

Senior Power Systems Engineer – Role Description

Role Title:	Senior Power Systems Engineer	
Job Holder:	As per Company's Organisational Design	
Reports To:	Practice Lead	
Last Updated:	14/09/2022	
Overall Objective		
<p>Middleton Group is looking for a senior power systems engineer to assist with developing Middleton Group's grid connection team. The senior power systems engineer is responsible for technical leadership of generator and grid connection projects including power systems modelling studies and analysis for new solar farm, wind farm, BESS and hybrid generator connections throughout Australia, using tools such as PSS®E, PSCAD and DigSILENT PowerFactory.</p>		
Responsibility	<ul style="list-style-type: none"> • Proven track record of successful grid connections (R0, R1 and R2) within Australia with diverse generation technologies. • Power system analysis for utility-scale networks including steady state and dynamic system studies. • Experienced working with DigSILENT PowerFactory, PSCAD, PSS/E, and the ability to guide and mentor younger team members. • Thorough understanding of the generator connection process in Australia (Chapter 5 and 5A) and the obligations of each party (NSPs, AEMO, Proponent etc). • Knowledgeable in one or more generator technologies such as synchronous (steam, hydro, gas etc) or asynchronous (solar PV, wind, BESS etc). 	
Technical Depth & Breadth	<ul style="list-style-type: none"> • Consistently demonstrates high levels of technical knowledge along with ingenuity and creativity in developing design and project solutions. • Develops and applies advanced technologies, engineering principles, theories and concepts in electrical and control systems engineering. • Broad knowledge about the design and operation of systems outside of their specialty. • Recognized for their technical ability within the professional community of their area of expertise. • Possess a working knowledge of control and instrumentation equipment and systems used in process industries. 	
Guidance / Initiative	<ul style="list-style-type: none"> • Self-supervising within guidance and expectations of team and project management. • Provides guidance to several groups within the organization. • Acts independently at the organizational level with outcomes reviewed by team/project lead. • Exercises independent initiative and judgment in setting and implementing goals. 	
Communication / Interpersonal Skills	<ul style="list-style-type: none"> • Experienced in discussing and negotiating access standards with NSPs and AEMO, including creating concise and convincing reports and technical memos to provide justification. • Take the lead in difficult conversations with project stakeholders through to resolution. • Able to effectively train people outside their direct team or project group. • Able to write convincing proposals and reports with all necessary backup material for external consumption. 	
Competency Level	<p>Exhibits the following overall engineering competency levels</p> <ul style="list-style-type: none"> • Level 2 • Level 3 <p>Note: Levels and descriptions based on Engineers Australia guidance. Refer to the Engineering Competency Matrix (HERE).</p>	

	<p>Shows following proficiency levels for technical tasks associated to relevant practice area</p> <ul style="list-style-type: none"> • Levels 3 • Levels 4 <p>Technical skills and proficiency levels are documented for Practice Areas. Refer to the Skills Matrix (HERE)</p>	
<p>Education & Experience</p>	<ul style="list-style-type: none"> • Bachelor of Engineering (BEng) • Minimum of 7 years of relevant experience. • Chartered Professional Engineer (Electrical) 	
<p>Key Interfaces</p>	<p>Managing Director</p> <p>Director – Sustainable Growth</p> <p>Technical Directors</p> <p>Practice Area Lead</p> <p>Job Directors</p>	
<p>Utilization</p>		
<p>Target utilisation is average 80%+</p>		
<p>Authorities (If applicable, describe the authority permitted to this position by indicating recommendations/decisions expected from the role)</p>		
<p>Role will have delegated authorities according to the delegated authority matrix</p>		