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

| TSC Category                | Policy Management and Gove   | rnance  |         |   |  |   |  |  |
|-----------------------------|--|---------|---------|---|--|---|--|--|
| TSC Title                   | Policy and Regulations Framework Development for Technology Advancement  |         |         |   |  |   |  |  |
| TSC Description             | Drive the development and review of policy and regulations framework for emerging technologies for power systems in collaboration with public and private sector organisation. |         |         |   |  |   |  |  |
| TSC Proficiency Description | Level 1  | Level 2 | Level 3 | Level 4 <insert code="" tsc=""></insert>  | Level 5 <insert code="" tsc=""></insert>   | Level 6 <insert code="" tsc=""></insert>  |  |  |
|                             |  |         |         | Analyse emerging technologies for power systems to support development of the policy and regulations framework for power technology advancement   | Participate in the development and review of policy and regulations framework for power technology advancement   | Engage stakeholders and government officials to develop, review and update the policy and regulations framework for power technology advancement  |  |  |
| Knowledge                   |  |         |         | <ul> <li>Existing legislation, regulations and policies in the power sector</li> <li>Power sector codes of practice and performance standards</li> <li>Local and international technological, political and regulatory issues</li> <li>Trends, practices, new developments and emerging needs in the power sector</li> <li>Existing decarbonisation decentralisation and digitalisation (3D) initiatives</li> <li>Methods for conducting internal and external environmental scans to keep abreast of latest developments, changes and initiatives in the ministry and power sector</li> <li>Range of research methods and sources of credible information</li> </ul> | <ul> <li>Local and international legislation, political framework and policies in the power sector</li> <li>Legal and regulatory requirements of the power sector</li> <li>Whole-of-government principles and processes</li> <li>Relevant government initiatives, policies and priorities</li> <li>Pro-3D (decarbonisation, decentralisation and digitalisation) policies and practices</li> <li>Current and future technology needs of the power sector</li> <li>Methods for policy and regulatory analysis</li> <li>Relevant stakeholders in policy formulation</li> <li>Networking techniques for policy and regulatory framework development</li> <li>Stakeholder engagement procedures</li> </ul> | <ul> <li>Local and international legislation, political framework and policies in the power sector</li> <li>Legal and regulatory requirements of the power sector</li> <li>Technology trend analysis strategies</li> <li>Implications of regional and global changes on the power sector in Singapore</li> <li>Policy and regulations frameworks for power sector in leading global power hubs</li> <li>Government initiatives, policies and priorities within the power sector</li> <li>Pro-3D (decarbonisation, decentralisation and digitalisation) policies and practices</li> <li>Relevant government policy development forums and processes</li> </ul> |  |  |

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|           | literature reviews  Data or information management system requirements  Relevant stakeholders in policy formulation   | Tools and techniques for influencing policymakers and power sector stakeholders to Techniques for advocating the benefits of policies to policymakers and sector leaders |
|-----------|---|--|
| Abilities | technology trends in the power sector  Describe existing legislation, political framework and policies  Examine the broader technological, political, socioeconomic environment to develop and prioritise policy and regulations  Evaluate the integrity and comparability of data sources by interpreting information gathered from a variety of sources for the current policy agendas  Conduct literature reviews  Analyse relevant subject matter issues affecting stakeholders in the power sector  Conduct discussions with stakeholders to better understand policy and regulatory implications  electrical and power technologies for policy formulation ldentify current and future technology needs of the power sector  Assess existing decarbonisation, decentralisation and digitalisation policies and practices  Review submissions on literature reviews and identify applications for policy programmes  Inform direction of policy development by examining policies in the context of whole-of-government priorities and policy agendas  Facilitate the review and formulation of policy and regulatory proposals for new technologies  Apply relevant knowledge about the technological, political, socioeconomic environment  Electrical and power technology needs of the power sector  Assess existing decarbonisation, decentralisation and digitalisation policies and practices  Review submissions on literature reviews and identify applications for policy programmes  Inform direction of policy development by examining policies in the context of whole-of-government priorities and policy agendas  Facilitate the review and formulation of policy development by examining policies in the context of whole-of-government priorities and policy agendas  Analyse relevant subject matter issues affecting stakeholders to better understand policy and regulatory proposals for new technologies  Apply relevant knowledge about the technological, political, socioeconomic environment  Ensure appropriate | existing policies and regulations Lead the evaluation of information to identify breaches and inconsistencies in policies and regulation                                 |

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|  |  | development  Engage and gather information from relevant stakeholders  agency, we government agenda, or and influe stakeholders  Shape go policies to | through ent of cross- whole-of- ent policy developments ences vernment o support the direction of the |
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|--|--|---|---|