Powerlink Queensland

Annual Report & Financial Statements

2016/17

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Corporate profile

Mission

Powerlink enriches lifestyles and powers economic growth through electricity transmission and associated solutions.

Vision

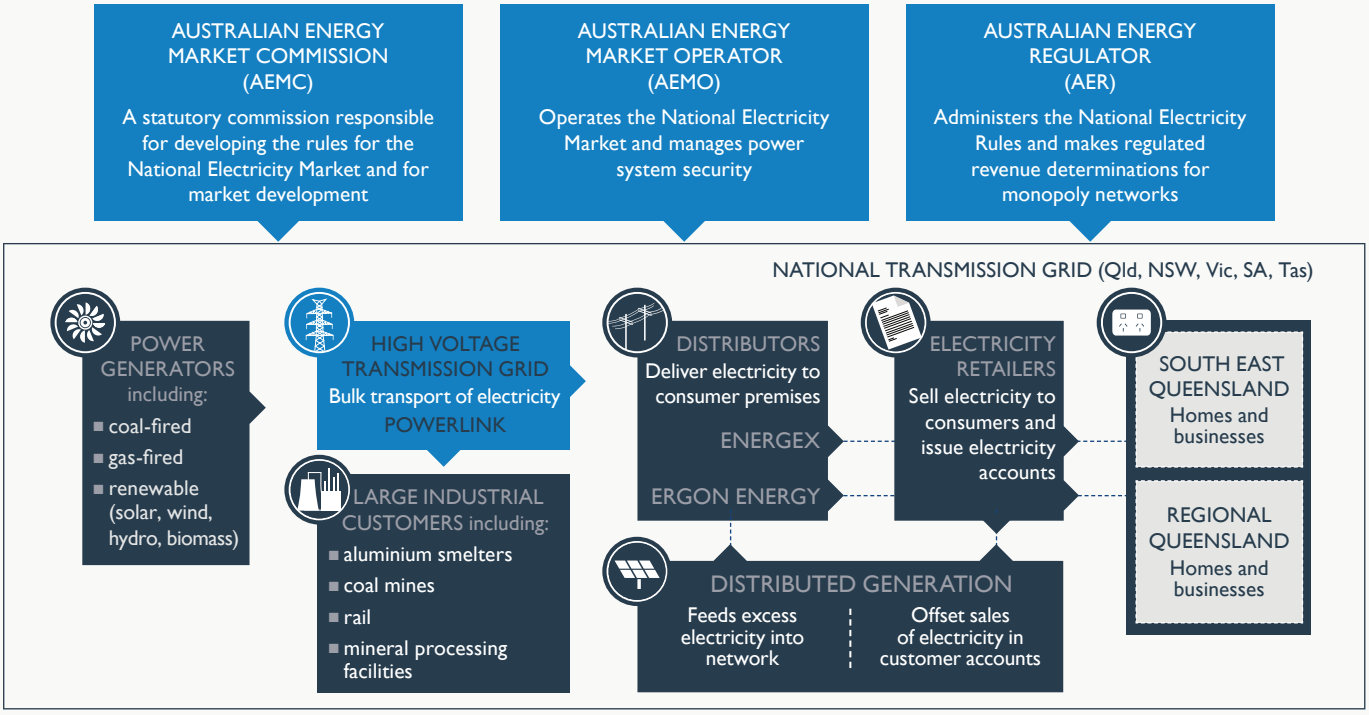
We are innovative and customer focused with a stronger business and reputation.

Values

The values that guide our behaviour are:

• Safe • Respectful • Proactive
• Ethical • Cooperative

Powerlink's role in the Queensland power supply industry



Reporting

This Annual Report has been prepared in accordance with the provisions of the *Government Owned Corporations Act 1993* (incorporating aspects of the *Financial Accountability Act 2009*) and the *Corporations Act 2001* and is presented to the Legislative Assembly of Queensland. It contains Powerlink's Financial Report for 2016/17.

Powerlink Queensland is the trading name of Queensland Electricity Transmission Corporation Limited.

Highlights 2016/17

- Our 2016/17 Earnings Before Interest and Tax (EBIT) performed above the Statement of Corporate Intent (SCI) target, with controllable operating costs below target.
- Powerlink's contribution to electricity bills will reduce by a third in 2017/18 and our Australian Energy Regulator (AER) transmission determination process for 2017/18 to 2021/22 achieved positive stakeholder engagement.
- We successfully completed comprehensive negotiations to connect seven new renewable generators to our electricity network. We responded to an unprecedented level of more than 80 enquiries and progressed more than 20 applications from potential renewable generators, which will continue through connection processes in 2017/18.
- We implemented a new leadership and organisational structure to drive a sustainable, high performing business that delivers value to customers.
- We maintained electricity supply to customers during Severe Tropical Cyclone Debbie and the subsequent severe weather event despite the flooding causing damage to 19 transmission towers in Central Queensland.
- We committed to the 2016 Queensland Electricity Supply Industry Code of Practice detailing how we will maintain electricity corridors and infrastructure in National Parks and State Forests.

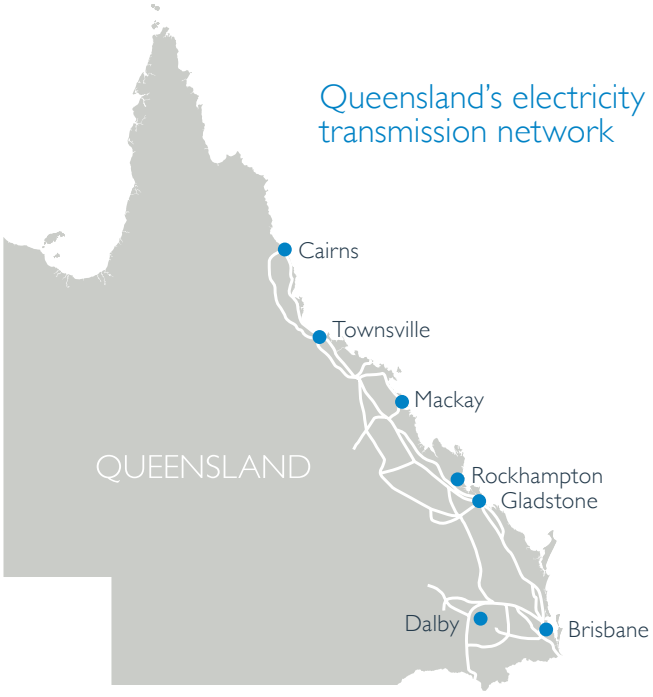
Powerlink profile

Powerlink Queensland is a leading Australian provider of high voltage electricity transmission network services, combining innovation with insight to deliver safe, cost effective and reliable solutions. We are a Queensland Government Owned Corporation (GOC) that owns, develops, operates and maintains the high voltage electricity transmission network in Queensland. Our network extends 1,700km from Cairns to the New South Wales border, and comprises 15,337 circuit kilometres of transmission lines and 139 substations.

With electricity being a key enabler of the economy and supporter of our lifestyles, Powerlink has an important responsibility in delivering electricity to almost four million Queenslanders. We transport electricity generated at major power stations through our transmission grid to the electricity distribution networks owned by Energex, Ergon Energy and Essential Energy (in northern New South Wales) to supply customers. We also transport electricity to several large electricity consumers in Queensland and to New South Wales via the Queensland/NSW Interconnector transmission line.

Powerlink is Australia's most experienced transmission network connection team, having delivered more network connections on a commercial basis than any other transmission company in Australia. We provide network connections for renewable and large-scale energy generators, as well as for major industrial customers operating rail systems, mines, and gas and mineral processing facilities.

We are a Transmission Network Service Provider (TNSP) in the National Electricity Market (NEM). The majority of Powerlink's network is regulated by the Australian Energy Regulator (AER) under the National Electricity Law and the National Electricity Rules (NER).



Powering communities and industry across Queensland.

Financial overview

Financial year 2016/17 was the final year of Powerlink's 2012/13 to 2016/17 regulatory period.

During the year, the AER delivered its Final Decision on Powerlink's transmission determination for the 2017/18 to 2021/22 regulatory period. The regulatory process establishes Powerlink's revenue for the five-year period from 1 July 2017, which includes an allowance for efficient operating and capital expenditure requirements.

Powerlink business performance

EBIT for 2016/17 was $816.3 million with total revenue of $1,370.4 million.

A key strategic focus for Powerlink was the delivery of its transmission services in an efficient and effective manner. To this end, in 2016/17 Powerlink continued to drive sustainable efficiencies in the controllable operating cost base, which closed at $233.4 million, slightly below the SCI target.

One of Powerlink's measures of cost efficiency is 'controllable operating cost as a percentage of depreciated asset value'. Performance against this measure for the year was in line with the target of three per cent, with the better operating cost performance being offset by a lower closing asset base, with asset revaluation at 2.1 per cent, which was below forecast.

Powerlink's Net Profit After Tax (NPAT) for 2016/17 was $351.2 million, which was a stronger result than the SCI target.

Capital investment

Capital expenditure in 2016/17 was $177.1 million, slightly below the SCI target of $179.6 million. With the relatively flat energy demand outlook, the network capital works undertaken focused on the refurbishment and replacement of assets, representing approximately 85 per cent of Powerlink's total network expenditure.

Borrowings

Powerlink did not require any additional debt funding during the year with its closing debt balance remaining unchanged at $5.3 billion. Powerlink's business gearing (Net Debt to Regulatory Asset Base) at 30 June 2017 was 72.9 per cent, which was below the SCI target of 75 per cent. The lower gearing ratio was due to higher cash holdings at the end of the year ($264 million) resulting in a lower Net Debt position.

A key contributor to the higher closing cash position and the EBIT performance was higher than forecast regulated revenue collections in 2016/17. This was due to the significant increase in Inter and Intra-Regional Settlements Residue (IRSRs) collections through the Australian Energy Market Operator (AEMO). IRSR proceeds totalled $115 million in 2016/17, an increase from $55 million on collections in 2015/16.

The over-collection of regulated revenue in 2016/17 will be used to offset regulated transmission prices in 2018/19, as prices have already been set for 2017/18. However, the 2017/18 prices already represent a significant reduction in average transmission prices.

Dividends

Powerlink's shareholding Ministers directed Powerlink on 8 June 2017 to retain $150 million of its proposed 2016/17 final dividend for the potential development of a transmission line linking proposed renewable energy generators in North Queensland (the Clean Energy Hub).

As such, Powerlink's final declared dividend for 2016/17 was $201.2 million, in addition to the $160 million of special dividends paid during the year.

Summary of Statement of Corporate Intent 2016/17

Our SCI for 2016/17, as agreed with our shareholding Ministers, details Powerlink's performance targets, priorities and strategies. The following table summarises the key financial and non-financial indicators in the SCI, as well as our performance against these indicators.

Objectives	2016/17 Performance targets	2016/17 Performance outcomes
Meet financial targets		
Achieve specified financial performance		
Earnings Before Interest and Tax (EBIT)	$ 743.1 million	$ 816.3 million
Net Profit After Tax (NPAT)	$ 279.4 million	$ 351.2 million
Return on Assets	9.1%	10.0%
Net Debt/Fixed Assets Ratio	65.8%	63.7%
Net Debt/Regulated Assets Ratio	75.2%	72.9%
Debt/Debt + Equity Ratio	76.6%	75.4%
Cash Flow From Operations + Interest/Interest	>2 times	3.1 times
Cash Flow From Operations/Net Debt	>7%	13.5%
Interest Cover Ratio (EBITDA)	3.1 times	3.6 times
Deliver shareholder value		
Deliver targeted dividends and returns to shareholders		
Return on Equity	17.2%	21.2%
Dividend Payout Ratio	157% (includes Special Dividends)	103%
Distribution Yield	21.6%	20.3%
Distribution Cash Coverage	1.2 times	1.5 times
Dividend provided	$ 439.4 million	$ 361.2 million[1]
Deliver our capital works program		
Develop the Queensland transmission grid to maintain reliability and meet customer requirements		
Total capital works expenditure	$ 179.6 million	$ 177.1 million
Meet non-financial targets		
Achieve specified safety performance		
Lost Time Injury Frequency Rate (LTIFR)	2.5	1.2
Total Recordable Injury Frequency Rate (TRIFR)	9.5	5.4
Compliant with relevant environmental legislation		
Environment	To be compliant with relevant legislation	Compliant
Environmental incidents	<=4	Nil
Achieve cost efficiency performance targets		
Maintenance operating cost/depreciated asset value	1.6%	1.6%
Controllable operating cost/depreciated asset value	3.0%	3.0%
Achieve network performance targets (calendar year 2016)		
System reliability parameters - Events in excess of 0.1 system minutes	Not more than 4	0
- Events in excess of 0.75 system minutes	Not more than 1	0

[1] Refer to Shareholding Minister directions on page 20 of this report.

Chairman's review

The future of energy in Australia continues to change. This is a transformational period for the energy industry, driven by changes in economic outlook, consumer behaviour, government policy and regulation, and emerging technologies. In addition to these wider changes to our national industry, renewable energy developments in Queensland are reshaping Powerlink's operating environment.

Powerlink achieved its key financial targets as approved by shareholding Ministers for 2016/17. Leading into the next regulatory period, Powerlink placed an emphasis on reducing its operating cost base to ensure it continues to deliver customer value and provide competitive non-regulated services.

Powerlink's underlying dividend policy is to distribute 100 per cent of Net Profit After Tax, which was $351.2 million for 2016/17. The final declared dividend for the year was $201.2 million, which recognised the Queensland Government's decision for Powerlink to retain $150 million for the potential development of transmission infrastructure to support renewable energy generation in Northern Queensland.

This supports Powerlink's work with the Queensland Government to deliver the initiatives presented in its Powering Queensland Plan and associated Powering North Queensland Plan. The plans outline investment across the Queensland energy industry, including investigations into transmission infrastructure for clean energy hubs and assessing the need for more interconnectors. These initiatives highlight the key role Powerlink's transmission network will play in the future of energy in Queensland, particularly in regard to encouraging diversity of renewable generation sources.

Another key focus has been our continued positive engagement with our stakeholders. In 2016/17, Powerlink engaged with its stakeholders in a variety of forums and across a range of matters that contributed to our business direction and improved our decision making.

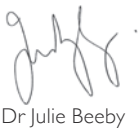
We acknowledge the valued input from stakeholders into our Revenue Proposal and Revised Revenue Proposal to the AER. With reduced capital and operating expenditure compared to the current regulatory period, Powerlink has been preparing for the AER's Final Decision by changing the way we operate the business and reducing costs.

Safety is essential and Powerlink remains firmly committed to achieving a more mature and interdependent safety culture and improved safety performance. Safety leadership continues to be valued across Powerlink and contributes to ongoing improvements in safety reporting.

I welcome Ms Sarah Zeljko and Mr Peter Hudson to the Powerlink Board and thank them, along with continuing Board members, for their support and input. I recognise former Directors, Ms Joanna Brand and The Honourable Paul Lucas, who resigned in September 2016 and April 2017 respectively, for their contribution to the Board and Board Committees.

In March and April 2017, the impacts of Severe Tropical Cyclone Debbie were felt by communities across Queensland. Our network operated throughout this severe weather event without any electricity supply interruption to customers, despite flood-related damage to a number of electricity transmission towers in Central Queensland. Our people rose to the challenge and responded to this extreme weather event with a high level of commitment and professionalism.

Powerlink's people are delivering the business strategy in a rapidly changing environment. I take this opportunity to thank them for their contribution to the future of electricity transmission services in Queensland.



Dr Julie Beeby

Chief Executive's review

The past 12 months have seen continuing change in our industry. Energy policy has become a national priority, while the price of electricity continues to be a key issue for customers and consumers. In 2016/17, Powerlink continued to respond to these changes, adjusting our operating model to continue to safely deliver cost-effective, regulated transmission services for electricity consumers and facilitate renewable energy generation connections to our transmission network.

One of the key achievements has been the work undertaken as part of the 2017/18 to 2021/22 Regulated Revenue Determination process with the AER. Our approach was to propose a reasonable level of revenue to allow us to operate our network safely and efficiently while responding to the concerns of customers and consumers over electricity prices. The Final Decision is closely aligned with the proposal made by Powerlink and will see the transmission component of typical Queensland residential household electricity bills reduce by between $23 and $38 per annum. Our approach was recognised by the AER, who positively stated that "Powerlink demonstrated a genuine desire to put the interests of its customers first".

As a member of Energy Networks Australia (ENA), we made a significant contribution to the Electricity Network Transformation Roadmap, a comprehensive plan developed by the ENA and CSIRO which demonstrates the role of energy networks in delivering reliable and secure electricity supply at lower cost in a decarbonised future. The roadmap is closely aligned to the recommendations made in the report by Australia's Chief Scientist, Dr Alan Finkel, which also reinforces that transmission infrastructure will remain a critical component of the electricity supply system of the future.

Powerlink's network is already playing an important role in facilitating new renewable generation for Queensland. In addition to the seven new renewable generators that committed during 2016/17 to connect to Powerlink's network, we are working with a significant number of proponents of solar and wind generation projects across the state, providing certainty and solutions for their projects.

Our new leadership and organisational structure supports Powerlink's transition to our future business. I would like to thank employees for engaging in the journey towards a constructive organisational culture, supporting our new leadership and demonstrating their ongoing commitment to safety and business performance.

Merryn York

Health, safety and environment

Safe for Life

At Powerlink, the safety of our employees, contractors and the communities in which we operate is essential. Powerlink is also committed to protecting the environment and managing the potential environmental impacts resulting from our activities.

At Powerlink, every individual is responsible and accountable for health, safety and responsible environmental management, and our leaders are active role models of this commitment.

Our Safe for Life program continued to be highly visible and strongly influences Powerlink's safety culture at both personal and organisational levels. Safe for Life was implemented in 2014, as Powerlink commenced a journey towards an interdependent safety culture and improved safety performance. Safe for Life initiatives implemented during 2016/17 continued to support us in progressing the maturity of Powerlink's safety culture.

We implemented an alcohol and other drugs management program to reflect industry and community expectations, to raise awareness about the negative influences of alcohol and other drug use, and to highlight the potential risk to personal safety in the workplace.

Integrating our approach

We have aligned to a contemporary and efficient management support model by integrating and centralising Powerlink's health, safety and environment functions. This is underpinned by a new Health, Safety and Environment Policy, driving our integrated approach.

In maturing our safety culture and improving our health, safety and environment objectives, we have commenced a program of works which leverages our previous success. The health, safety and environment program will address engagement and communications for improvement initiatives, leadership coaching, strengthening our safety management system, and building health, safety and environment acumen across our business.

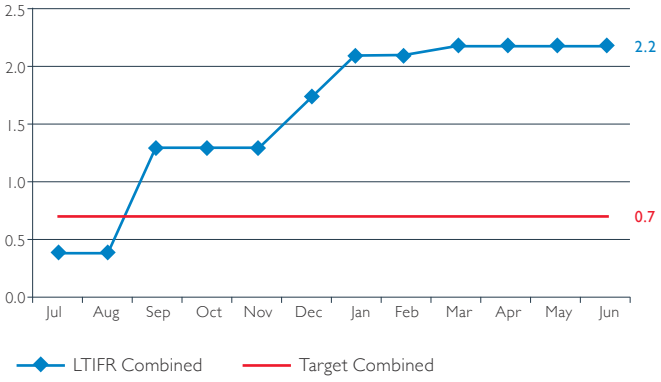
Safety performance

Powerlink's Electrical Safety Management System retained certification under the *Electrical Safety Act 2002,* following an audit by an independent external auditor. The Electrical Safety Management System is one element addressed in Powerlink's Safety Management System, which provides a cost efficient and consistent approach to safety management. Powerlink continues to monitor and report performance against our Lost Time Injury Frequency Rate (LTIFR) target.

In 2016/17, the combined Powerlink employee and contractor LTIFR tracked considerably above the target. In response, Powerlink has ensured that management takes action and learnings are shared to reduce the likelihood of similar incidents in the future. The incident trends have reinforced the importance of our safety values, Safe For Life – Everyone, Everywhere, Everyday.

Powerlink will continue to monitor and report on LTIFR, however, in line with our goal of improved safety performance and cultural maturity, we will also target a reduction in the Total Recordable Injury Frequency Rate (TRIFR). This measure, which is inclusive of lost time injuries and extends to medically treated and restricted work injuries, aligns with contemporary industry practices and visibly demonstrates Powerlink's commitment to our Safe for Life program.

Powerlink 2016/2017 Combined Employee and Contractor LTIFR



Contractor safety

We require our contractors to demonstrate the application of safe systems of work and display safe behaviour at all times. Our engagement processes help ensure our contractors share our commitment to safety and are willing to adopt our safety standards.

We support and have oversight of our contractors to achieve good safety performance and drive a strong safety culture.

We will continue to work with all of our contractors to ensure their ongoing commitment and maintenance of effective health, safety and environment management. Working together will improve our safety performance.

Public safety and infrastructure security

We delivered improvements to public safety and security by increasing the robustness of our critical substation infrastructure to prevent unauthorised entry and identify site entry activities. The improvements continue to be rolled out across our network of substations.

Powerlink continued to deliver powerline safety messages in collaboration with Energex and Ergon Energy (part of the Energy Queensland Group), through the 'Look up and Live' campaign and other electrical safety awareness activities. We promoted public safety messages through social media, and during face-to-face interactions with landholders and targeted community events. These community engagement activities aim to raise awareness of the importance of exercising caution around powerlines and substations for landholders and people working and living around our infrastructure.

We also provided information and advice to landholders about activities that can be carried out on, or near, Powerlink easements. We publish this information in Powerlink's Management of Easement Co-use Requests Guideline.

Public safety and network security considerations also influence the terms and conditions of electricity transmission line easements provided to landholders.

Abrasive blasting taking place on the Runcorn to Belmont transmission line as part of refit activities to safeguard network reliability.

Environmental management

Powerlink seeks to continually improve our environmental performance, as we acknowledge that responsible environmental management is integral to our business activities.

We review Powerlink's environmental performance against relevant legislative requirements and internal performance indicators. This review is informed by a program of audits undertaken throughout the year.

We manage environmental risks through a clear identification process and implementation of appropriate control measures. There were no reportable environmental incidents during 2016/17.

Recognising the diversity of the environments in which we operate, Powerlink was a signatory to the 2016 Queensland Electricity Supply Industry (QESI) Code of Practice which details how Powerlink, Ergon Energy and Energex will maintain electricity corridors and infrastructure in Queensland's National Parks and State Forests, including Wet Tropics World Heritage listed areas. The 2016 QESI Code of Practice was negotiated by the QESI entities and the Department of National Parks, Sport and Racing (including the Queensland Parks and Wildlife Service – QPWS) and the Department of Agriculture and Fisheries, with engagement from Wet Tropics Management Authority (WTMA) and HQPlantations.

With the assistance of Macquarie University and James Cook University, Powerlink assessed the environmental impact of abrasive blasting of transmission towers, part of a process to extend the life of the towers. WTMA and QPWS were also engaged in the study process. Findings from the study have informed our processes to implement relevant controls during abrasive blasting of transmission towers and were shared with the Australian Chapter of the International Council on Large Electric Systems (CIGRE).

We established a collaborative biosecurity research project with Biosecurity Queensland, seeking to improve the efficiency of our process for managing weedy tussock grasses and minimise the impact of our biosecurity management processes on existing grazing activities.

Emissions management and reporting

Powerlink reports annually on energy and greenhouse gas emissions to remain compliant with the *National Greenhouse and Energy Reporting Act 2007.* An independent limited assurance audit verified the accuracy of Powerlink's 2016 report.

Operating in the National Electricity Market

Regulatory determination process

The AER is responsible for the economic regulation of TNSPs under Chapter 6A of the NER.

In April 2017, the AER published its Final Decision on Powerlink's transmission determination for the 2017/18 to 2021/22 regulatory period, which sets out the revenue, capital expenditure, operating expenditure and other allowances for regulated services for the next five years.

The AER's Final Decision is the culmination of an extensive process that has occurred over more than two years. Powerlink submitted a Revenue Proposal to the AER in January 2016, and a Revised Revenue Proposal in December 2016 in response to the AER's Draft Decision in September 2016. Powerlink proposed prudent and efficient expenditure forecasts and revenue requirements that we considered were capable of acceptance by the AER.

Over the course of the transmission determination process, we built on our business-as-usual program of customer and consumer engagement activities to seek input into and provide feedback on our Revenue Proposals. We acknowledge the important role these stakeholders played in the determination process. Our Revenue Proposal reflected our focus on responding to consumer concerns over electricity prices through increased efficiency, cost reductions and consideration of alternative solutions that minimised the requirement for additional investment in the regulated network.

Regulatory determination outcome

The AER's Final Decision on Powerlink's transmission determination for the 2017/18 to 2021/22 regulatory period means that Powerlink's contribution to electricity bills is forecast to fall by almost one third from 1 July 2017.

Powerlink estimates that a typical Queensland residential household will save between $23 and $38 per annum on their electricity bill as a result of reduced transmission charges. The reduction will vary between households depending on electricity tariffs and consumption patterns.

The AER has determined that Powerlink's average annual revenues for the 2017/18 to 2021/22 regulatory period will be 24.7 per cent lower than those in the current regulatory period. In communicating its decision, the AER stated that it was supportive of the approach taken by Powerlink and acknowledged that most of the savings were identified by Powerlink after engaging with customers.

Powerlink recognises the flat outlook for electricity demand and the need to place downward pressure on electricity prices. Powerlink considers it can safely and reliably deliver its regulated services within the revenue level in the Final Decision. Powerlink has accepted the AER's Final Decision and has not pursued Limited Merits Review of the decision.

Transmission component of electricity prices

28.5% drop in indicative transmission price in 2017/18

Between **$23 and $38** savings for the average Queensland residential household annual electricity bill

Transmission pricing

Powerlink recognises that access to affordable and reliable electricity is a key enabler of the economy and enriches our modern lifestyle. We are focused on making our contribution to the electricity supply chain to deliver better value to our customers and consumers.

Powerlink's high voltage electricity network services represent about eight per cent of the total delivered cost of electricity for a typical Queensland residential electricity consumer. We determine Powerlink's regulated transmission charges in accordance with the NER and Powerlink's AER-approved Pricing Methodology. This is based on the Maximum Allowed Revenue (MAR) approved by the AER through the transmission determination process. Powerlink's MAR was $986.2 million[2] for 2016/17, which was year five of its 2012/13 to 2016/17 regulatory period.

Customers who connect directly to Powerlink's transmission network are charged for the use of the transmission network taking into account factors such as location and level of use.

Engaging in market development

Powerlink participated in a number of initiatives that contributed to the development of the NEM within a changing operating environment. Some of these key processes include:

Electricity Network Transformation Roadmap

Australia's national science agency, CSIRO, and the peak national body representing gas distribution and electricity transmission and distribution businesses in Australia, ENA, partnered to develop an Electricity Network Transformation Roadmap released in April 2017. The roadmap was developed to guide a structured transformation over the next decade, and to equip networks to deliver identified customer outcomes. The Final Report identifies various challenges facing Australia's electricity system in the face of diversified energy supply driven by customers, a strategy for the future and a plan to deliver that strategy.

[2] This is the revenue specified in the AER's 2012 determination and does not include allowable adjustments.

Working alongside stakeholders to effectively respond to an ever-changing environment.

System Security

A number of reviews and rule changes into power system security are under way to consider various aspects of security and reliability of electricity supply in the context of a national electricity system in transition and a lower emissions future. Key among these has been the Independent Review into the Future Security of the NEM (the Finkel Review). The Review Panel recommended a way forward with the release of its blueprint for the future of the NEM, with the majority of recommendations accepted by the Council of Australian Governments (COAG) Energy Council.

Transmission Connections and Planning Rule change

In April 2017, the Australian Energy Market Commission (AEMC) introduced new Rules aimed at providing more choice, control and certainty for customers connecting to a transmission network, while confirming that TNSPs remain accountable for the operation, maintenance and control of the shared network. These changes will also result in TNSPs including more information in their Annual Planning Reports.

Regulatory Investment Test (RIT) Rule change

The COAG review of the RIT for Transmission concluded that the current test remains the appropriate mechanism for new transmission infrastructure investment in the NEM, including assessment of interconnection investments. A number of improvements to the test were identified, including a requirement to ensure system security and emissions reduction goals are adequately considered. Separately, the AEMC is consulting on a proposed RIT for Replacements Rule change intended to increase the transparency of asset retirement, de-rating and replacement decisions of network businesses.

Network planning and reliability standards

Powerlink's network is planned, developed and operated to meet reliability standards set out in the NER, Queensland's *Electricity Act 1994* and Powerlink's Transmission Authority which is issued by the Queensland Government. Each year Powerlink assesses the network's capability to meet forecast electricity demand through a process that involves collaboration with TNSPs in other states, Distribution Network Service Providers connected to our network, AEMO and other stakeholders.

The planning standard set in Powerlink's Transmission Authority requires our network to be planned and developed on the basis that only a specified amount of load will be at risk of interruption during a single contingency event. This standard is applied through Powerlink's policies and frameworks so that the transmission network can be operated and maintained in a way that achieves reliable supply outcomes for customers while balancing cost and other factors.

Powerlink is adapting to ongoing changes in our operating environment including the impacts and opportunities associated with supporting developments in renewable energy generation.

Network performance in 2016

The AER sets calendar year performance targets for Powerlink for the duration of each five-year regulatory period through the Service Target Performance Incentive Scheme (STPIS). The AER's STPIS for Powerlink comprises two components:

- The network service component focuses on network availability and supply reliability. Powerlink's performance on peak period availability was above target performance levels, as was availability of transformers and reactive plant. Transmission line availability was below the target performance level due to necessary outages related to projects to refurbish or extend the life of selected transmission lines. Powerlink exceeded the performance targets for supply reliability.
- The market impact component focuses on outages that potentially have a negative impact on participants in the NEM wholesale electricity market. For 2016, Powerlink's performance exceeded AER targets.

Powerlink's performance against these targets for 2016 is reported in the SCI summary on page 3. There was no significant loss of supply event on the transmission network during the year.

As Powerlink enters a new five-year regulatory period in 2017/18, our performance will be measured against a revised AER STPIS.

Delivering innovative solutions for our oil testing customers.

Network strategy and operations

Electricity demand and forecasting

Powerlink's Transmission Annual Planning Report (TAPR), published in June each year, is a key part of the planning process to ensure our network and business priorities meet the needs of electricity consumers and participants in the NEM, while meeting our obligations under the NER, Queensland's *Electricity Act 1994* and our Transmission Authority.

The TAPR provides information about the Queensland electricity transmission network to stakeholders including AEMO and Registered Participants[3], and parties with an interest in the NEM. The TAPR also provides stakeholders with an overview of Powerlink's planning processes and decision making on future investment, which offers market intelligence to a range of interested parties.

The 2017 TAPR includes information on forecast electricity requirements, the transmission network's capability, large-scale renewable electricity generation connections to the network, and future investment required to ensure the ongoing safe and reliable management of our network.

Queensland's 2016/17 summer was hot and long lasting, with two days of particularly high electricity demand on the transmission network. A new maximum demand record was set on 18 January 2017 and was subsequently exceeded on 12 February 2017.

The 2017 TAPR reports that Queensland's electricity peak demand is expected to remain relatively flat in the next five years, with moderate growth in the five years to follow. Electricity peak demand is forecast to increase at an average rate of 0.6 per cent per annum over the next 10 years. Consumer response to electricity prices is expected to have a continued dampening effect on electricity peak demand and usage.

Powerlink is committed to understanding the potential future impacts of emerging technologies to develop transmission network services in a way valued by customers. For example, future developments in battery storage technology coupled with small-scale solar photovoltaic could see significant changes to electricity usage patterns, which could reduce the need for the transmission network to cover short duration peaks in electricity demand. Feedback gained through our stakeholder engagement activities helped Powerlink to better understand these potential future impacts and informed the development of the 2017 TAPR.

Capital works program

Powerlink's strategic approach to asset investment ensures the management of our transmission infrastructure, while we safely and efficiently deliver the capital works program.

Powerlink invested $177.1 million in capital works projects throughout Queensland in 2016/17. A total of 5.9 per cent of our capital works projects comprised non-regulated customer connections, the cost of which are paid for by the customer seeking the connection.

Reinvestment associated with assets reaching end of technical life is the largest component of Powerlink's capital expenditure, comprising 85 per cent of Powerlink's total network expenditure and 91 per cent of the regulated network capital investment in 2016/17.

The forecast total regulated capital expenditure for the 2018 to 2022 regulatory period as determined in the AER's Final Decision is $835.5 million (2016/17 real). This is $476.2 million lower, in real terms, than actual regulated capital expenditure in the 2012/13 to 2016/17 regulatory period. This reduction is due to forecast relatively flat electricity demand and the efficient reinvestment in assets that are expected to reach end of life over the next five years.

[3] Defined under National Electricity Rules, AEMC, Chapter 2 – Registered Participants and Registration.

Aerially inspecting our transmission lines and towers maintains the safety and reliability of our network.

Maintenance and materials management

Our network maintenance program is focused on ensuring the ongoing reliability of electricity supply. We track our progress against maintenance targets and monitor the efficiency of our program through international benchmarking.

In 2016/17, we successfully delivered 99 per cent of planned maintenance on our transmission lines, substations and communication sites. During the period, Powerlink invested $144 million in maintaining the transmission network to ensure we delivered safe, cost effective and reliable transmission services.

We are committed to realising efficiency improvements in our approach to maintenance. Our field mobility project has integrated the use of mobile devices for our field staff maintaining our transmission network assets. The seamless integration of this mobile application will contribute to the ongoing safety and efficiency of our maintenance work.

Powerlink adopted aerial surveillance of transmission line easements to deliver efficiencies in our vegetation management program. Using light detection and ranging methods, the program delivers improved data on vegetation impacts on our easements. We are also exploring opportunities to apply data to advance other aspects of our vegetation management program.

We delivered a materials management program to achieve efficiencies in the management of Powerlink's inventory, encompassing improvements in equipment ordering, warehousing, picking, tracking and delivery. A key aspect of the program was the application of radio-frequency identification technology to provide better access to equipment data, which informs on-site maintenance work and enables analysis of long-term equipment performance.

Contingency planning and emergency response

Powerlink works cooperatively with relevant state agencies on contingency planning and responding to extreme events that impact on the transmission network. This interaction with external agencies and our internal processes are directed by our comprehensive emergency management response plans. We test these response plans through internal exercises and annual exercises with AEMO and jurisdictional representatives from the Queensland Department of Energy and Water Supply (DEWS).

Our emergency response plans ensured Powerlink was well prepared for Severe Tropical Cyclone Debbie, which made landfall in North Queensland on 28 March 2017 and continued south causing significant damage and flooding in Central and South East Queensland. Sections of Powerlink's transmission network in Central Queensland were impacted during the cyclone and subsequent weather event, with extensive damage to 19 transmission towers along the Broadsound to Nebo 275kV transmission line. The structures of certain transmission towers were impacted by flooding, causing those towers to fall and creating a cascading effect on neighbouring towers.

Despite this significant damage, the network was configured to ensure a continued high voltage electricity supply to the area, with no impact to supply for customers. Following the cyclone, we inspected our transmission lines in the area by helicopter to check for remaining debris and potential damage. Our priority was to safely isolate and disconnect the damaged sections of transmission line. A restoration project to replace these transmission towers is expected to be completed by summer 2017/18 to ensure our transmission network continues to operate safely and reliably.

The transmission network is playing a key role in enabling the connection of renewable energy projects.

Customer focus

Connecting renewable generation

The future of energy is changing, and Powerlink is changing with it, contributing to a lower carbon future for Queenslanders. Evidence of this change is the high level of interest from renewable energy projects seeking to connect to Powerlink's electricity transmission network. We responded to more than 80 new connection enquiries from renewable generators totalling more than 15,000 megawatts. More than 20 of these enquiries progressed to application in accordance with the NER, an unprecedented level in Powerlink's history.

We are focused on supporting the delivery of successful renewable energy projects, on time and on budget. To achieve this level of service, we draw on our skills and capability as Australia's most experienced transmission network connection team and our proven proficiency in delivering more network connections on a commercial basis than any other transmission company in Australia.

Seven renewable generators committed to using Powerlink to connect to the electricity transmission network in Queensland, after completing the detailed connection process required by the NER. These new projects will deliver a total of 718 megawatts of renewable generating capacity for Queensland, comprising six solar farms and one wind farm.

Powerlink began connection works for one project in early 2017 and will deliver all six connections for solar farms during 2017/18. We will draw on our technical know-how and expertise to ensure the on-time delivery of these customer connections throughout Queensland.

We are actively negotiating multiple renewable energy connections with other proponents representing a broad customer base including international, national and local developers. Throughout these negotiations, we maintain our focus on delivering certainty and solutions for our customers.

Renewable electricity generators that finalised Connection and Access Agreements with Powerlink in 2016/17

Region	Project	Registered generation capacity
North Queensland	Mt Emerald Wind Farm	180 megawatts
	Ross River Solar Farm	125 megawatts
	Clare Solar Farm	136 megawatts
	Whitsunday Solar Farm	57 megawatts
	Hamilton Solar Farm	57 megawatts
Southern Queensland	Darling Downs Solar Farm	110 megawatts
	Teebar Solar Farm	53 megawatts

Our services

Powerlink's customers want value, certainty and solutions. As a leading provider of high voltage network services, we deliver technical advice with the right solution to meet a range of customer needs. In 2016/17, we continued the growth of our non-regulated service offering including:

- network connections for generators and large energy users
- telecommunications
- oil, insulation and SF6 testing
- asset management
- construction and project management
- easement acquisition
- ongoing maintenance and operations
- sale of high voltage equipment
- property services
- consulting services.

Stakeholder engagement

Effective engagement

Continuing to engage with stakeholders helps us understand and adapt to the changing business environment. In 2016/17, we remained focused on promoting effective and genuine engagement, based on the principles of integrity, openness, responsiveness, accountability and inclusiveness.

Our engagement approach continued to be guided by Powerlink's Stakeholder Engagement Framework, which aims to build stakeholder trust and social licence to operate.

In November 2016, we undertook our bi-annual stakeholder perception survey to gain insights into more than 100 stakeholders' perceptions of Powerlink, our social licence to operate, reputation and perceptions of overall performance. The survey findings indicated that generally stakeholders remain positive about their relationship with Powerlink and have an overall high level of acceptance of our operations. This understanding and awareness has supported and informed our ongoing engagement with stakeholders.

Based on the 2016 stakeholder survey results, we focused on improving relationships with local government representatives and landholders, as well as continuing to engage with diverse stakeholders including our customers, electricity consumers, communities, Traditional Owners, regulators, government and industry groups.

Engagement activities

We proactively created opportunities to engage with our stakeholders with the aim of seeking input into Powerlink's business focus and objectives. Feedback from these activities improved our decision making to deliver better value for customers.

In July 2016, more than 100 customer, consumer, government and industry representatives attended Powerlink's second annual Transmission Network Forum to discuss the future of Powerlink's network.

Powerlink's Customer and Consumer Panel provided an ongoing face-to-face forum for our stakeholders to give input and feedback regarding our decision making, processes and methodologies. The panel, comprising members from energy industry, resources and community advocacy groups, consumers and research organisations, met in October 2016 and May 2017. Topics explored by the panel included the AER's Draft and Final Decisions, opportunities to strengthen Powerlink's customer focus and the application of relevant key insights from the ENA and CSIRO's Electricity Network Transformation Roadmap.

In April 2017, Powerlink held a Demand and Energy Forecasting Forum attended by representatives from distribution businesses, AEMO, Queensland Government and industry experts. Among the topics examined was the potential impact of new technologies and tariff reform on electricity demand and energy forecasting on the Queensland transmission network.

Powerlink hosted a North Queensland Area Plan Forum in Townsville in April 2017. The forum provided the opportunity for Powerlink to gather strategic input from local stakeholders on factors to consider when planning reinvestment in the North Queensland transmission network. Feedback received will assist with guiding future planning and investment decisions.

Powerlink has continued to enhance processes for engaging with stakeholders for the provision of non-network services. These processes include publishing information on the need for and scope of viable non-network solutions. The first Non-Network Feasibility Study was published in August 2016 and focused on further improving consultation with non-network providers and seeking potential alternative solutions for network developments. In addition, a Future Transmission Network Webinar in May 2017 was the first in a series of webinars intended for non-network providers and other stakeholders unfamiliar with Powerlink's transmission network. By providing and exchanging information early, Powerlink hopes to generate more interactions with non-network providers during any future non-network consultation processes.

Cultural Heritage

Powerlink recognises that Traditional Owners have a significant landholding interest and are key stakeholders in our operations. We meet our obligations under the Queensland *Aboriginal Cultural Heritage Act 2003* and the Queensland *Heritage Act 1992*, as well as Commonwealth legislation.

Our Cultural Heritage Framework guides the ongoing management of Cultural Heritage throughout the life of our transmission assets, including during the planning and delivery of network reinvestment projects. We also work cooperatively with customers wishing to connect to our network to achieve efficient Cultural Heritage outcomes for the benefit of commercial projects.

We continued to engage proactively with Traditional Owner groups to foster respectful and positive relationships, including through our established whole-of-claim agreement approach. This approach establishes agreed processes to manage Cultural Heritage matters in all phases of our activities and recognises the Traditional Owners' unique knowledge of the land.

Regulated network development

Focus on network reinvestment

We assess committed and future potential regulated network investments after considering the technical and economic life of transmission infrastructure and electricity demand growth.

Consistent with the relatively flat electricity demand forecast outlook, Powerlink assesses the enduring need for assets at the end of their technical or economic life. We also consider a broad range of options in response, including network reconfiguration, asset retirement, non-network solutions or replacement with an asset of similar or lower capacity.

We gained stakeholder input into our network reinvestment decision making process through our ongoing stakeholder engagement activities, particularly the Transmission Network Forum and through local engagement such as the North Queensland Area Plan Forum in Townsville.

Regulated network developments

Before committing to build a transmission line or substation, Powerlink undertakes a thorough assessment of alternatives, including non-network solutions, to ensure the selected solution results in the lowest long-run cost to electricity consumers, while also balancing safety, reliability and environmental factors.

Powerlink is required to apply the AER's Regulatory Investment Test for Transmission (RIT-T) when, among other things, identifying network augmentation solutions costing over $6 million. Powerlink did not initiate any new RIT-T assessments during 2016/17.

Non-network solutions

In certain cases, technically and economically feasible non-network solutions can reduce, defer or even replace the need for future transmission network investments. Non-network solutions may also form part of an overall network reconfiguration strategy when a network asset has reached end-of-life to assist in achieving the right balance between reliability and the cost of transmission services.

Common types of non-network alternatives can include demand side management initiatives, which contribute to lowering peak electricity demand, and network support where additional generation is provided during times of peak demand on the electricity network.

Powerlink's Non-Network Solution Feasibility study process advances consultation with stakeholders who may have the potential to provide non-network services and have identified their interest by joining our non-network engagement stakeholder group. Our Future Transmission Network Webinar supported stakeholder engagement in the process by sharing current and historical information about our transmission network with registered non-network providers.

Powerlink's first Non-Network Solution Feasibility Study Report, published in August 2016, reported on the viability of a non-network solution as an alternative to replacing two transformers at Garbutt Substation. Through the study, we provided information to members of our Non-Network Engagement Stakeholder Register and received comments from three possible non-network solution providers. The information we received from this exchange supported the decision that the solution to address the need and deliver the lowest long-run cost to consumers was for Powerlink to replace both of the transformers at Garbutt Substation.

Major regulated network projects

Major transmission developments and reinvestments completed in 2016/17

Region	Project
North Queensland	Strathmore 275kV Substation secondary systems replacement
Southern Queensland	Blackwall 275kV Substation secondary systems replacement
	Braemar 275kV Substation secondary systems replacement
	Upper Kedron 110kV Substation secondary systems replacement

Major transmission developments and reinvestments under construction in 2016/17

Region	Project
North Queensland	Collinsville to Proserpine 132kV transmission line refit
	Garbutt to Alan Sherriff 132kV transmission line replacement
	Mackay 132kV Substation replacement
	Moranbah area 132kV capacitor banks
	Moranbah 132/66kV Substation transformer replacements
	Nebo 275/132kV Substation transformer replacements
	Nebo 275kV Substation replacement
	Proserpine 132kV Substation replacement
	Ross 275kV Substation secondary systems replacement
	Tully 132kV Substation secondary systems replacement
Central Queensland	Blackwater 132kV Substation replacement
	Calvale and Callide B 275kV Substation secondary systems replacement
	Moura 132kV Substation replacement
	Gladstone to Boyne Island 132kV transmission line refit
	Stanwell 275kV Substation secondary systems replacement
Southern Queensland	Mudgeeraba 110kV Substation replacement
	Rocklea 275kV Substation secondary systems replacement
	Tennyson 110kV Substation secondary systems replacement

Major transmission developments and reinvestments approved but not yet under construction in 2016/17

Region	Project
North Queensland	Alligator Creek to Eton Tee 132kV transmission line refit
	Garbutt 132/66kV Substation transformer replacements
Central Queensland	Calvale 275/132kV Substation transformer reinvestment
	Dysart 132kV Substation replacement
	Wurdong 275kV Substation secondary systems replacement

People

Workforce strategies

Achieving our goals through teamwork and a shared focus is a key enabler for Powerlink and underpins our strategic imperative of ensuring Powerlink is a great place to work. Our success will see our people working together as one Powerlink, and collectively creating and sharing success, along with our people working productively and fostering a supportive culture that enables everyone to realise their full potential.

Our total workforce Full Time Equivalent staffing as at June 2017 was 820. We have optimised our organisation for future competitiveness through implementing efficiencies across the business that have seen a direct reduction in our workforce positively impacting both direct and indirect costs. No forced redundancies were implemented as part of these efficiency measures. A key driver of the success of these changes has been our genuine collaborative and consultative approach with our employees and their representatives.

The diversity of our workforce is a key strength in our delivery of high quality services, and we know that by harnessing different perspectives in different ways we will be better positioned to deliver the innovative thinking and solutions that will be required for the complex problems we face both now and in the future. Powerlink continues to build on the strong foundation of valuing diversity and inclusion to enhance our work environment, productivity and capability.

During 2016/17 we had two agreements in place, the Working At Powerlink Union Collective Agreement 2015 and the Powerlink Managers' Agreement 2014.

Leadership and business structure

In transforming our business to become more agile and responsive to our changing external environment, we reviewed and revised Powerlink's business and leadership structure.

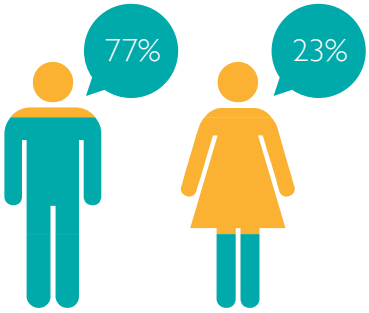
We successfully implemented a new business structure in response to our changing external environment. The new leadership structure and team will assist in driving a sustainable, high performing business that provides value to our customers, supports a constructive culture and delivers on Powerlink's mission, vision and values.

Organisational culture

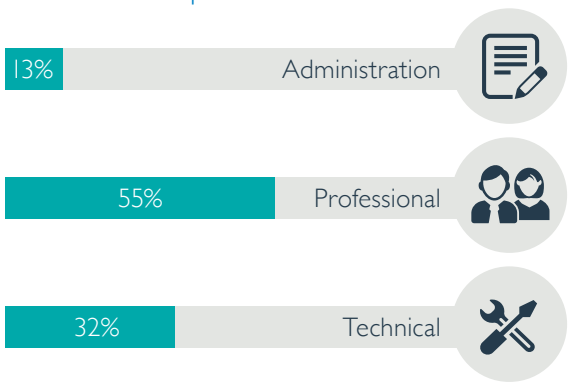
Supporting our employees and leaders through change was a key priority in 2016/17. We also focused on working with our people to continue Powerlink's culture change journey which aims to drive a productive and supportive culture that enables our employees to realise their potential.

Through extensive consultation and co-design with our employees, we identified a desired preferred culture. Complementing our desired culture is a strong focus on leadership development that fosters senior leaders that lead by example and guide employees to embody our preferred culture. We also undertook activities aimed at improving employee connection to Powerlink's mission and vision, employee involvement, upward communication and customer service.

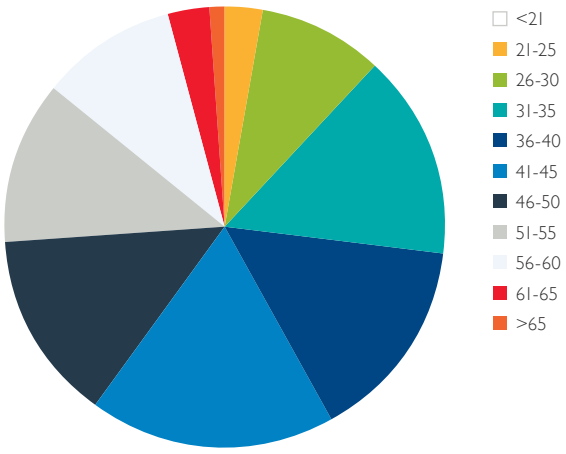
Powerlink gender composition



Powerlink occupational stream



Powerlink age profile



Joining forces with students from St Laurence's College to plant trees at the school's Runcorn Playing Fields.

Community

Corporate citizenship approach

In carrying out our business activities, Powerlink strives to act as a good corporate citizen through our operational performance, engagement with stakeholders and community relations activities. Our corporate citizenship approach in communities is a key driver of reputation and the social licence to operate granted to us by our stakeholders.

We are committed to building relationships with communities, local government and other stakeholders in the areas where we have current or planned operations.

Strategic partnerships

We seek to support community initiatives that focus on empowering communities, protecting and conserving the environment, supporting safety and wellbeing, and education.

Powerlink supported the Queensland State Emergency Service (QSES), in conjunction with Energex and Ergon Energy, by delivering an equipment program for SES groups around the state. The sponsorship funded new equipment for SES units, helping to enhance their response during emergency events. The support aligns with Powerlink's commitment to safety and emergency response, and working with local communities.

Powerlink and the Bulimba Creek Catchment Coordinating Committee (B4C) implemented an environmental rehabilitation project, planting 480 native plants in Wishart in Brisbane, near Powerlink's Runcorn to Belmont transmission line.

St Laurence's College collaborated with Powerlink and B4C to plant 300 native seedlings at the school's playing fields in Runcorn, which are traversed by Powerlink's Algester to Runcorn transmission line. Powerlink and B4C also presented a guest lecture to students about the importance of protecting waterways and environmental conservation.

To celebrate World Environment Day, Powerlink worked with students at Nashville and Geebung State Schools to complete on-ground garden maintenance activities and share environmental skills that support the school and local community.

Powerlink also partners with a number of professional and industry associations to support initiatives that progress and inform our industry.

Koala offset program

The growth of koala food and shelter trees at the Grandchester Koala Offset Project continued to outpace expectations. The continuing partnership between Powerlink, Ipswich City Council and Healthy Waterways and Catchments is delivering on-ground outcomes that protect the natural environment and wildlife.

Electric and magnetic fields

Electric and magnetic fields (EMFs) are found everywhere electricity or electrical equipment is being used. We understand some of Powerlink's community stakeholders have an interest in EMFs. Powerlink closely follows ongoing research and developments in this area, and takes advice about EMF from recognised national and international authorities including the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

In Australia, the Federal Government agency responsible for EMF regulation is ARPANSA. Powerlink complies with the guidelines set by ARPANSA. A fact sheet developed by ARPANSA, Electricity and Health, concludes: "The scientific evidence does not establish that exposure to the electric and magnetic fields found around the home, the office or near powerlines causes health effects."

Corporate governance

Powerlink Queensland and its wholly-owned subsidiaries operate and are managed within a corporate governance framework which encompasses an appropriate degree of accountability and transparency to all stakeholders.

Powerlink corporate governance framework

Shareholding Ministers

Our shareholders

Powerlink has two shareholders who hold the shares on behalf of the State of Queensland. Our shareholding Ministers, as at 30 June 2017, were:

- The Honourable Curtis Pitt, Treasurer and Minister for Trade and Investment, holding 50 per cent of the A class voting shares and 100 per cent of the B class non-voting shares.
- The Honourable Mark Bailey, Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply, holding 50 per cent of the A class voting shares.

Powerlink Queensland Board

Key accountabilities of the Board

The Powerlink Board establishes the overall corporate governance of the corporation and is responsible for:

- setting the corporation's values and standards of conduct, and ensuring that these are observed
- providing leadership of the corporation within a framework of prudent and effective controls
- setting the corporation's direction, strategies and financial objectives and ensuring that all necessary resources are available for the business to meet its objectives
- monitoring financial outcomes and the integrity of reporting; in particular, approving annual budgets and longer-term strategic and business plans
- endorsing the SCI
- monitoring management's performance and implementation of strategy, and ensuring appropriate processes for risk assessment, management and internal controls are in place
- ensuring an effective system of corporate governance exists
- disclosing to shareholding Ministers relevant information on the operations, financial performance and financial position of the corporation and its subsidiaries
- providing formal delegations of authority to the Chief Executive, management and other specified officers.

Membership and meetings

- All Directors, including the Chairman, are independent, non-executive Directors appointed by the Governor in Council in accordance with the GOC Act.
- In 2016/17, Powerlink held 11 formal meetings of Directors, which were supplemented with Flying Minutes. The attendance record of the Directors at meetings of the Board is presented in the Directors' Report section in the Annual Report.

Board Committees

Audit, Risk and Compliance Committee

The Committee endorses the corporation's internal audit program and risk management profile and provides a link between the corporation's auditors (internal and external) and the Board. The Committee meets with, and receives reports from, both the internal and external auditors. The Committee also assists the Board in the oversight of financial integrity and legal compliance.

People, Culture and Remuneration Committee

The Committee assists the Board in fulfilling its employer responsibilities by providing governance of key organisational people and culture matters, developing "fit for purpose" organisational policies that support Powerlink's strategic direction and the development of an appropriate organisational culture.

Chief Executive

Executive Team

Executive Committees

- Executive Committee for Environment
- Executive Committee for Security
- Executive Committee for Corporate Emergency Response
- Executive Committee for Health and Safety

Corporate governance in Powerlink

Powerlink Queensland is a corporation established under the *Government Owned Corporations Act 1993* (GOC Act) and is a registered public company under the *Corporations Act 2001*. The Board of Directors has overall responsibility for corporate governance of the corporation.

Directors are appointed by the Queensland Government and the Board reports to the nominated shareholding Ministers.

The Queensland Government has published its *Corporate Governance Guidelines for Government Owned Corporations* (Guidelines) which includes a *Code of Conduct and Conflicts of Interest Best Practice Guide for Government Owned Corporations*. The Guidelines outline the expectations of shareholding Ministers and describe a set of comprehensive corporate governance principles, and proper disclosure and reporting arrangements that are appropriate to GOCs. There were no revisions made to the Guidelines that required changes to Powerlink's corporate governance arrangements in 2016/17.

Corporate governance in Powerlink is managed through a framework of policies approved by the Board and supplemented by supporting standards, procedures and practices developed by management. The corporation commits to these to ensure appropriate accountability and control systems are in place to achieve business outcomes, and encourage and enhance sustainable business performance. This section of the Annual Report outlines Powerlink's corporate governance arrangements and describes its reporting and disclosure practices.

The Board

The Powerlink Board is responsible for the overall corporate governance of the corporation, setting the strategic direction articulated in Powerlink's SCI and five-year Corporate Plan.

The Board has regard to the Guidelines in the overall scope and application of corporate governance within Powerlink. The Board sets goals for management and establishes the policies and operational framework for the corporation. It monitors performance of the corporation, its Chief Executive, and senior management through regular direct reporting and via established committees.

Details relating to Powerlink Directors, Board Committee composition and meetings in 2016/17 are set out in the Directors' Report.

The table below sets out the balance and tenure of Board members at Powerlink as at 30 June 2017.

Board Balance	Board Tenure		Board Diversity	
1 Non-Executive Chairman	0-2 years	3	Female	60%
4 Non-Executive Directors	2-4 years	0	Male	40%
	4-6 years	1		
	6-8 years	1		

Corporate Governance Guidelines for GOCs – Queensland Government

Powerlink's corporate governance processes are consistent with the Guidelines issued by the Queensland Government. Powerlink's corporate governance arrangements in reference to the Guidelines are:

Principle 1: Foundations of management and oversight

The Board Charter, a summary of which is available on the Powerlink website, describes the Board's functions and responsibilities, which are to:

- set the corporation's values and standards of conduct and ensure that these are adhered to
- provide leadership of the corporation within a framework of prudent and effective controls which enable risks to be assessed and managed effectively
- in collaboration with management, develop and approve the corporation's direction, strategies and financial objectives, and ensure that all necessary resources are available for the business to meet its objectives
- monitor financial outcomes and the integrity of reporting
- monitor management's performance and implementation of strategy
- ensure an effective system of corporate governance exists.

The Board and management work together to establish and maintain a legal and ethical environment and framework that ensures accountability.

Day-to-day management of the consolidated entity's affairs and the implementation of the corporate strategy and business initiatives are formally delegated by the Board to the Chief Executive and senior management as set out in the delegations policy. These delegations are reviewed as considered necessary.

The Powerlink Board undertook its annual evaluation of the performance of the Chief Executive against pre-agreed business and individual targets. The Chief Executive evaluated the annual performance of each executive against pre-agreed business and individual targets, and submitted the outcomes of the evaluation to the Board for its consideration and approval.

The Board Handbook is a key resource identifying the major reference documents that are relevant and will assist the Powerlink Directors in undertaking their roles and responsibilities. The Handbook serves as both an induction and an ongoing reference guide for Directors, and is updated annually by the Company Secretary.

New Directors attend induction sessions which provide an overview of Powerlink's operations and policies, and information on the Board and Committee functions. The induction process assists the Directors to understand their roles and responsibilities.

Principle 2: Structure the Board to add value

At 30 June 2017, the Board comprised five independent non-executive Directors. All Directors are appointed by the Government in accordance with the GOC Act. There were changes to Powerlink's Directors in 2016/17:

- Director Joanna Brand resigned in August 2016.
- New Directors Paul Lucas, Sarah Zeljko and Peter Hudson were appointed in December 2016.
- Director Paul Lucas resigned in April 2017.

Details of the skills and experience of each current Director are presented separately in the Board of Directors section of this Annual Report. The table below provides an overview of the significant strengths of the current Directors.

The Directors' Report includes a listing of the terms of office and appointment date for each Director.

In the event of Directors requiring independent professional advice, it is provided at the expense of Powerlink. All Directors, including the Chairman, continue to exercise independent judgement in the conduct of their responsibilities.

The Board continually assesses the ongoing independence of the Directors. All Directors are required to disclose any potential conflicts of interest at the commencement of each Board meeting. Any such conflicts are recorded in the minutes of the meeting.

All Directors are considered to be independent. No Directors are considered to have material supplier or customer relationships with the corporation. A pre-determined specific materiality threshold has not been established by the Board. The Board's assessment of materiality is undertaken on a case-by-case basis taking into consideration the relevant facts and circumstances that may impact Director independence.

The Board annually reviews the individual and collective performance of the Directors and the Board, through a self-assessment by the Directors and input from the Chief Executive and Company Secretary, to assure itself that it operates in accordance with the Board Charter and the discharge of its responsibilities. A key element in this evaluation is the consideration of the continuing education and professional development of Directors.

In addition to business operational and performance matters, the Board specifically considers at each meeting key issues relevant to the business including safety, environment, stakeholder engagement and corporate governance.

In addition to the 2016/17 Board meetings, the Board held Strategic Planning and Risk Workshops.

The Board formally considers its information requirements on an annual basis to ensure it is receiving appropriate information to effectively carry out its responsibilities.

The Board having undertaken its annual self-assessment for 2016/17, concluded that it is fulfilling its role with no obvious gaps in its performance, and that there was good interaction and relations with both shareholding Ministers and Powerlink management.

A structured internal process is in place to review and evaluate the performance of Board Committees. Each Board Committee submits an Annual Report of its activities to the Board.

	Finance & commercial	Governmental & stakeholder relations	Business strategy development	Corporate governance & risk management	Industry knowledge	HR & IR
Julie Beeby	•		•	•	•	•
Peter Hudson	•	•	•		•	
Julie Martin				•	•	
Alan Millis		•	•	•	•	
Sarah Zeljko		•	•	•		•

Principle 3: Promote ethical and responsible decision making

The Board has a Code of Conduct that guides Directors in carrying out their duties and responsibilities, sets out expected standards of behaviour, and includes policies relating to conflict of interest issues. A summary of this document is available on the Powerlink website.

The Board has developed a Share Trading Policy, a summary of which is also available on the Powerlink website. The primary purpose of this policy is to mitigate the risk of inappropriate trading of shares by Powerlink employees, managers and Directors.

Each Director has a responsibility to declare any related interests, which are appropriately recorded and assessed for materiality on a case-by-case basis. Where appropriate, the Director does not participate in the Board's consideration of the interests disclosed.

All Powerlink Directors and management are expected to act with integrity and strive at all times to enhance the reputation and performance of the corporation.

Principle 4: Safeguard integrity in financial reporting

The Board has established two Board Committees to assist in fulfilling its corporate governance responsibilities:

- the Powerlink Audit, Risk and Compliance Committee
- the Powerlink People, Culture and Remuneration Committee.

These Committees have documented mandates that are reviewed on a regular basis, at least every two years. The membership of both committees consists of non-executive Directors. Details of Committee members at 30 June 2017, number of meetings during the year and attendance are presented in the Directors' Report.

Audit, Risk and Compliance Committee

Chairman: Mr Alan Millis

Members: Dr Julie Beeby and Mr Peter Hudson (from December 2016)

The Powerlink Audit, Risk and Compliance Committee endorses the corporation's internal audit program and risk management profile, and provides a link between the corporation's auditors (internal and external) and the Board. The Committee meets with, and receives reports from, both the internal and external auditors over the duration of the financial year.

The Committee is responsible for considering the annual statutory financial statements for subsequent consideration and approval by the Board. The Chief Executive and Chief Financial Officer are required to provide an annual declaration that the financial statements represent a true and fair view, and are in accordance with accounting standards. The processes the Chief Executive and the Chief Financial Officer have in place to support their certifications to the Board are also considered by the Committee.

The Committee also assesses and reports on issues relating to financial integrity, corporate processes for compliance with laws and regulations, codes of conduct and business risk management.

People, Culture and Remuneration Committee

Chairman: Ms Julie Martin

Members: Dr Julie Beeby and Ms Sarah Zeljko (from May 2017)

The Committee assists the Board in fulfilling its employer responsibilities by providing governance of key organisational people and culture matters, and developing "fit for purpose" organisational policies that support Powerlink's strategic direction and the development of an appropriate organisational culture.

Principle 5: Make timely and balanced disclosures

Powerlink has established processes to ensure it meets its disclosure and reporting obligations, including those to shareholding Ministers. Powerlink's reporting arrangements include the Annual Report, regulatory reports, Powerlink website and other public disclosures.

Principle 6: Respect the rights of shareholders

The Powerlink Board has a communication framework to promote effective communication with shareholding Ministers. The Board aims to ensure that shareholding Ministers are informed of all major developments affecting the corporation's state of affairs. This includes regular meetings with shareholding Ministers' representatives and departments, and information communicated formally through quarterly progress reports and the Annual Report.

Each year Powerlink prepares its SCI and five-year Corporate Plan, reflecting the outcomes of a comprehensive strategic and business planning process involving the Board and the Executive. Both documents are presented to shareholding Ministers.

Quarterly progress reports on the performance against the SCI are prepared by the Board and are submitted to shareholding Ministers.

Principle 7: Recognise and manage risk

Risk assessment processes are inherent within Powerlink's business. Powerlink has an approved Risk Management Policy that provides an overall framework and structure for the management of risk within Powerlink. Management regularly reports to the Board on key business risks.

An Executive Committee structure also operates in parallel with the Board Committees to address issues of health and safety, environmental management, security and corporate emergency management. Each of these Executive Committees submits reports to the Audit, Risk and Compliance Committee, or the People, Culture and Remuneration Committee through the Chief Executive.

The Executive Committee for Health and Safety develops and directs Powerlink's health and safety management practices, and also ensures that Powerlink complies with relevant health and safety legislation.

The Executive Committee for Environment develops appropriate strategic responses to environmental issues, as well as ensuring compliance with Powerlink policies and relevant environmental legislation.

The Executive Committee for Security provides guidance in the development and approval of the Powerlink Security Plan. The Committee reviews security incidents and considers necessary amendments to the plan in response to these events.

The Executive Committee for Corporate Emergency Management develops appropriate strategic responses to corporate emergencies and is responsible for maintaining corporate emergency management documentation.

The corporation's internal control framework is designed to provide reasonable assurance regarding the achievement of the corporation's objectives. Implicit within this framework is the prevention of fraud (including corruption). Powerlink has a range of strategies and approaches that provides an effective fraud and corruption control framework that is closely integrated with the corporation's enterprise information management systems.

Powerlink's Code of Conduct documents aim to ensure that Powerlink employees and those carrying out work for Powerlink perform their work cost effectively, efficiently, cooperatively, honestly, ethically and with respect and consideration for others.

Principle 8: Remunerate fairly and responsibly

Powerlink seeks to develop individuals to attain the skills and motivation necessary to excel in an environment of high achievement. High priority is given to selecting the best person for the job at all levels in the corporation, recognising the benefits of diversity, and investing in that person's potential through further training and development.

The membership and responsibilities of the Board's People, Culture and Remuneration Committee are presented above.

Powerlink's Remuneration Policy is designed to:

- attract and retain talented people with the skills to plan, develop, operate and maintain a large world class electricity transmission network; and
- reward and provide incentives for exceeding the key business performance targets.

The remuneration policy provides for performance-based payments for all permanent employees, with the payments directly linked to the performance of the individual or small teams against pre-agreed performance targets and the performance of the business.

The Working at Powerlink 2015 Union Collective Agreement was effective from March 2015, and the Powerlink Managers' Agreement 2014 was effective from January 2015. The Agreements allow for Powerlink and its employees to respond to targets agreed with our shareholding Ministers. They continue to focus Powerlink on developing a competitive and efficient workplace. They recognise that the economic health of the corporation and the wellbeing of all employees depend upon the success of a shared commitment by all parties to these Agreements.

Award employees may be eligible for performance-based payments that are delivered as gainsharing and performance pay. Gainsharing is a payment subject to Board approval. The gainsharing payment is made subject to the corporation's profitability target being exceeded and key organisation performance measures and stretch targets being achieved.

Performance pay is based on individual or small team performance targets, which are reviewed at least half yearly and rated at the end of the annual performance cycle. The individual performance targets are aligned with the overall business stretch targets of the corporation.

Managers and senior staff are employed on management contracts. Powerlink's remuneration policy for contract employees uses the concept of Total Fixed Remuneration (TFR), which includes employer superannuation contributions. In order to promote management focus, the remuneration policy provides for performance-based payments dependent on the performance against pre-agreed business and individual targets. The TFR level is reviewed annually based on consideration of economic and individual capability factors.

The fees paid to Directors for serving on the Board and on the Committees of the Board are determined by shareholding Ministers. Directors also receive reimbursement for expenditure incurred in performing their roles as Directors.

Shareholding Minister directions

There was one shareholding Ministers' direction in 2016/17:

- Powerlink 2016/17 Dividend.

Corporate entertainment and hospitality

The *GOC Corporate Entertainment and Hospitality Guidelines* establish reporting requirements for GOCs. Powerlink's corporate entertainment and hospitality expenditure for 2016/17 totalled $10,816. There were no events above the individual reporting threshold of $5,000.

Board of Directors

Julie Beeby

BSc (Hons I), PhD (Physical Chemistry), MBA, FAICD

Chairman of the Board
(Appointed to Chairman December 2014, Board Member since 2008)

Julie has worked in the minerals and petroleum industries in Australia for more than 25 years and her career has included work for major Australian and US resources companies, including recently as Chief Executive Officer of WestSide Corporation, an ASX-listed, Queensland-based coal seam gas company.

Julie commenced her career in mineral processing research, and went on to develop her technical, strategic and business skills through a succession of successful executive positions in chemical plant, coal seam gas, explosives and mining areas.

Julie is currently a non-executive director of Whitehaven Coal Ltd and OzMinerals Ltd and has previously held non-executive director positions on ASX listed companies, industry associations and research organisations.

Julie is a member of the Powerlink Board's Audit, Risk and Compliance Committee, and the People, Culture and Remuneration Committee.

Peter Hudson

BA, MAICD, CA

Board Member
(Appointed 2016)

Peter has extensive experience in the energy, mining, transport and telecommunications sectors. Currently Managing Director at investment business Stradbroke Capital, Peter is also a director of Youngcare Ltd and the Queensland Theatre Company.

Peter was a partner at global advisory firm KPMG and for the last 10 years specialised in assisting governments around Australia in undertaking restructuring processes.

Peter is a member of the Powerlink Board's Audit, Risk and Compliance Committee.

Julie Martin

BE (Hons), MIEAust, GAICD

Board Member
(Appointed 2011)

Julie has more than 20 years' experience as an electrical engineer, having played a key role in a variety of large-scale infrastructure projects within Australia and internationally. She is currently the General Manager (QLD, WA, NT, PNG) at EIC Activities, the CIMIC Group's engineering and technical services business. Prior to joining EIC, Julie held the position of Power Site Manager with CPB Contractors (formerly Theiss), responsible for the delivery of QGC's Surat North Project high voltage infrastructure.

In 2008 Julie won the Women in Community/Public Sector – Engineering category of the Smart Women – Smart State Awards for her work in the TrackStar Alliance program to deliver $700 million worth of rail projects in South East Queensland.

Julie is the Chairman of the Powerlink Board's People, Culture and Remuneration Committee.

Alan Millis

BE (Hons), MEngSc, DipCompSc, BEcon, GAICD

Board Member
(Appointed 2015)

Alan has more than 40 years' experience in the energy sector with management roles covering corporatisation of the Queensland Energy Government Owned Corporations, general energy policy, development of the national energy markets, energy market trading and risk management.

Alan has held a number of senior executive roles including General Manager and Deputy Director General within the Queensland Government departments responsible for energy as well as the role of Queensland Energy Regulator.

Alan has a detailed knowledge of the operational and regulatory environment of Queensland and national electricity sectors and the issues they face going forward.

Alan is the Chairman of the Powerlink Board's Audit, Risk and Compliance Committee.

Sarah Zeljko

LLB, GAICD

Board Member
(Appointed 2016)

Sarah has over 20 years' experience in the legal sector including extensive executive leadership experience in the infrastructure, energy, water, mining and manufacturing industries in large government and private corporations.

Sarah is currently General Counsel and Company Secretary of G8 Education, a top 200 ASX listed entity and was previously the General Counsel and Company Secretary for the Wiggins Island Coal Export Terminal and Cement Australia.

Sarah specialises in the areas of corporate governance, risk management, compliance, commercial negotiations and strategy.

Sarah is a member of the Powerlink Board's People, Culture and Remuneration Committee.

Executive Team

Merryn York

BE (Hons), MEngSc, Grad Cert AppLaw, FIEAust, RPEQ, GAICD

Chief Executive

Merryn has more than 25 years' experience in the Queensland electricity industry. Her career encompasses experience in strategic business development and asset management to optimise the long-term return on investment, network planning, regulatory affairs, customer management and strategic development of the transmission network.

Merryn attends the Powerlink Board's Audit, Risk and Compliance Committee, and the People, Culture and Remuneration Committee meetings.

Stewart Bell

BEng, PhD, MBA, CEng, FIET, RPEQ

Executive General Manager Delivery and Technical Solutions

Stewart has more than 20 years' experience in the electricity industry, including management roles in operations, project delivery and asset investment.

Stewart is responsible for Powerlink's asset management strategies and standards, all aspects of Powerlink's capital works program, and the acquisition and management of land and property including landholder relations.

Maurie Brennan

BBus, MBA, CPA, FAICD

Chief Financial Officer

Maurie has provided strategic financial and commercial advice to public sector organisations in Queensland's electricity industry since 1979.

At Powerlink, Maurie manages all finance, tax, treasury, investment analysis, contract management, internal audit, insurance, and legal, business and risk services. He is also Powerlink's Company Secretary.

Gary Edwards

BBus, AD Elec Eng

Executive General Manager Operations and Service Delivery

Gary is an experienced senior leader with more than 35 years' experience in technical and leadership roles within the energy industry.

Gary is responsible for delivering Powerlink's state-wide operations including 24/7 real time operations, all field maintenance, telecommunication services, operational technology, laboratory and warehousing services.

Cathy Heffernan

GradCertLegalSt, Qualified Workplace Investigator, Qualified Mediator

Executive General Manager People and Corporate Services

Cathy has more than 25 years' experience across human resources, change management, customer and corporate services, and health, safety and environment functions.

Prior to joining Powerlink, Cathy held the role of Assistant Director General Human Resources at the Department of Education and Training, where she led the strategic human resources agenda.

At Powerlink, Cathy leads the people and culture, business information technology, communications, and health, safety and environment functions.

Kevin Kehl

BE (Hons), GradCertElecSupplyEng, GAICD

Executive General Manager Strategy and Business Development

Kevin is an experienced senior executive with more than 30 years' involvement in the electricity industry. He joins Powerlink from Energy Queensland where he held the role of Executive General Manager Strategy, Portfolio and Innovation.

Kevin leads Powerlink's strategy, business planning, network regulation, business development, network portfolio and business resilience functions.

Statistical summary

The following tables provide an overview of Powerlink's assets and network equipment across Queensland.

Substations/switching stations and communication sites as at 30 June 2017

Voltage	Substations	Cable transitions	Communication sites
330kV	4	0	
275kV	43	1	
132kV	78	3	
110kV	14	5	
66kV	0	1	
Total	**139**	**10**	**85***

*3 communication sites decommissioned: Pingin Hill Repeater, Mt Nutt Repeater, Mt Seaview Repeater

Substations/switching stations and transformers added in 2016/17

Voltage	Substations		Transformers		
	Total number	Location	Total number	Total Rating (MVA)	Location
330kV	0		0		
275kV	0		1	250	Mudgeeraba
132kV	0		0		
110kV	0		0		
Total	**0**		**1**	**250**	

Circuit breakers as at 30 June 2017

Voltage	Total number
330kV	30
275kV	513
132kV	551
110kV	271
66kV*	24
Total	**1389**

* equal to or less than 66kV

Circuit breakers added in 2016/17

Voltage	Circuit breakers	Location
330kV	-1	Braemar
275kV	0	
132kV	-2	Rockhampton
110kV	-2	Mudgeeraba
66kV*	0	
Total	**-5**	

* equal to or less than 66kV

Capacitor banks, shunt reactors and Static VAr Compensators added in 2016/17

Voltage	Capacitor banks		Reactors		SVCs		Location
	Total	MVAr	Total	MVAr	Total	MVAr	
330kV	0	0.0	0	0.0	0	0.0	
275kV	0	0.0	0	0.0	0	0.0	
132kV	-1	-48.0	0	0.0	0	0.0	Rockhampton
110kV	-1	-37.5	0	0.0	0	0.0	Mudgeeraba
Total	**-2**	**-85.5**	**0**	**0.0**	**0**	**0.0**	

Capacitor banks, shunt reactors and Static Var Compensators as at 30 June 2017

Voltage	Capacitor banks		Reactors		SVCs	
	Total	MVAr	Total	MVAr	Total	MVAr
330kV	3	440.0	4	144.0	0	
275kV	28	3880.0	18	846.0	8	2510.0
132kV	35	1555.0	0		15	1881.0
110kV	33	1825.2	0		0	
66kV*	5	96.0	2	42.4	0	
Total	**104**	**7796.2**	**24**	**1032.4**	**23**	**4391.0**

* equal to or less than 66kV

Transmission lines and underground cables added in 2016/17

Voltage	Transmission line		Underground cable	
	Route km	Circuit km	Route km	Circuit km
330kV	0	0	0	0
275kV	0	0	0	0
132kV	-98	-196	0	0
110kV	0	0	0	0
66kV	0	0	0	0
Total	**-98***	**-196***	**0**	**0**

* Proserpine to Mackay transmission line decommissioned

Five-year history of transmission lines and underground cables as at 30 June 2017										
Voltage^	2013		2014		2015		2016		2017	
	Route km	Circuit km	Route km	Circuit km	Route km	Circuit km	Route km	Circuit km	Route km	Circuit km
Transmission lines										
330kV	348	696	348	696	348	696	348	696	348	696
275kV	6293	8981	6512	9419	6557	9509	6693	9781	6693	9781
132kV	2820	4521	2841	4564	2787	4458	2867	4616	2769	4420
110kV	222	420	215	413	215	413	215	413	215	413
66kV*	4	4	4	4	4	4	4	4	4	4
Total lines	**9687**	**14622**	**9920**	**15096**	**9911**	**15080**	**10127**	**15510**	**10029**	**15314**
Underground cables										
275kV	10	10	10	10	10	10	10	10	10	10
132kV	4	4	4	4	4	4	4	4	4	4
110kV	8	8	8	8	8	8	8	8	8	8
66kV*	1	1	1	1	1	1	1	1	1	1
Total cables	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
Total lines & cables	**9710**	**14645**	**9943**	**15119**	**9934**	**15103**	**10150**	**15533**	**10052**	**15337**

* equal to or less than 66kV
^ as constructed voltages

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Contact us

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