers’ requests and queries to improve delivery of services
- Review reports related to gas market operation