



CURRICULUM VITAE

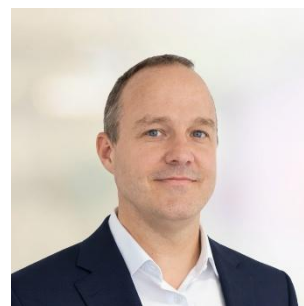
Adam Peard

Personal statistics

Nationality: Australian

Current position

Market Area Director, Australia, Power Grids



Languages

Language	Native	Speaking	Reading	Writing
English	✓	High	High	High

Education

Field of expertise	University/School	Year
Bachelor of Engineering (Electrical)	The University of Queensland	2002
Advanced Diploma, Electronics Engineering	TAFE Queensland	1999

Summary of professional experience

Adam Peard is a Fellow of Engineers Australia, with around 25 years of experience in the operation and planning of electricity markets, transmission planning and connections. He has very broad knowledge of market operations including security constrained economic dispatch processes, ancillary services, technical performance standards, system security and reliability.

Adam's has extensive experience in power system analysis, generator and load connections in the National Electricity Market and Wholesale Electricity Market. He has contributed to the successful negotiation of many GW of connections and associated performance standards for various projects, including wind farms, solar farms, hydro schemes, and battery energy storage systems.

As a transmission planning specialist, Adam has contributed to the development and justification of large transmission augmentations, emergency planning, risk assessment, plant specifications, and asset management strategies. He has also assisted with the planning of Renewable Energy Zones.

Adam's time is often spent as a Strategic Technical Advisor to market participants including generators, network service providers, system controllers and government bodies. He provides Expert Witness services in relation to planning and connections and he is a representative on the independent Technical Panel of Experts for Generation Arbitration in Western Australia.

Adam's commitment to enhancing electrical network efficiency and reliability has consistently delivered positive outcomes for the industry.

Memberships

Fellow, Engineers Australia (FIEAust)	Current
Chartered Professional Engineer, Engineers Australia (CPEng)	Current
Registered Professional Engineer Queensland (RPEQ)	Current

Employment

DNV Australia Pty Limited	2026 – Present
Position: Market Area Director, Australia, Power Grids	
Amplitude Consultants Pty Ltd	2017 – 2026
Position: Country Manager – Australia	
GridLink Consulting Pty Ltd (Western Australia)	2017 – 2017
Position: Director	
Western Power Corporation (Western Australia)	2014 – 2016
Position: System Analysis and Solutions Area Manager (SAS)	
Public Utilities Office (Western Australia)	2015 – 2016
Position: Network Connections and Access Project Lead	
Western Power Corporation (Western Australia)	2013 – 2014
Position: Engineering Team Leader	
Western Power Corporation (Western Australia)	2011 – 2013
Position: Principal Engineer	
Western Power Corporation (Western Australia)	2010 – 2011
Position: Senior Engineer	
Australian Energy Market Operator – AEMO (Queensland)	2009 – 2010
Position: Principal Engineer	
National Electricity Market Management Company NEMMCO (Queensland)	2005 – 2009
Position: Planning Specialist	
National Electricity Market Management Company NEMMCO (Queensland)	2003 – 2005
Position: Planning Engineer	
Control Logic (Queensland)	2002 – 2003
Position: National Product Manager (P&B Engineering Protection Relays)	
Queensland Nitrates (Queensland)	2001 – 2002
Position: Part Time Electrical Engineering Trainee	

Experience

POWER SYSTEMS ANALYSIS, GENERATOR AND LOCAL CONNECTIONS

- Expert Witness to several Generator arbitration proceedings.
 - Lead consultant for the inaugural Regulated Electricity System Investment Plan (RESIP) for all three regulated power systems in the Northern Territory.
 - Technical advisor to Western Power on the 2024, 2025 and 2026 Transmission System Plans (TSP) including technoeconomic and planning advisory support.
 - Prepared the PWC Engineering Roadmap for Integrating Renewables.
 - Review of the Horizon Power Generation Planning Criteria.
 - Review of regulation and contingency Essential System Services requirements (ESS) in the Darwin Katherine and Alice Spings power systems.
 - Review of power transfer limit equations for the Wholesale Electricity Market (WEM).
 - Investigate the benefits of grid forming BESS on power transfer capability in the WEM.
 - Assessment of the benefits of the 900 MW Owen Mountain Pumped Hydro Scheme on system stability limits.
 - Review of the Northern Territory Power System Model Governance Framework.
 - Technical expert and negotiator for preparation of performance standards for numerous projects including thermal plant, wind farms, solar farms, compressed air storage, BESS, large loads and HVDC.
 - Technical expert and advisor to Network Service Providers for various generator and customer performance standard submissions.
 - Due diligence of the South West Interconnected System (SWIS) power transfer limit equations.
 - Technical advisor to various clients on generator PSSE and PSCAD modelling related matters.
 - Risk of constraint analysis (congestion) for numerous generator proposals.
 - Assisting numerous developers with Red Flag Assessments for large scale generator connection opportunities around the NEM and WEM.
 - Developed specification for the modelling requirements for a large HVDC system.
 - Review and amendment of Horizon Power's Basic and Low Voltage Embedded Generator Technical Requirements, including incorporation of updated AS4777.2020 Standard.
 - Technical advisor to AEMO on various Wholesale Electricity Market (WEM) reform initiatives including:
 - Allocation of Network Access Quantity (NAQ) in a constrained access environment.
 - Introduction of revised generator performance standards.
 - Review of operating standards (e.g., frequency control, system security)
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Experience

POWER SYSTEMS ANALYSIS, GENERATOR AND LOCAL CONNECTIONS

- System Analysis and Solutions (SAS) Area Manager at Western Power. Responsible for the oversight of all group activity, including:
 - Assessing the existing steady state, dynamic and transient performance of the power system to ensure that it continues to operate within a manageable technical envelope.
 - Evaluating the connection of larger new entrant generation and loads to the network to ensure connection can be accommodated in a safe manner, governed by relevant performance standards and Technical Rule requirements.
 - Developing engineering scopes of work and estimating the capital costs for new entrant connections.
 - Feasibility assessment and concept design for the Generator Interim Access (GIA) tool.
 - Developing power system transfer limit equations for use by the system operator for planned and unplanned system conditions, as well as providing system operator advice regarding emergency management of major incidents.
 - Developing system wide special protection and coordination schemes including high speed generation runback, under voltage load shedding and over / under frequency management systems.
 - Assisting with generator commissioning programs, validation of model parameters, and establishment / monitoring of generation compliance programs.
 - Monitoring system wide power quality through high-speed recording devices and investigating sources of unacceptable harmonics and other power quality related issues.
 - Provision of subject matter expertise to the Western Power's Regulatory team and Public Utilities Office (PUO) including:
 - Implications of adopting aspects of the National Electricity Rules on the Wholesale Electricity Market and required amendments to suit Western Australia.
 - Development of transitional provisions for connection agreements, including generator performance standards.
 - Introduction of new power system security rules for the WEM.
 - Impact of constrained access on existing and new generators in the WEM.
 - Review of power system frequency operating standards for the WEM.
 - Review of the reliability standard for the WEM.
 - Seconded into the Electricity Market Review for the Public Utilities Office in WA for a period of 12 months as a Project Lead and subject matter expert on network connections and access policy reform.
 - Various Principal Engineer and Planning Specialist roles for Western Power, AEMO and NEMMCO:
 - Numerous generation, load, and interconnector power system studies (steady state and dynamic) in support of new entrant connections to the NEM (more than 3 GW).
 - Real time incident investigation into oscillatory, voltage and dynamic alarms in the control room and preparation of control room advice. Development of High-Speed Monitor specifications for NEM wide role out in the HSM Project.
 - Delivery of Psymetrix Stage 2 (real time oscillatory stability assessment tool) into NEMMCO control room. Project lead for DSA Stage 2 dynamic stability benchmark tests of PSS/E against Powertech TSAT package, for NEMMCO control room use.
 - Technical review of black start procedures for generators in the NEM and development of HV line energisation procedures when critical network elements are out of service.
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Experience

MARKET MODELLING

- Technical advisor to the Western Australia Public Utilities Office for network constrained access market modelling activities.
- Performed the following in various Principal Engineer and Planning Specialist roles for Western Power, NEMMCO and AEMO:
 - Time sequential market modelling of the National Electricity Market including detailed representation of generation and load, interconnectors, loss equations, generator bidding behaviours and constraint equations.
 - Simulation studies in support of the National Transmission Network Development Plan (NTNDP) and the Annual National Transmission Statement (ANTS).
 - Provided subject matter expertise and quality control for time sequential market modelling for the Wholesale Electricity Market.
 - Development of constraint equations for market simulation purposes and review of constraint equation formulation for dispatch and pre-dispatch systems.
 - Development of detailed cascaded hydrological models and other generating systems using Prophet. Benchmarking and back casting studies to validate model performance.
 - National Electricity Market and Wholesale Electricity Market Transmission congestion assessments and cost of congestion analysis. Preparation of reports about network utilisation and incidence of constraint binding, generator profitability, hydro water usage, market pricing and cost of loss.
 - Development of augmentation proposals and creation of representative constraint equation sets. Net market benefit and value of customer reliability analysis for numerous projects.
 - Development of market driven new entrant generation models for a range of economic scenarios. Analysis of generator behaviour in response to market outcomes, constraint equation formulation and fuel source restrictions.
 - Reliability investigations including assessment of drought in Eastern Australia on supply reliability to the NEM. Project manager for the 2006 recalculation of NEM Minimum Reserve Levels (MRLs).
 - Cost of constraint analysis in support of Regulatory Test assessments and routine assessments of the cost of Victorian constraints in the NEM as part of preparation of the Victorian Annual Planning Report.

TRANSMISSION NETWORK PLANNING AND REGULATORY SUBMISSIONS

- Leadership and Principal Engineer support to a team of transmission planning engineers in Western Power, responsible for:
 - Preparation of the transmission capital expansion regulatory submissions.
 - Preparation of transmission content for the Annual Planning Report.
 - Development of long term (25 years) network development plans.
 - Detailed justification and business cases for individual projects ranging up to \$250M. involving reinforcement of substations, transmission reinforcements from 22kV to 330kV, installation of static and dynamic reactive plant. Detailed financial analysis including net benefit assessments.
 - Development plans for future stages of the 330 kV Mid-West Energy Project include staging options, wood pole retiral, potential market benefits from new generation connections.
 - Risk assessment and development of emergency operating plans following Muja BTT1 490 MVA transformer failure.
 - System operational advice including summer readiness, reactive reserve, system incidents and fault level management. Preparation of control room advice including network emergency mitigation measures in response to extreme demand and bush fires.
 - Providing advice to Asset Managers regarding plant specifications. Assist asset management staff creating strategies for substation primary equipment, wood pole and lattice tower structures.
 - Development of risk-based planning methods and guidelines.
 - Preparation of Technical Rules exemption requests for Regulator consideration.
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