

# JOB POSTING



**Function:** **Systems Engineer – Microgrids and Energy Storage**  
**Reference Number:** PT-SJ-PT 20-0113  
**Location:** Mitcham, VIC 3132 (PowerTec office and workshop, this job is not generally suited to working from home)  
**Regular / Temporary:** Regular  
**Start Date:** 01/11/2020 **Employment:** Full Time

<p>Why work for PowerTec?</p>	<p><b><i>Do you want to be a member of a growing team delivering cutting-edge solutions for the electricity network transformation to renewables?</i></b></p> <p>PowerTec works closely with utilities and industry to realise distributed intelligent control systems and turn-key battery energy storage systems. We provide key technologies that enable Microgrids, electric vehicle charging stations and renewable power generation. We empower our customers to create their microgrid, to support the electricity distribution network, and to access electrical energy markets.</p> <p>We are a scale-up business, growing fast to unlock the potential of commercial &amp; industrial Distributed Energy Resources.</p> <p><b><i>Do you prefer providing comprehensive solutions rather than working with a silo mindset?</i></b></p> <p>Our small multi-disciplinary team delivers systems and projects end-to-end: from feasibility studies through to system design, software development, strategic procurement, components import, manufacturing management and commissioning. PowerTec has put its all-round technical and commercial skills to work in delivering some of Australia’s key Microgrid and energy storage projects. We have won the 2017 Clean Energy Industry Innovation Award for the Mini-Grid Stabiliser at Mooroolbark, VIC.</p> <p>Are you ready to join us in delivering solutions, even if it involves leaving your comfort zone?</p> <p><b><i>Are you more excited about customer focus than about reporting to superiors?</i></b></p> <p>We are still a small, young, and humble team working and growing with our sophisticated B2B customers. We apply a flexible and collaborative approach, and we learn from our customers. We make our money from our customers only, which means limited resources at times and a humble environment, but we offer one of the best personal growth and learning opportunities in the market.</p>
<p>The opportunity:</p>	<p>Then we want to hear from you as a <b>Systems Engineer – Microgrids and Energy Storage!</b></p>
<p>The candidate will have:</p>	<ul style="list-style-type: none"> <li>• A Bachelor (Honours), Masters, PhD or equivalent degree in Systems Engineering, Electrical Engineering, Software Engineering, Power/Renewable Systems Engineering, Information technology or a related field</li> <li>• Broad, theoretical control and systems engineering capability and an ability to practically apply smart automation and control theory to commercial physical systems (our inverter-based power systems) in both software and hardware</li> <li>• Willingness to work in diverse functions along the project delivery process and life cycle</li> <li>• Ability to work on diverse technical levels from field devices via embedded controls and system coordination control to aggregated systems</li> <li>• Flexibility to analyse, work with and further develop pre-existing software and hardware solutions</li> </ul>

	<ul style="list-style-type: none"> <li>• Work experience in System Integration for electricity supply, renewable energy, or another field dealing with physical processes – in a business or, if you are a graduate, in a practically realised, complex academic project</li> <li>• Relevant theoretical and practical experience in the following areas:             <ul style="list-style-type: none"> <li>- Systems Integration, preferably (but not necessarily) in the electrical/renewable energy, power systems, electrical machines, electrical drives, or power electronics sector</li> <li>- Dynamic feedback, model-based, intelligent, predictive, and distributed control</li> <li>- System analysis and modelling – experience with power systems is a plus</li> <li>- Signal filtering</li> <li>- Field devices control using Fieldbus communication</li> <li>- Existing knowledge of commercial/industrial/community (C&amp;I) Microgrids or C&amp;I battery energy storage is a plus</li> <li>- Environmental, auxiliary or safety monitoring and control system</li> <li>- Use of a modern programming language suitable for real-time control and embedded systems</li> <li>- Testing integrated hardware and software systems</li> <li>- Technical project management</li> </ul> </li> <li>• A pragmatic, delivery-oriented approach with a strong ability to problem-solve project issues independently</li> <li>• Strong interpersonal and team working skills</li> <li>• Effective verbal &amp; written communication, ability to write concise technical documents</li> <li>• Confidence in working with customers</li> <li>• Australian citizenship, permanent residency, or temporary residency with an existing suitable valid visa to work in Australia for at least 1 one more year</li> </ul>
<p>By the end of your first year, you will have:</p>	<ul style="list-style-type: none"> <li>• Developed a firm understanding of PowerTec’s solutions through peer-to-peer coaching and learning on the job</li> <li>• Successfully and timely             <ul style="list-style-type: none"> <li>- Further developed methods of smart combined control of battery energy storage systems for peak lopping, voltage control, network balancing, islanding, and energy market services.</li> <li>- Optimised the operation of intelligent battery energy storage systems (BESSs) at about five existing and five new sites across Australia. Applications include EV-charging, community distribution network support and industrial Microgrids.</li> <li>- Designed and implemented dynamic feedback controls, sequencing controls, and high-level model-based controls of BESSs and Microgrids as systems with control and sensor hardware and embedded software</li> <li>- Optimised the design and implementation of distributed Microgrid controls</li> <li>- Conducted functional testing, hot testing, and functional commissioning of several BESS and Microgrids</li> <li>- Contributed to the design and selection of suitable hardware and software components for our system</li> </ul> </li> <li>• Travelled to several sites for functional commissioning and acceptance testing</li> <li>• Provided feedback to continuously improve the functionality and design standard of our PowerTec’s PowerCache® and PaDECS® products</li> </ul>

**To apply for this opportunity, please provide comprehensive documentation: your cover letter, CV, education certificates and transcripts as well as names of referees. Please send your documents to [careers@power-tec.com.au](mailto:careers@power-tec.com.au), quoting reference PT-SJ-PT 20-0113.**