

POWER ENGINEERING COMPETENCY FRAMEWORK			
SKILLS MAP - Chief Engineer / Senior Project Manager / Project Director / Deputy Director			
Sector	Power Engineering in the Public Service		
Track	Engineering / Project Management		
Occupation	Electrical Engineer		
Job Role	Chief Engineer / Senior Project Manager / Project Director / Deputy Director		
Job Role Description	<p>The Chief Engineer / Senior Project Manager / Project Director is responsible driving cross-department collaboration to optimise design, construction, commissioning, and operations and maintenance for electrical and power projects. He/She endorse project scope, goals and objectives in collaboration with technical personnel and leads stakeholder engagement for sign-off on project plans. He leads project implementation as per technical specifications and cost, time and quality requirements and leads project reviews for compliance with regulatory requirements and industry standards. He also formulates solutions to improve project budget performance and cash flows.</p> <p>He builds strategic partnerships and drives collaboration with public sector agencies and other departments for leveraging synergies for smooth implementation of electrical and power projects. He drives contractor performance and compliance with contract terms, technical standards and regulatory requirements. He champions cross-department strategies for implementation of safe work practices and drives the agency's environmental sustainability practices. In addition, he establishes direction and strategy for the agency's decarbonisation, decentralisation and digitalisation initiatives.</p> <p>He possesses good leadership and interpersonal skills and build strategic partnerships with internal and external stakeholders. He also advises on national energy and power policies, strategies and frameworks to balance economic competitiveness, environmental sustainability and energy security.</p>		
Critical Work Functions and Key Tasks / Performance Expectations	Critical Work Functions	Key Tasks	Performance Expectations (For legislated / regulated occupations)*
	Manage power generation and/or distribution projects	Drive cross-department collaboration to optimise design, construction, commissioning, and operations and maintenance for electrical and power projects	In accordance with: - Electricity Act including subsidiary legislations - Energy Market Authority of Singapore Act - International Electrotechnical Commission (IEC) Standards - International Organization for Standardisation (ISO) Standards - Singapore Standards for Electrical and Power sector - Workplace Safety and Health (WSH) Act  * Performance Expectations are non-exhaustive and subject to prevailing regulations and industry standards
		Endorse project scope, goals and objectives in collaboration with technical personnel	
		Lead stakeholder engagements for sign-off on project plans including budget, timeline, quality, and success metrics	
		Establish staffing and resourcing processes for the department to support project implementation	
		Lead implementation of projects as per technical specifications and cost, time and quality requirements	
		Lead project reviews for compliance with regulatory requirements and industry standards	
		Provide appropriate solutions for managing issues and mitigating risks that arise in projects	
		Formulate solutions to improve project budget performance and cash flows	
	Manage key stakeholders / Manage contractors	Drive collaboration with public sector agencies for ensuring synergies in electrical and power projects	
		Build strategic partnerships with internal and external stakeholders	
		Drive cross-department collaboration for tendering exercises for electrical and power projects	
		Approve contractor selection and the awarding of contracts according to agency requirements	
		Manage contractor works across functions for fulfilment of contract terms	
	Manage safety, health and environment	Drive contractor performance and compliance with technical standards and codes of practice	
		Establish innovative safe work practices based on industry best practices, according to statutory requirements and procedures	
		Champion cross-department strategies for implementation of safe work practices for contractors	
		Drive workplace adherence to relevant sector regulations and codes of practice	
		Drive Permit-to-Work procedures and frameworks across the department	
	Contribute to decarbonisation, decentralisation and digitalisation initiatives	Drive formulation of the agency's environmental sustainability practices, policies and procedures	
Advise on national energy and power policies, strategies and frameworks to balance economic competitiveness, environmental sustainability and energy security			
Drive cross-department collaboration for innovation and process improvement initiatives to leverage new electrical and power technologies			
Drive industry and inter-agency collaborations for research and assessment of new electrical and power technologies			
Champion green initiatives and sustainability programmes			
Establish cross-department strategies for implementation of distributed power technologies			
Formulate data analytics plans for strategic decision-making			
Skills & Competencies	Technical Skills and Competencies		Critical Core Skills
	Business Intelligence and Data Analytics	Level 5	Decision Making Advanced

	Continuous Improvement Management	Level 6	Developing People	Advanced
	Contract and Contractor Management	Level 5	Communication	Advanced
	Emergency Response and Crisis Management	Level 6	Problem Solving	Advanced
	Engineering Safety Standards Interpretation	Level 5	Collaboration	Advanced
	Environmental Sustainability Management	Level 6	Transdisciplinary Thinking	Advanced
	Equipment and Systems Installation and Commissioning	Level 5	Building Diversity	Advanced
	Innovation Management	Level 6	Customer Orientation	Advanced
	Inter-agency Collaboration	Level 6	Digital Fluency	Advanced
	Modelling, Simulation and Visualisation	Level 5	Creative Thinking	Advanced
	Organisational Resource Management	Level 6	Adaptability	Advanced
	Policy Development	Level 3	Influence	Advanced
	Power Engineering Management	Level 5	Self Management	Advanced
	Project Management	Level 6		
	Public Health and Safety Management	Level 6		
	Regulatory Compliance and Risk Management	Level 6		
	Renewable Energy Technologies Application	Level 6		
	Smart Grid Implementation	Level 6		
	Stakeholder Management	Level 6		
	Strategy Development	Level 6		
	Technical Inspection	Level 5		
	Technology Road Mapping	Level 6		
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<b>Programme Listing</b>	For a list of training programmes available for the Power Engineers in the Public Service, please refer to separate document on training courses.			

The information contained in this document serves as a guide.