**POWER ENGINEERING COMPETENCY FRAMEWORK FOR POWER ENGINEERING PROFESSIONALS IN PUBLIC SERVICE**
**TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

| TSC Category | Energy Operations Management | | | | | |
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| **TSC Title** | Electricity Network Incident Management | | | | | |
| **TSC Description** | Investigate and recommend solutions to resolve electricity network incidents | | | | | |
| **TSC Proficiency Description** | **Level 1** | **Level 2** | **Level 3** | **Level 4** | **Level 5** | **Level 6** |
| | **<Insert TSC Code>** | **<Insert TSC Code>** | **<Insert TSC Code>** | **<Insert TSC Code>** | **<Insert TSC Code>** | |
| | Oversee procedures for restoring low voltage (LV) outages | Monitor electricity network abnormalities and report incidents for further investigation | Investigate low voltage (LV) electricity network incidents and apply incident response management procedures | Determine root causes of high voltage (HV) and extra high voltage (EHV) network incidents and recommend mitigation solutions | Develop electricity network incident management strategies and procedures, and resolve large-scale, complex network incidents | |
| **Knowledge** | • Tools, equipment and materials needed to restore LV outages <br> • Methods to identify outage locations <br> • Methods to determine extent of outages <br> • Organisational test methods and protocols <br> • Fault identification methods | • Network abnormalities detection and reporting protocols <br> • Types of network incidents <br> • Categorisation guidelines for network incidents <br> • Impact of network incidents on the network and users <br> • Evidence gathering techniques and procedures | • Electricity Act and regulations <br> • Prioritisation criteria for network incidents <br> • Tools and processes used to investigate network incidents <br> • Tools and processes used to remedy network incidents <br> • Root cause analysis procedures <br> • Implications of network incidents on supply and security | • Electricity Act and regulations <br> • Mechanics of network incident alert triggers <br> • Network incident remediation solutions and strategies <br> • Network incident mitigation strategies <br> • Network incident containment procedures <br> • Root cause analysis methodologies | • Electricity Act and regulations <br> • Industry standards and best practices in network incident management <br> • Key components of network incident management manuals <br> • Criteria and requirements of network incident response teams <br> • Network incident mitigation strategies <br> • Key stakeholder groups <br> • Post-mortem processes <br> • Network incident containment strategies <br> • Evidence retention frameworks | |

| Abilities | | | | | |
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| • Identify the location and extent of outages<br>• Oversee contractor's work in resolving LV outages in accordance with Standard Operating Procedures (SOPs)<br>• Barricade affected work areas to prevent unauthorised access<br>• Witness test circuits and identify faulty cables using organisational test methods<br>• Isolate faulty cables<br>• Manage contractor's work in rectifying faults and restoring supply to the affected customers<br>• Escalate issues to relevant stakeholders according to SOPs<br>• Verify accuracy of complaints at customers' premises prior to the commencement of fault rectification activities<br>• Oversee reinstatement of affected site upon completion of all work activities in accordance with SOPs | • Maintain a tracker or log of network incidents to provide real time status reporting on affected circuits<br>• Monitor network incidents, in line with network incident management protocols<br>• Gather relevant information about network incidents<br>• Categorise the importance of network incidents based on established guidelines<br>• Identify the networks and user groups affected by the network incident based on information gathered<br>• Oversee mitigation of recurring network incidents<br>• Document the modifications made to troubleshoot and resolve problems or incidents in the network<br>• Perform evidence gathering to aid in the investigation of any potential breach of any legislative or regulatory provisions | • Review categorisation of network incidents, and determine its priority and the need for escalation<br>• Escalate network incidents to relevant stakeholder groups upon occurrence<br>• Perform first responder troubleshooting on network-related or supply security incidents, by following Standard Operating Procedures (SOPs)<br>• Analyse network incident reports, log files and affected circuits to identify threats and root causes of network incidents<br>• Assess network incident based on severity of network incidents and supply security implications<br>• Implement approved processes or technologies to mitigate future network incidents | • Integrate network-related information, alerts and analysis from detection system logs to develop a holistic view of network incidents<br>• Distil key insights and impact from analyses of network incidents<br>• Manage the containment of network incidents within the organisation<br>• Lead recovery of supply security after the network incidents<br>• Establish mitigation and prevention processes and policies<br>• Drive implementation of mitigation processes and policies<br>• Perform root cause analysis to determine source of network security breach and any breach of legislative or regulatory provisions<br>• Set prioritisation guidelines for network security incidents | • Establish network incident management procedures for the detection, reporting and handling of network incidents<br>• Develop a playbook for network incident management<br>• Lead network incident response teams<br>• Lead the remediation and resolution of network incidents at the organisational level<br>• Resolve large-scale, complex network incidents<br>• Make key decisions on when and how to communicate network incidents to different critical stakeholders<br>• Direct post-mortem activities following network incidents<br>• Develop network incident mitigation strategies<br>• Develop network incident response strategies<br>• Develop network incident evidence retention strategies | |