



POWER SYSTEMS

Transmission Lines & Substations



A MEMBER OF THE CIMIC GROUP
 **CIMIC**

UGL is Australia's trusted tier-one contractor, delivering end-to-end solutions from design and procurement to construction, testing, commissioning, operations, and maintenance, across power, water, transportation, resources, utilities, communication, and Defence sectors.

UGL's core principles of integrity, accountability, innovation, and delivery, supported by safety, are essential to their business approach. These values drive growth, employee development, and client success.

integrity
accountability
innovation
delivery

SAFETY





UGL has in-house capability to deliver technically complex outcomes for high voltage power transmission infrastructure.

Transmission lines

40+
Years in the business

over
7,300km
of transmission
lines laid

Voltage ranging
between

33kV to
500kV

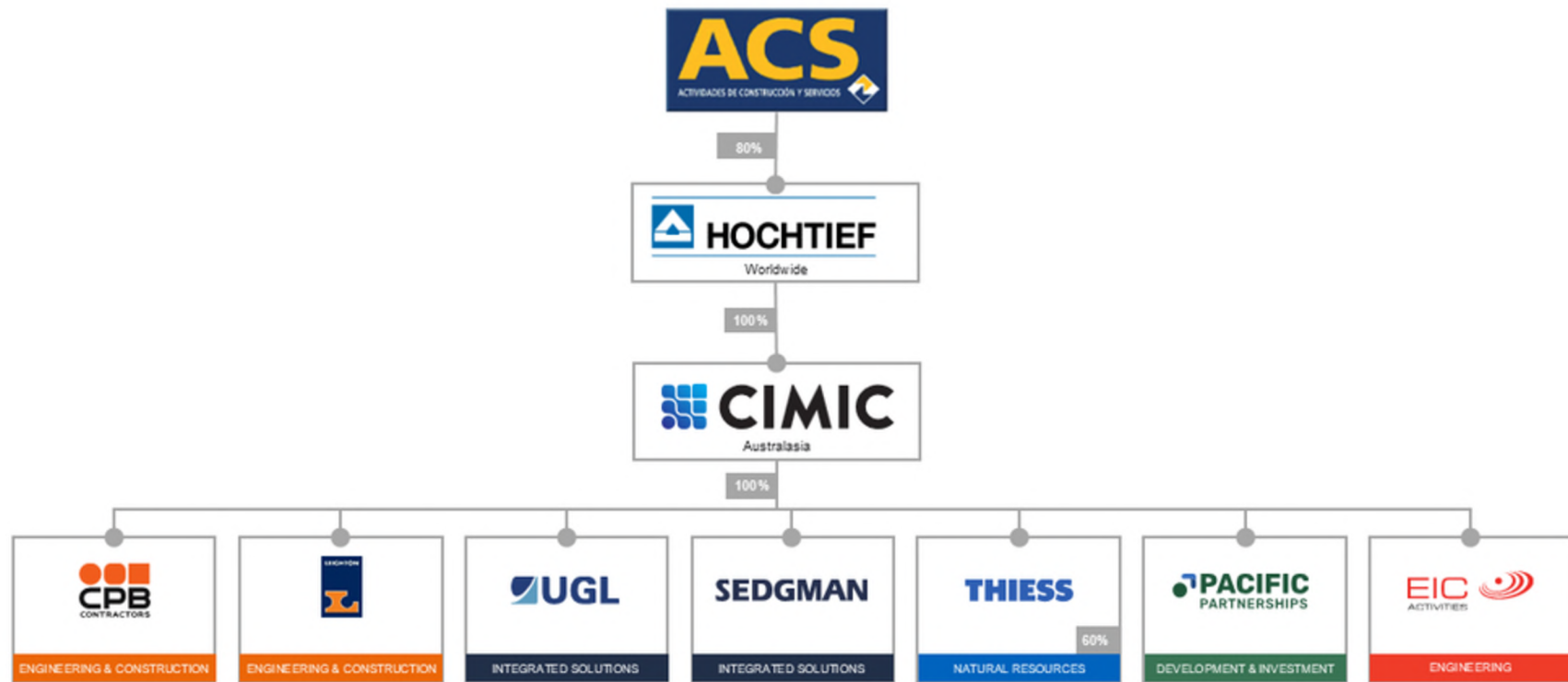
Substations

70+
Years in the business

over
300
substations built

Voltage ranging
between

11kV to
500kV



As part of the world's largest infrastructure contracting group, UGL benefits from the collective expertise and global reach of the ACS Group. This strategic affiliation not only strengthens our technical capabilities but also positions us to deliver innovative, scalable power solutions across multiple regions.

ACS is a global civil engineering and construction group listed on Spain's IBEX 35. Ranked as the number one international contractor. ACS companies include Dragados, HOCHTIEF, Iridium and Clece. Operations span Asia, North America, Australia, Europe and South America.

UGL's capacity

Employees

>11,000

External
workforce

>20,000

Professional
design engineers

>800

Safety
conversations
per year

>32,000



Electricity transmission infrastructure is the backbone of the energy transition. Our power infrastructure expertise supports clients to increase renewables penetration and improve grid stability.

- ANDREW VAUGHAN, NATIONAL POWER OPERATIONS



our expertise

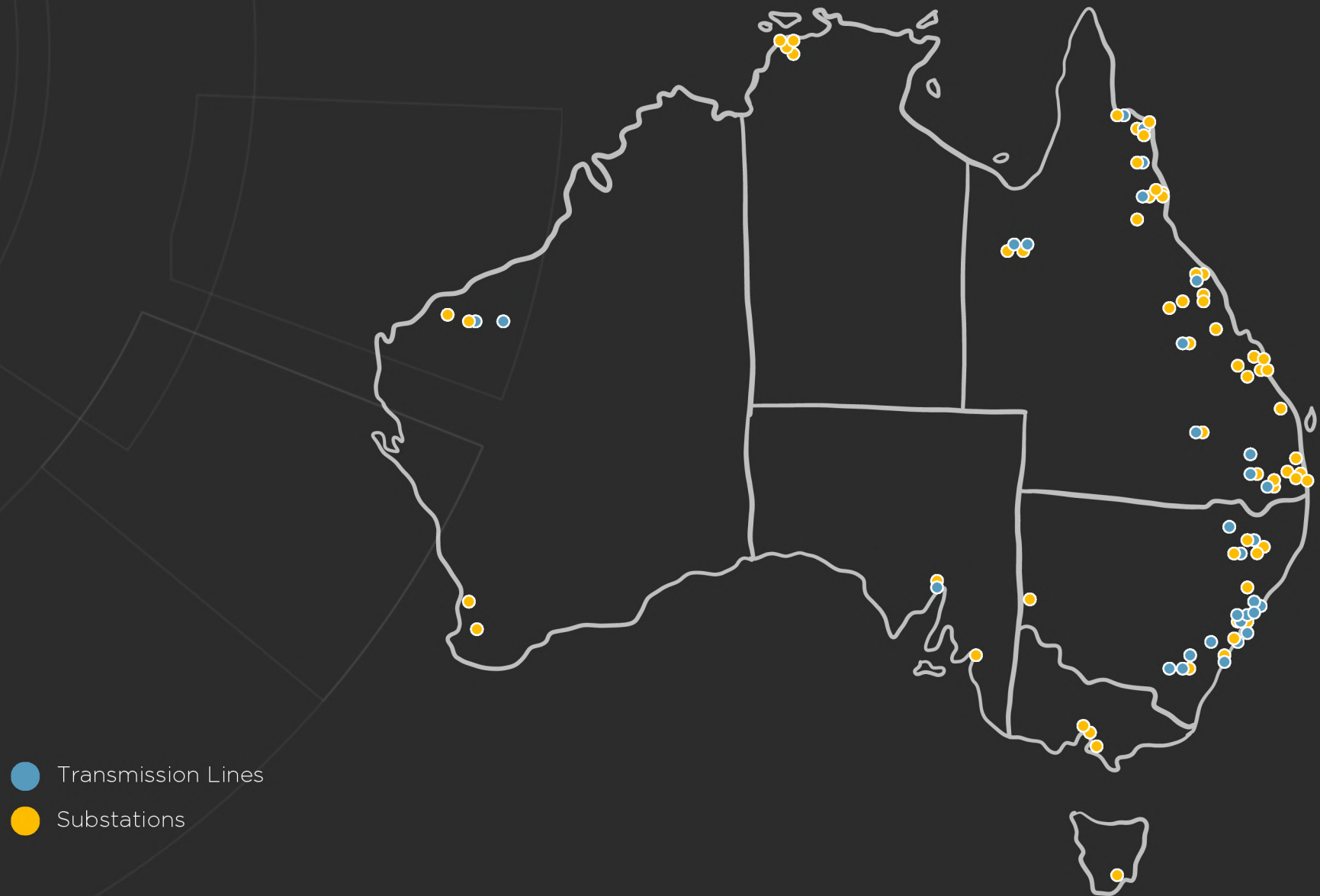
UGL is recognised as an industry leader in the design, construction, and commissioning of high voltage (HV) transmission lines and substations, having delivered an estimate 200 power system projects across Australia, New Zealand, and Asia over the past 15 years.

Our proven expertise spans voltages from 33kV to 500kV and includes extensive capabilities in HV substations, transmission lines, switching stations, and complex brownfield upgrades. Our dedicated, multidisciplinary in-house engineering and project delivery teams leverage decades of specialist experience to deliver solutions tailored to our clients.

UGL's engineering expertise optimises asset lifecycles by reducing risk, minimising costs, and ensuring future readiness with integrated solutions.

experience

Our impact in the past 10 years

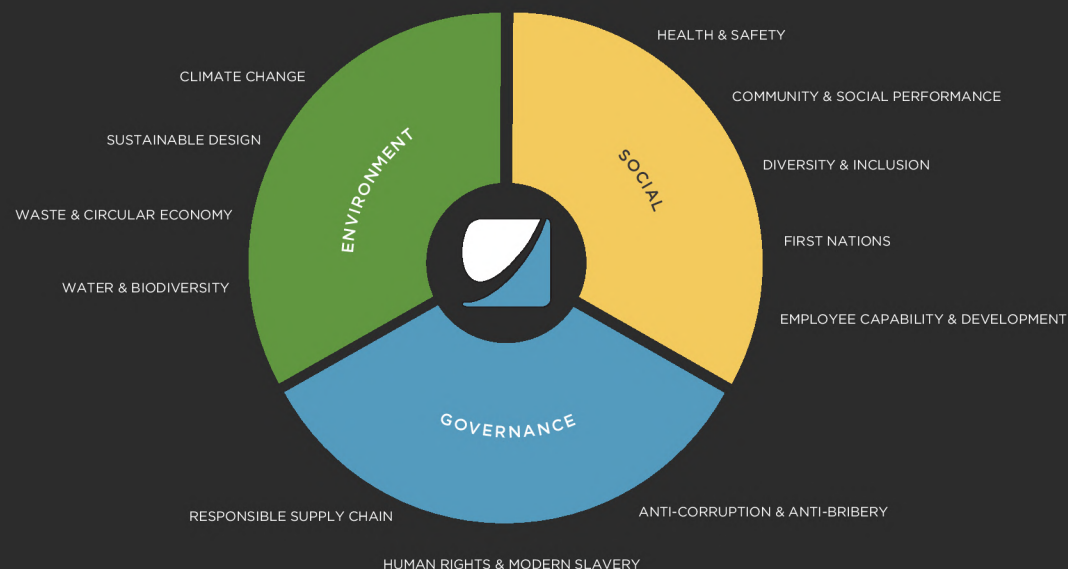


Our perspective on sustainability

At UGL we think about how sustainability applies today and tomorrow in:

- Our delivery of key sustainable infrastructure that supports the energy transition
- The technology and methods we use when delivering infrastructure to minimise impacts
- The positive legacies our work can have in the communities around us

UGL's Sustainability Framework sets our internal ambition. We want to increase sustainable outcomes from our work and partner with our customers on shared sustainability aspirations.



Aluminium composite reinforced conductor type

UGL's electricity transmission projects are building the backbone of Australia's energy sector transition.

UGL's design engineers are utilising aluminium conductor composite reinforced (ACCR) conductor types to help unlock maximised electrical generation for the design life of this infrastructure.

Improved conductivity means more clean electrons making into Australian homes, for longer.



”

Sustainable design, through form and function, allows UGL to deliver infrastructure that reduces resource needs, and integrates into communities for the long term.

- CAMERON MATTHEWS | ENGINEERING GROUP MANAGER

capability

ENGINEERING & DESIGN

We have an in-house multidisciplinary engineering team specialising in the design and documentation of HV substations and transmission lines. Our services encompass conceptual design, load flow studies, earthing and lightning protection, insulation coordination, SCADA and protection systems, civil and structural engineering, together with full transmission line, tower and foundation design, and full electrical system commissioning.

CONSTRUCTION & COMMISSIONING

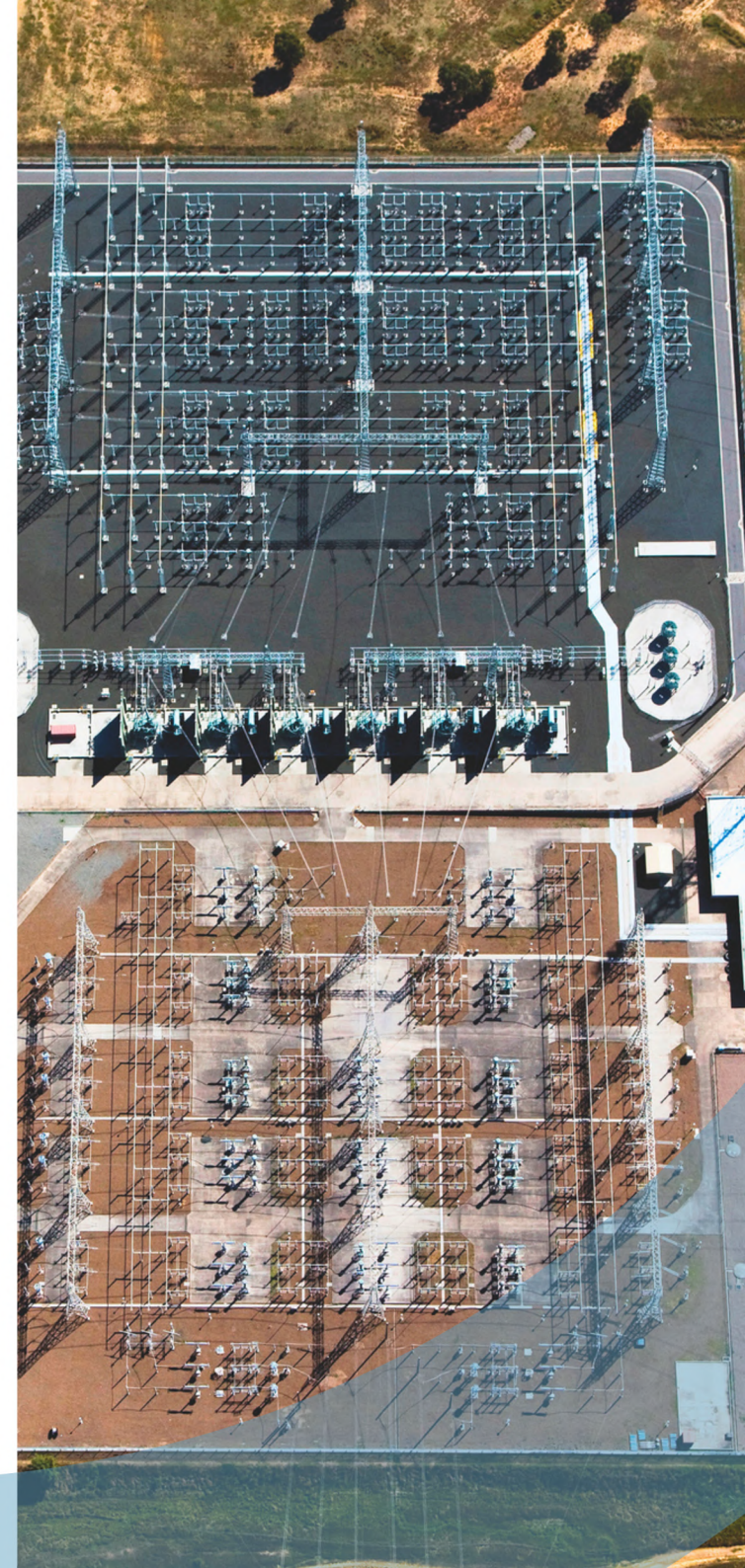
With a dedicated construction workforce experienced in handling critical HV plant, UGL self-performs key activities such as site assembly and erection of equipment, foundations, steel structures (gantries and transmission towers), HV plant installation, cabling, connection works, and comprehensive testing and commissioning.

OPERATIONS & MAINTENANCE

Our skilled integrated teams focus on enhancing asset reliability and longevity, leveraging technology, precise planning, preventative maintenance practices, and systematic performance monitoring to ensure peak operational effectiveness throughout an asset's lifecycle.

ASSET MANAGEMENT & UPGRADES

UGL specialises in mid-life and end-of-life upgrades, asset overhauls, capital replacements, and innovation. Our solutions focus on minimising operational disruptions, optimising efficiency, and extending the useful life and reliability of critical transmission and substation infrastructure.



one HSE CULTURE



The health and safety of our work environments
– for our people, our clients, subcontractors,
suppliers, visitors and wider communities – are
paramount to everything we do.



INTEGRATED TEAMS

Our success begins with our people.

Our in-house team brings together experts from across disciplines, fostering a collaborative environment that drives innovation and ensures seamless delivery on every project.

The corporate size of UGL also ensures that we have the depth of resources and backup support required to deliver power generators and power system projects successfully.

This commitment to teamwork is a cornerstone of our approach to all projects we undertake.

ONE HSE CULTURE

Safety, health, and environmental stewardship are at the heart of everything we do.

Our One HSE Culture unifies our approach across all operations, ensuring that every project not only meets but exceeds industry standards. It also means creating a culture where individuals are encouraged to take personal responsibility, empowered to speak up and supported by teams that understand and believe in the central importance of health and safety.

This commitment to safety and sustainability supports both our teams and the communities we serve.



ROBUST PROCUREMENT & SUPPLY CHAIN MANAGEMENT

We leverage a streamlined procurement and supply chain process to ensure efficiency and reliability throughout our projects.

By maintaining strong relationships with suppliers and optimising our logistics, we secure the best materials and services, keeping projects on track and cost-effective.

It is our culture to proactively manage the manufacturing process with our supplier. We allow for adequate quality inspection and testing as a means of ensuring certainty of outcome in the procurement process for all our projects.

All our procurement processes starting from the request for quotation, order placement, vendor management etc. are done through our centralised system FELIX for better control of the process and to meet our management systems and policies.

Contracting models

Split scope contract

Incentivised Target Cost (ITC)

D&C model with Target Cost Estimates

Construct only

Integrated Project Delivery model

Early Contractor Involvement (ECI)

Collaborative Style Alliance model

Combined Lump Sum + Cost-Plus model

We welcome the opportunity to discuss the details further and to collaboratively work with the client's team to agree on a model that is more beneficial to the project.



our projects

Snowy 2.0 Transmission Connection Project

Transmission lines for the Snowy 2.0 project will be constructed from the cable yard at Lobs Hole in Kosciuszko National Park, extending west across Talbingo Reservoir to a new switching station at Maragle, near Transgrid's Line 64 in Bago State Forest. This connection to Line 64 will integrate the project with the grid and access Transgrid's southern network, maximizing Snowy 2.0's capacity.

Location	New South Wales
Status	Current
Contract value	86m
Power	330kV
Client	Lumea



Genex Kidston Connection Project

The Genex Kidston Connection Project is an initiative by Powerlink to build a 275kV electricity transmission line, linking Genex's renewable energy facility in Kidston to Australia's national grid. This infrastructure will support a diverse energy hub that includes hydro, solar, and wind power generation. Utilising innovative methods such as drone-based stringing for transmission lines, the project emphasises reduced environmental impact and enhanced safety.

Location	Queensland
Status	Current
Contract value	174.5m
Power	275kV
Client	Powerlink Queensland



HumeLink West

HumeLink West involves the expansion of the existing Wagga Wagga 330 kV substation, the design and construction of a new substation at Gugaa and connection works to the future Maragle 500 kV substation. The project also includes a new 500 kV double circuit transmission line to connect the substations at the Wondalga interface point with HumeLink East.

Location	New South Wales
Status	Current
Contract value	1.4b
Power	500kV
Client	Transgrid

Kaban Substation Wind Farm Connection (Green Power Hub Connection)

QUEENSLAND

Completed project

The project involved designing, constructing, and optionally testing a new substation for connecting the Kaban wind farm. The works included design, procurement, substation construction, transmission line construction. Substation 108 Tumoulin consists of two diameters in a 3-breaker mesh configuration to accommodate a 200MVA transformer yard. The project also involved constructing tower and pole foundations and integrating the 275kV transmission line into Tumoulin Substation.



MacIntyre Windfarm Connection 330kV Transmission Line

QUEENSLAND

Completed project

The scope of works included the construct only of approximately 63km of 330kV steel lattice structure transmission line. The new twin conductor transmission line involved a combination of double circuit and single circuit D-Series towers as well as foundation and structure erection work for the cut in arrangement at Tumaville substation involving tower and poles. The works were divided into clearing, access tracks, benching and transmission line construction.





Genex Mt Fox Substation

QUEENSLAND

Completed project

UGL has successfully completed the project for Powerlink, developing new 275kV substations at Kidston and Mt Fox. These substations are now connected by a newly constructed 275kV single circuit steel tower transmission line. The project's objective to construct a new 275kV switchyard at Kidston and a new 275kV switching station at Mt Fox has been achieved. The scope of the work included the design, construction, and testing of a new 275kV substation at Mt Fox, featuring 4 x 275kV diameters, now referred to as H093 Mt Fox Substation.



Newman to Roy Hill Transmission System

WESTERN AUSTRALIA

Completed project

UGL was chosen by Alinta under an Early Works Agreement (EWA) to design and supply a transmission system from Newman to Roy Hill mine. They conducted site surveys and geological assessments to finalise an EPC price and procure long lead items. The EPC contract covered the delivery of a 66/220 kV substation at Newman, 140 km of 220 kV transmission line, a 220/33 kV substation, 5 km of 4 x 33 kV cable route, and backup diesel generation at the Roy Hill process plant. The scope included erosion controls, earthworks, drainage, access roads, foundations, high voltage plant installation, and complete secondary systems for substations, as well as all necessary work for the transmission line.

what we offer

Choosing UGL means partnering with an established Australian leader whose integrated approach consistently delivers tangible benefits.

We offer a comprehensive range of services applicable to the design and construction of high voltage transmission lines including:

Route selection, survey, route profiling and structure plotting

Complete Line Design and drafting

Project and Construction Management

Construction Services

Procurement, prototyping and testing

Access track and clearing works

Foundation Construction

Installation and dressing of transmission towers/poles

Stringing of conductors

Commissioning and testing

Handover and documentation



Management systems and accreditations

The UGL QMS is certified for use in multidisciplinary project management, construction and commissioning management, engineering, design and procurement for market sectors including, power generation, power systems, and power distribution.

Our operations are underpinned by a robust framework of quality and safety standards. Our Quality Management System is certified to ISO 9001, while our environmental and health & safety practices meet ISO 14001 and ISO 45001 standards. These certifications validate our commitment to operational excellence and continuous improvement.

UGL holds the following certification certificates:

- UGL OH&S Management System AS4801
- UGL Quality Management System ISO 9001
- UGL Environmental Management ISO 14001
- UGL Occupational Health & Safety OHSAS 45001
- The Office of the Federal Safety Commissioner Accreditation (OFSC)

Quality, Environment & Safety Management



Member of ISC since 2017



Authorised Engineering Organisation & National Engineers Register



ISO Certified 45001; 9001; 14001; AS/NZS 4801



Partnering with Aboriginal businesses

UGL's Aboriginal and Torres Strait Islander partner organisations are part of our journey towards reconciliation through opportunity.

We seek to encourage economic empowerment in our organisation and our clients' organisations by facilitating education, training, employment and subcontracting opportunities for Aboriginal and Torres Strait Islander people and businesses.

UGL maintains a range of key partnerships to achieve lasting outcomes by leveraging the strengths, resources and knowledge from both UGL employees and our partners to broaden our inclusive and diverse team culture.



Case Study: ARRA Group

ARRA Group and UGL forged a collaborative partnership in 2018. ARRA Group is a majority Indigenous owned company that is committed to the enhancement of employment opportunities for Aboriginal peoples, as well as non-Indigenous people.

Leveraging UGL's scale and the ARRA Group workforce network, UGL has facilitated opportunities for Aboriginal and Torres Strait Islander peoples to join the permanent and semi-permanent work forces on Chevron project sites in Western Australia. UGL's strong partnership network has increased workforce diversity on client sites and opened up ongoing employment opportunities for Aboriginal and Torres Strait Islander people.



Supply Nation

Supply Nation is a key partner organisation of UGL. Supply Nation is Australia's largest national directory of Aboriginal and Torres Strait Islander businesses. We are proud to enable opportunities by creating a connection between the Supply Nation network and our client networks.

KEY PARTNERS





For more information please contact UGL:

Level 8, 40 Miller Street, North Sydney, New South Wales, 2060, Australia
T: +61 2 8925 8925

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Published by UGL Pty Limited | 2025

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