

MERZ

Consulting

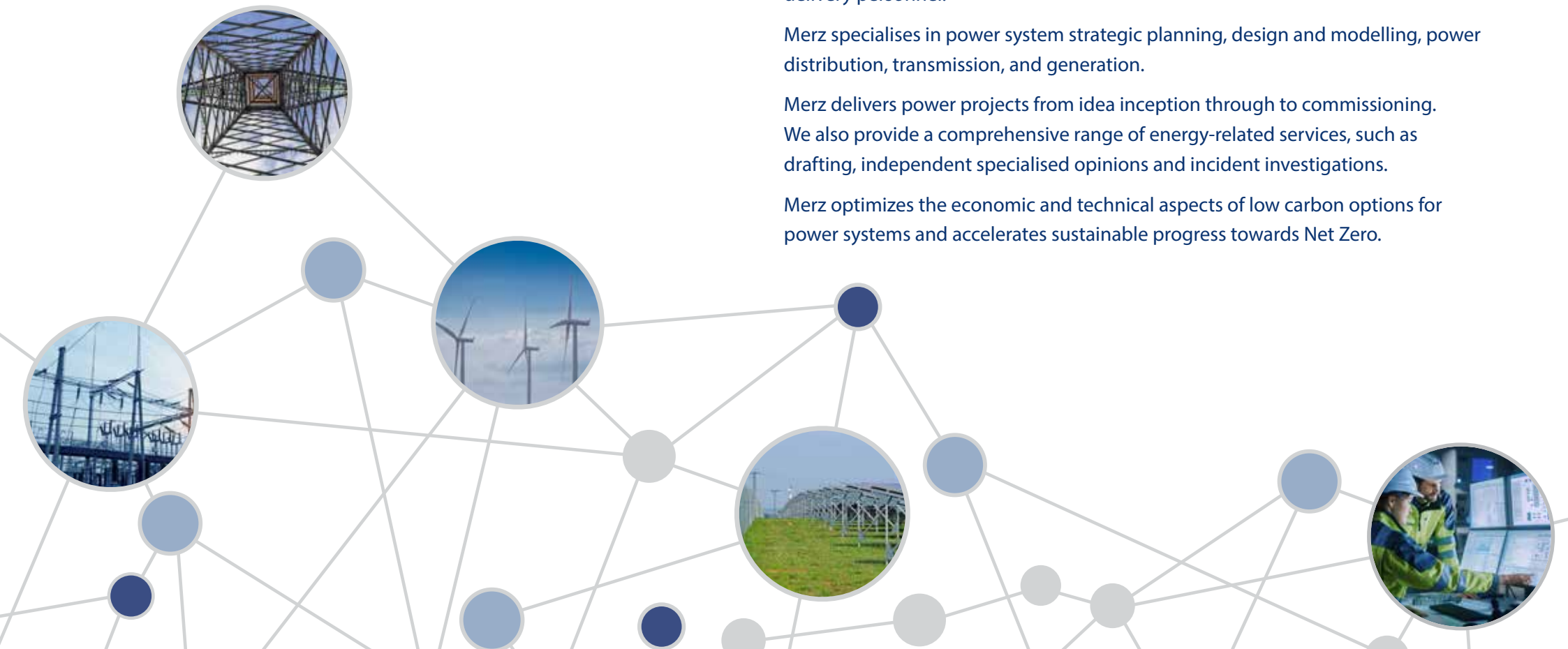
- Market & Regulatory Advisory Services
- Asset Management Systems
- Engineering & Design
- Power System Modelling & Studies
- Project Delivery

Merz Consultancy Pty Ltd (Merz) is owned and operated by high-calibre strategic consultants, energy economists, engineers, technicians, draftspersons and project delivery personnel.

Merz specialises in power system strategic planning, design and modelling, power distribution, transmission, and generation.

Merz delivers power projects from idea inception through to commissioning. We also provide a comprehensive range of energy-related services, such as drafting, independent specialised opinions and incident investigations.

Merz optimizes the economic and technical aspects of low carbon options for power systems and accelerates sustainable progress towards Net Zero.



Market & Regulatory Advisory Services

Merz supports regulators, electricity market operators, utilities, and customers.

Merz works with the full breadth of participants within the electricity industry and has a strong understanding of issues from all perspectives, ensuring effective and pragmatic advice. This is enhanced by the extensive and diverse national and international experience of Merz's Team, spanning markets across Australia, New Zealand and Asia.

Merz operates effectively within both technical and economic models and can establish the impact that technical changes may have on economic outcomes or vice versa. The tools adopted by Merz include:

- Our custom linear optimiser, the Economic Generation Portfolio Optimisation (EGPO) for renewable generation and battery integration.
- Options analysis and business case development.
- Electricity dispatch modelling and Monte Carlo analysis.
- Power system modelling and studies.
- Statistical modelling and analysis.

Services and support

Regulators

- Advice and analysis on the impact of regulatory developments and changes.
- Legislation assessment for fit-for-purpose.
- Review of license applications.
- Review of submissions for regulatory tests.
- Support for benchmarking activities.

Electricity market operators

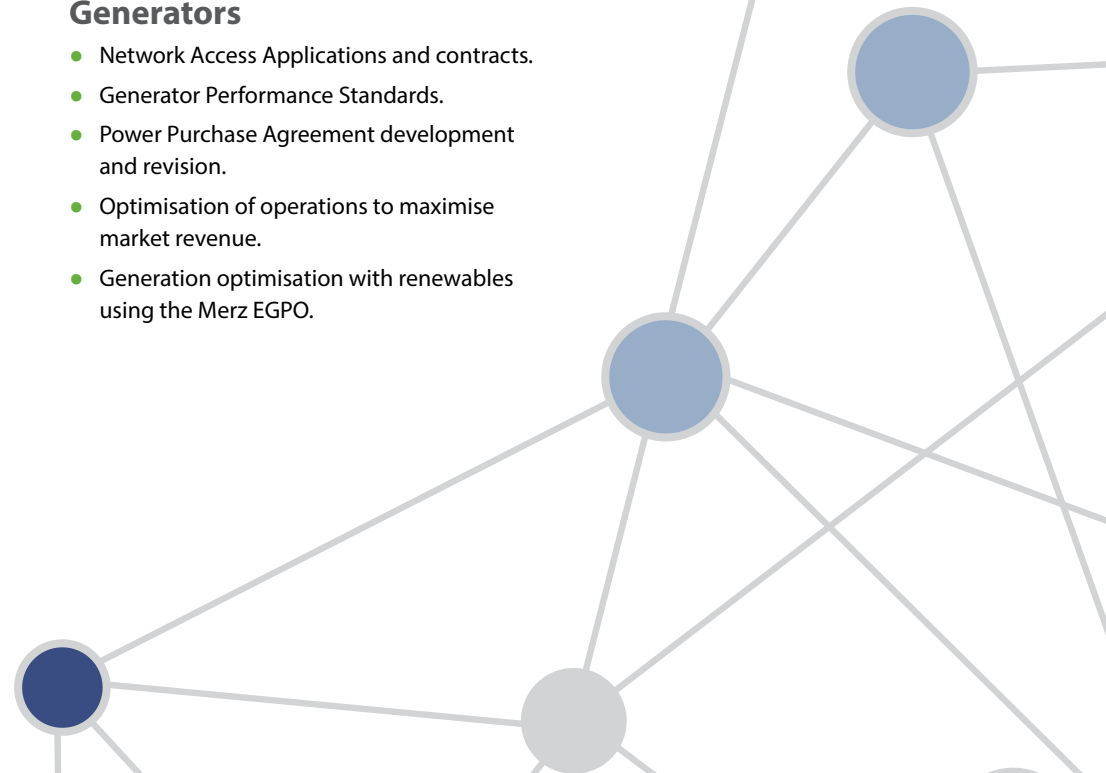
- Analysis to support market price limits and other market factors.
- Advice on changes to market processes and operation.

Utilities

- Support regulatory tests and resets.
- Development and maintenance of regulatory pricing models.
- Power system modelling and analysis.
- Asset valuations and review.
- Multicriteria analysis and business case development.

Generators

- Network Access Applications and contracts.
- Generator Performance Standards.
- Power Purchase Agreement development and revision.
- Optimisation of operations to maximise market revenue.
- Generation optimisation with renewables using the Merz EGPO.



Asset Management Systems

ISO55000 whole-of-life asset management for achieving organisational objectives.

Asset optimisation

- Optimisation of asset creation including options analysis and timing of investments.
- Assessment and optimisation of asset contribution towards Net Zero.
- Prescription of operational processes that support the appropriate operation of the asset.
- Timing and prioritisation of maintenance activities.
- Timing and a planned approach to disposal.

Merz utilises our clients' corporate objectives to guide the development of their Asset Management System, including the approach to the management of risk. An effective Asset Management System incorporates a set of concise and auditable records supporting the consistent application of good asset decision-making.

Merz can support with the development of effective and prudent Asset Management Systems:

- Design and implementation of full Asset Management Systems.
- Integration of corporate risk frameworks with asset management decision-making, using probabilistic and statistical tools.
- Development or review of asset capacity expansion or end-of-life business cases.
- Development of comprehensive asset condition assessment tools and documentation.



Engineering & Design

Appropriate and accurate engineering analysis and design is essential for the development and management of any project.

Engineering

- Transmission line design.
- Substation and switchyard HV and LV design.
- Renewable energy systems.
- Protection systems.
- Instrumentation and process control systems.
- SCADA and communications systems.
- Earthing systems, including earthing design calculations using CDEGS.

Design and drafting services

- As-built onsite verification and confirmation of works.
- Redline drafting.
- Detailed design services.
- Conversions and conforming of drawings.
- 3D model design.

Power System Modelling & Studies

The Merz power system modelling and analytics engineers have significant expertise, and routinely undertake complex power system model development and studies using power system simulation platforms.

Power system solutions

- Generators and renewable connection studies.
- Generator Performance Standard assessments, reports and submissions.
- Grid Codes compliance analysis and testing.
- R1 and R2 submissions, R2 testing, model development, testing and model validation.
- Synchronous condensers, STATCOM, and other reactive devices sizing and optimisation.
- Power system planning, operation and control analysis.
- Power system dynamic modelling and testing.
- Power quality assessments.
- Power system modelling, testing and analysis on various power standard system simulation platforms including DIgSILENT PowerFactory, PSS/E, PSCAD and ETAP.



Project Delivery

Merz project managers have extensive experience in managing EPCM, large scale engineering and design projects, infrastructure, and process change projects. We offer fully integrated project management services from project inception through to final delivery.

Merz provides project management services to offer certainty in the delivery of the defined project objectives.

Merz has provided independent project control services for large infrastructure projects, delivered on an EPCM basis. Managed large engineering and design projects and managed process and regulatory change projects. Merz provides project management services for mining and resource companies, industrial plants, utilities, regulators and government agencies.

Project management services

- Project development.
- Project support and management.
- Project programme management.
- Independent cost control and project governance.
- Owner's and independent engineering.
- Design management.
- Study management.
- Procurement support and management.
- Contract management.
- Site management.
- Risk management.



Core Team



Geoff Glazier
Principal Consultant



Belinda Mead
Operations Manager



Jaden Williamson
Senior Consultant &
Project Manager



Robert Barge
Senior Project Manager



Geoff Daniel
Engineering & Design
Services Manager



Andy Cahyono
Senior Electrical Engineer



Peter Van Den Dolder
Electrical Engineer



Johnny Ng
Electrical Engineer



Bao Nguyen
Graduate Electrical Engineer



Mitchell Spyker
Graduate Electrical Engineer



Dr Ferry Viawan
Manager, Power System
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Dr Roni Irnawan
Senior Power System
Modelling & Studies Engineer



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Graduate Power System
Modelling & Studies Engineer



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**Harso Adjie
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Graduate Power System
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Core Team

(continued)



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Graduate Power System
Modelling & Studies Engineer



Dr Carolyn Moore
Chief Sustainability Officer
(Quality, Safety & Environment)



Tulus Mujiono
Senior Electrical &
Instrument Designer



Brian Bozich
Senior Electrical Designer



Nicholas O'Neill
Electrical Designer



Herri Irawanto
Electrical Designer



Kobi Scott
Trainee Draftsperson



Carol Hibberd
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