

GRID CONNECTION ENGINEER | RENEWABLE ENERGY SPECIALIST

Power systems and grid connection engineer with current developer-side experience at Windlab and prior AEMO and OEM experience through the CEC's Grid Connection Engineer Graduate Program. Practical capability across PowerFactory, PSS/E, and PSCAD for reticulation design and grid connection studies. Backed by a Master of Sustainable Energy and 11 years of complex Defence engineering delivery, including technical tendering, systems engineering, contractor management and stakeholder engagement.

KEY ASSETS

- **Grid connection:** R0/R1/R2 support, connection application inputs, GPS review, model validation, commissioning evidence and generator registration support.
- **Power systems modelling:** PowerFactory, PSS/E, and PSCAD for RMS / EMT studies.
- **NEM / NER:** Working understanding of AEMO registration, NSP interfaces, NER obligations, loss factors, system strength and connection-risk management.
- **Communication:** Strong ability to turn technical risks into plain English for development, construction, commercial, board and external stakeholder audiences.
- **Project Management & Systems Engineering:** Experienced in managing multidisciplinary teams with agile methodology and systems thinking.
- **Business Strategy and Financial Analysis:** Strong commercial acumen, business case development and investment evaluation using financial models.

CAREER HIGHLIGHTS

- **2025** – One of twelve selected for Clean Energy Council's inaugural Grid Connection Engineer Graduate Program.
- **2024** – Attained a Master of Sustainable Energy with a 7.0 GPA (High Distinction).
- **2021** - Led \$8M software project, unifying 12 staff with agile methodologies for successful implementation and stakeholder alignment, contributing to \$30M project win.
- **2015** - Planned a concept demonstration for a \$1B project, identifying key requirements for production, leveraging predictive project management methodologies to ensure program success.
- **2014** - Recognized by CEO for outstanding performance at Defence Materiel Organisation, demonstrating excellence in project leadership and execution.
- **2012** - Managed month-long, nation-wide program for 431 military vehicles, implementing 106 changes, ensuring operational continuity and customer satisfaction.
- **2011** - Successfully delivered \$12M project, ensuring safety and compliance within regulatory frameworks, showcasing effective project management and stakeholder engagement.

RELEVANT EXPERIENCE

WINDLAB

02/2026 – CURRENT

Grid Connection Engineer (CEC Graduate Rotation)

Windlab is a clean energy developer that builds projects that do right by people, respect Country, and protect the planet, while raising the bar for how renewables should be done.

- Built and reviewed PowerFactory models for transmission-connected generation and storage scenarios, including transformer modelling, cable sizing and short circuit studies including 3ph and 1phg faults.
- Aggregated the detailed design of the wind farm to a SMIB for implementation in PSCAD to manually run voltage disturbance and fault ride through studies against s5.2.5 of the NER and AEMO's DMAT.
- Tuned the PSCAD model for active and reactive power requirements including voltage droop control, voltage disturbance and fault ride through behaviour.

VESTAS

08/2025 – 02/2026

Grid Connection Engineer (CEC Graduate Rotation)

Vestas is an Original Equipment Manufacturer (OEM) of wind turbines and a global leader in the design, manufacture, installation, and service of wind turbines across the globe.

- Built a new project management workflow in Jira for the Grid Team to enable accurate scheduling and resourcing of R0 and R1 submissions.
- Conducted a techno-economic cost-benefit analysis in the use of grid-forming WTGs vs grid-forming BESS vs grid-forming STATCOMS to reduce system strength charges.
- Responded to service requests for existing wind farms including investigations into post-upgrade controller behaviour.

AUSTRALIAN ENERGY MARKET OPERATOR

02/2025 – 08/2025

Onboarding and Connections Engineer (CEC Graduate Rotation)

The Australian Energy Market Operator (AEMO) is responsible for operating and planning Australia's energy systems and markets across the electricity and gas sectors.

- Supported grid connection studies using PSS®E to conduct load flows and dynamic studies.
- Reviewed technical documentation including R2 submissions and conducting due diligence against the agreed GPS as well as R2 model validation.
- Assisted with witnessing of 3 commission tests for new generators and inverter-based resources.

CONSULTANT (PART-TIME)

05/2024 – 12/2024

Energy Catalyst

Energy Catalyst is a specialised consulting platform that works with clients to apply grid architecture and systems engineering to navigate and accelerate complex energy system transformations in Australia, the United States, the United Kingdom and the European Union.

- Advised AEMO on enabling high DER futures through systems engineering and grid architecture.

- Delivered Concept of Operations report for the Future Energy Systems program to enable a systematic approach toward ensuring rollout of DER.
- Conducted technical and financial analysis of innovative renewable technologies.

MASTER OF SUSTAINABLE ENERGY

07/2023 – 12/2024

University of Queensland

The Master of Sustainable Energy (MSE) is designed to equip students with the skills to develop sustainability frameworks and renewable energy projects that provide affordable, reliable & sustainable energy.

- Graduated with a 7.0 GPA (High Distinction).
- Coursework included: Renewable Energy Technology, Energy Markets, Decarbonisation Strategies, Investment & Finance.
- Delivered projects on NPV modelling, emissions reduction strategies, and energy policy.

CAREER BREAK

07/2022 – 06/2023

Thru-hiking the 3000 km Te Araroa Trail, New Zealand

- Completed a solo thru-hike across New Zealand, building resilience and clarity through self-directed challenge.
- Used the time for deep reflection, which sparked a decision to pivot toward a purpose-led career in sustainable energy and climate impact.

TECHNICAL PROJECT MANAGER FOR C4EDGE

12/2020 – 06/2022

Insitec MIS

MIS is a technology startup focused on military, intelligence and space systems that was acquired by Insitec and operated as one of its divisions.

- Led cross-functional team to deliver complex defence tech prototype on time and under budget within 12 months.
- Instituted agile project delivery and a culture of continuous improvement.
- Managed engineering risks, contractors, and high-value stakeholders.

CAREER BREAK

02/2015 – 11/2020

Travel and Adventure Guiding, Around the World

- Worked as an outdoor guide and pursued global travel.
- Reconnected with nature and solidified commitment to sustainability.

SYSTEMS ENGINEERING MANAGER FOR LAND 75 PHASE 4

01/2012 – 02/2015

Department of Defence (Defence materiel organisation)

Land 75 Phase 4 was a project to acquire and install radios and computers into a suite of military vehicles.

- Developed technical tender documentation for the \$30M concept demonstration within a 6-month timeframe.
- Coordinated a diverse group of internal and external stakeholders as well as contractors.
- Supported the Chief Engineer through tender evaluation, contract negotiations and engineering oversight.

TECHNICAL LEAD FOR M113AS4

01/2011 – 01/2012

Department of Defence (Defence materiel organisation)

The M113AS4 fleet sustainment cell was required to maintain M113AS4 armoured personnel carriers.

- Led fleet sustainment engineering and stakeholder engagement.
- Delivered effective solutions based on user feedback.
- Coordinated and supervised upgrade program for the entire fleet of vehicles.

PROJECT ENGINEER FOR FIELD REFRIGERATION PROJECT

08/2007 – 01/2011

Department of Defence (Defence materiel organisation)

The Field Refrigeration Project was responsible for the acquisition of military grade refrigerated containers for the Australian Army.

- Delivered project from concept to final testing, acceptance and delivery.
- Drafted engineering specifications, led tenders, contract negotiations, design reviews and acceptance testing.

JUNIOR ENGINEER

07/2006 – 07/2007

Department of Defence (Land Engineering Agency)

RESPONSIBILITIES

- Worked on a number of projects for rapid deployment to troops in Afghanistan.

GRADUATE ENGINEER

02/2005 – 06/2006

Department of Defence (Defence Materiel Organisation)

RESPONSIBILITIES

- Completed 3 graduate rotations in Amphibious and Afloat Support, Military & Geographic Information and Land Engineering Agency.

EDUCATION

Master of Sustainable Energy (High Distinction)

07/2023 – 12/2024

University of Queensland

Bachelor of Mechatronic Engineering (1st Class Honours)

01/2001 – 12/2004

University of Queensland

CERTIFICATIONS

PMI Certified Associate in Project Management (CAPM)	12/2023 – 02/2024
Google Data Analytics Professional Certificate	12/2023 – 02/2024
Climatebase Cohort 5	03/2024 – 09/2024

SKILLS AND TOOLS

- **Grid Tools:** PowerFactory, PSS/E, PSCAD
- **Programming:** Python, R Studio
- **Proficient in project management software:** MS Project and Jira.
- **Data Viz and Analysis:** Excel, Power BI, Tableau
- **MS Office Suite:** Powerpoint, Excel, Word, Teams, OneNote.

HOBBIES AND INTERESTS

Passionate about outdoor activities such as hiking, climbing, bouldering, whitewater rafting, surfing, and snowboarding.

Interested in climate change, sustainability, and renewable energy innovation.