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

TSC Category	Power Systems Monitoring and Control					
TSC Title	Operational Technology Security Management					
TSC Description	Manage the operational technology security frameworks, systems, procedures and risk mitigation plans to ensure that daily operations are well protected against risks, threats and vulnerabilities					
TSC Proficiency Description	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**Level 6**
				<Insert TSC Code>	**<Insert TSC Code>**	**<Insert TSC Code>**
				Implement and maintain operational technology security frameworks, systems, procedures and risk mitigation plans	Develop the operational technology security frameworks, systems, procedures and risk mitigation plans and recommend improvements	Set the strategy for the operational technology security frameworks, systems, risk management and process improvements
Knowledge				• Organisation operational technology security procedures • Implementation process and considerations for operational technology security policies and protocols • Types of operational technology security controls and implementation procedures • Techniques for assessment of processes against operational technology security standards • Relevant regulations, industry standards, codes of practice and safety procedures	• Operational technology security threat analysis and system vulnerabilities • Operational technology security policies • operational technology security frameworks • Communications of operational technology security standards • Relevant regulations, industry standards, codes of practice and safety procedures	• Potential threats to organisational operational technology security • Emerging trends and developments in operational technology security management and practices • Industry standards and best practices for organisational security • Impact of changes in operational technology security protocols on the organisation • Industry best practices and benchmarks for operations security framework • Relevant regulations, industry standards, codes of practice and safety procedures

Abilities				• Inspect adherence of applications and infrastructure components to operational technology security standards and baselines • Analyse lapses in organisational security standards or issues that may endanger operations security and integrity • Evaluate technologies and tools that can address operations security gaps and facilitate alignment with operations security policies • Introduce operational technology security controls in line with operations security policies and frameworks • Implement operational technology security guidelines and protocols, ensuring understanding and compliance • Analyse the adequacy of operational technology security controls • Highlight areas for improvement and propose solutions or revisions to operational technology security guidelines	• Determine existing operational technology security risks, threats and vulnerabilities and analyse gaps in current organisational operational technology security policies • Develop operational technologysecurity policies based on organisation's direction, to ensure operational technology are well protected • Review improvements, updates or modifications to current operational technology security policies and practices, to address potential security gaps • Initiate suitable technologies, processes and tools to monitor, guide and maximise compliance with operational technology security policies • Drive communication of operations security policies and implementation of operational technology security protocols • Establish internal processes to review adequacy of operational technologysystems' security controls against set benchmarks	• Set direction for the organisation’s operational technology security policies, frameworks and protocols, in line with business requirements and the external environment • Endorse proposals for updates or enhancements to operational technology security policies • Establish benchmarks and targets for operational technology security systems operations and processes to be reviewed against
Range of Application				Range of application includes, but is not limited to: • Power Generation • Distributed Power Generation • Power Transmission and Distribution Network		

				• Systems used in transmission network system planning, control and management, including but not limited to: energy management systems, information technology (IT) and operational technology (OT) systems, substation remote control unit (RCU) systems, interruptible load monitoring system, distributed generator monitoring system, flexible AC transmission systems (FACTS), and supervisory control and data acquisition (SCADA) systems