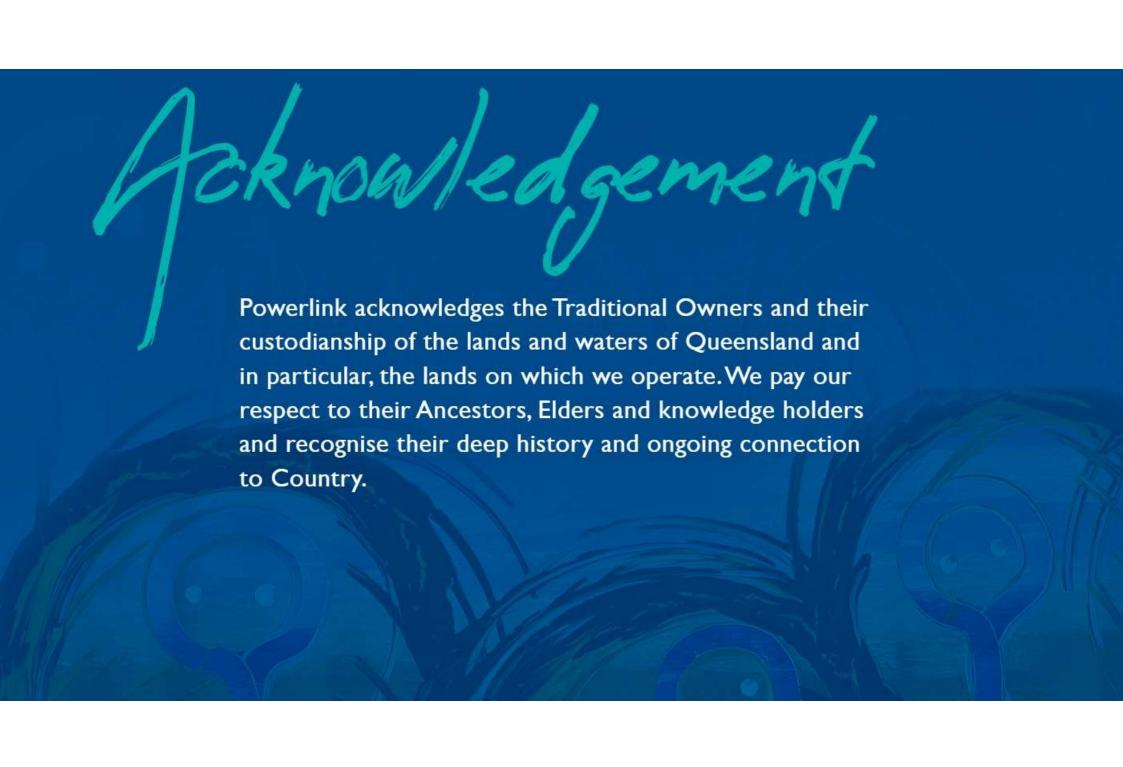


Customer Panel Meeting

1pm – 4pm

September 2023



About this information

Thank you for accessing this information from our Customer Panel meeting

We publish information in connection with our customer panel on our website, for information purposes only. While we make every effort to make sure the information regarding our customer panel is informative, this information may reflect works in progress and may be updated or amended from time to time. You should not rely on the information as a substitute for obtaining your own detailed independent advice. The information does not constitute legal, regulatory or business advice, and we do not guarantee its accuracy, suitability, fitness for purpose, reliability or completeness.

Information regarding our customer panel may include the views or recommendations of third parties and does not necessarily reflect the views of Powerlink Queensland or indicate a commitment by us to a particular course of action.



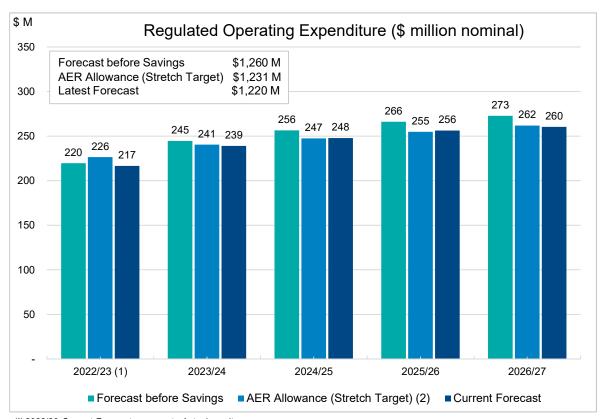
Agenda

- Welcome
- Energy Charter Powerlink Customer Scorecard annual report-backs:
 - 01: Actions to help meet our regulated operating expenditure target for the
 - 2023-27 regulatory period. Additional capex updates.
 - 02: Key outcomes from the Uniting Energy Program.
- Break
- Ring fencing regulatory change
- Energy joint CEO accountability forum: co-design of scope
- System Strength
- Wrap-up and close





Summary – Progress to Targets



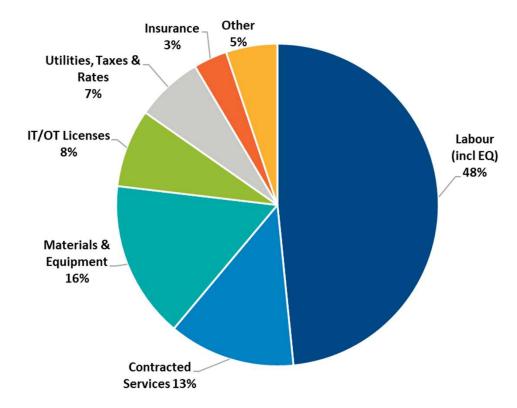
- (1) 2022/23 Current Forecast represents Actual result.
- (2) AER Allowance updated for changes in actual / forecast inflation.

- Committed to maintaining its regulatory operating expenditure at a consistent level compared to the 2018/19 base year.
- Regulated operating expenditure in 2022/23 was \$9M below the AER Allowance.
- Latest forecast for the 2023/27 regulatory period has the AER Operating Expenditure \$11M below the allowance.
- Global cost pressures are impacting our business.
- In response business is active in identifying opportunities to maximise value, that will ultimately benefit customers.
- During the quarterly planning cycles the business reviews latest forecasts to understand any additional levers that would extract value.



Breakdown Regulated Operating Expenditure

Regulated Operating Expenditure Cost Breakdown



The global cost pressures are having an impact on different aspects. This includes:-

- Competition for Resources
- Salary and Wage Increases
- Materials and equipment
- Information technology costs
- Foreign Currency Impact
- Business Growth and Cost Distribution
- Value Maximisation of Expenditure





Inventory Philosophy Review

Past Practice

- Just-In-Time (JIT) approach adopted for materials required for Projects
- Just-In-Case (JIC) approach adopted for maintenance, emergency repairs
- Materials kept in Warehouse under Project codes - if projects are delayed it increases WIP
- JIT adds risk to delivery of projects reliant on stable and efficient supply chain
- JIT aims to hold minimal inventory minimising cash holding, floor space

New Practice

- Just-In-Case approach for long lead items for Projects as well as maintenance, emergency repairs
- Just-In-Time approach for short lead time items for projects
- Increase in inventory levels to minimise risk of supply chain impacts
- Reduces risk of delivery of projects on time and within budget
- Provide agility by able to respond to immediate demands of equipment
- Drives the need for more standardisation of products

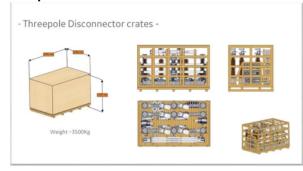


High Voltage Disconnectors

- Threepole Disconnector crates -

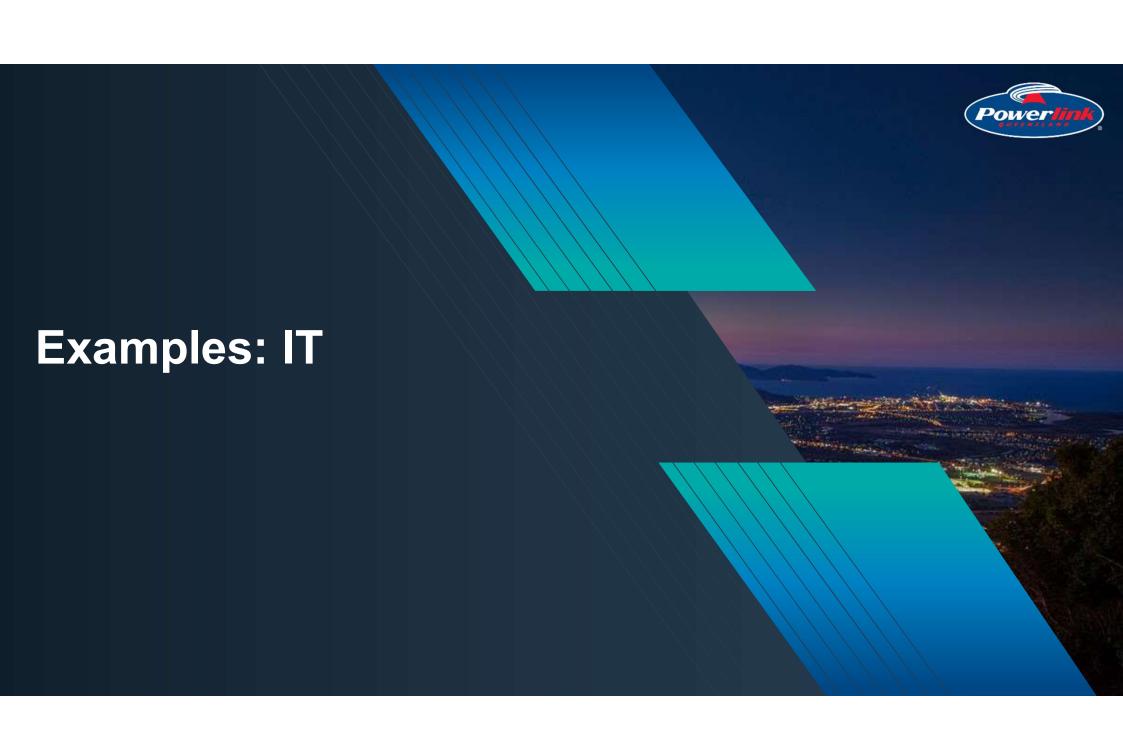
Issue: Time, Quality, Efficiency, Cost challenges with current method Solution: Pre-Assembled Disconnectors

- Minimal work required on site for final install
- Assembly conducted by Subject Matter Experts at factory providing assurance of quality and operation
- Reduction of site works allowing skilled resources to focus on other tasks more suitable for their skill set
- Increase in cost of delivery which is offset by reduction in site assembly costs. Net savings.
- Factory support available.
- Estimate to reduce failure rate significantly which will also save costs.
- Ease of storage in warehouse and on site prior to final installation









Managing IT Costs

Challenges

- Increasing Cloud and Software Licensing costs
 - Global supply chain impacts are driving cloud and software costs up
 - These costs are being passed on to customers including Powerlink





- Increasing Security costs
 - Security costs are another major driver to increasing software licensing costs
 - As Cyber threats become more sophisticated, the cost of security is rising
 - Vendors are investing more in security to protect their software which is being passed on to customers



Managing IT Costs (cont...)

Approach to Offset Increasing Costs

- With the increased impact of widespread licensing price increases as well as growing cloud and security costs, Powerlink software support & licensing costs will continue to grow.
- Powerlink is trying to offset software costs by consolidating its software and platforms, which can reduce complexity and functional redundancy.
 - Powerlink is moving many applications to its Microsoft environment either to host or to replace with a consolidated solution.
 - While this also comes at a cost, the licensing can be reused for multiple solutions.
- Powerlink has also implemented demand management and vendor negotiation approaches, which has helped to optimize its software usage to offset increased costs elsewhere
- Examples include production rationalisation for Identity Management and Backup solutions or successful vendor negotiations for EDRMS (Objective) and other enterprise solutions (Microsoft, SAP) to ensure best value for Powerlink.



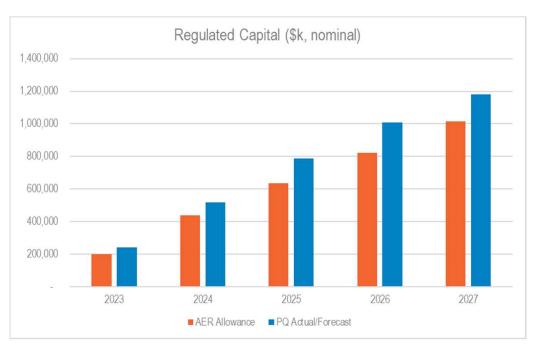


Regulated Capital Expenditure Actual and Forecast 2023-27

Customer Panel

21 September 2023

Regulated Capital Forecast 2023-27



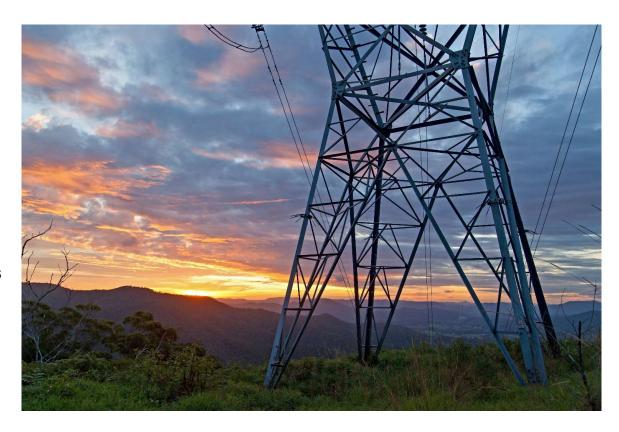
* AER allowance recast for actual/forecast CPI (Nov 22)

- \$41 million (20%) over capital allowance for FY23
- Regulatory period 2023-27 forecast exceeds AER allowance by approx. \$165 million (16%)
- Significant increases due to a number of factors, incl. materials, equipment and contractor prices
 - scarcity of materials and labour, rather than underlying CPI and commodity prices
 - challenging conditions for delivery of major operational technology projects



Example initiatives to manage capex

- Two stage approval process implemented for regulated network capital projects
- Asset Reinvestment Review provides for targeted approach to transmission line refit works, and maintain optionality for significant investments during period of significant expansion
- Secondary systems replacement trial of in-panel replacement of relays
- Development of "Portfolio Risk System" to calibrate risk quantification across different assets and provide whole of system risk management focus for capex prioritisation.





Potential consequences of forecast

- Powerlink will continue to work to drive reductions in its regulated capex program for the rest of the current regulatory control period
- But, as a business, we will not jeopardise safety or service levels.
- The National Electricity Rules provide for a review of the prudency and efficiency of regulated capex within the regulatory control period when the capital allowance is exceeded
- Mindful of impact on customers prudent and efficient capex
- Customers and Powerlink share the impact of the overspend for five years from incurrence of capex, under Capital Expenditure Sharing Scheme





Impact Update

Queensland Households in energy stress that we've helped together

Program delivery data from: Jan 2022 – Aug 2023

- No. households helped
- Referral conversions
- Support provided



What our clients are experiencing



93% unable to pay electricity bill on time



34% unable to meet rent or mortgage on time



2 in 3

presented with at least three combinations



78% unable to pay gas bill on time



71/0
asked family or
friends for money
to pay bills



69% asked for community



50%
Went without meals to pay bills



pawned or sold something to pay bills

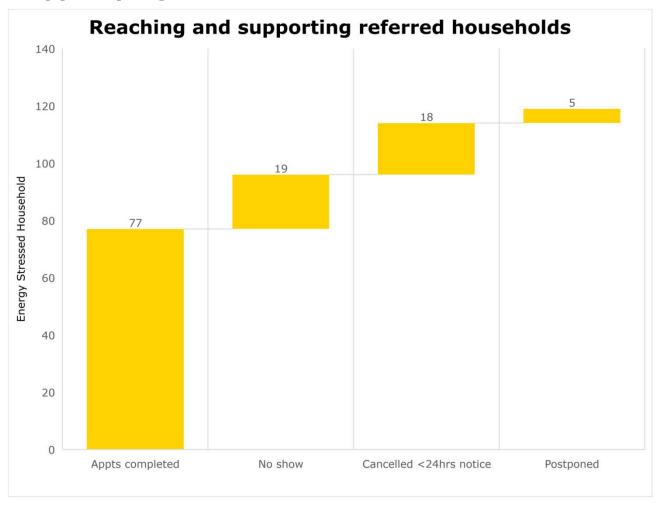


59% unable to pay credit card on time



Total Households supported & referral conversions

Successfully connecting with referred clients to provide the energy support program



119

Households referred from Queensland Community organisations

77 appointments completed

65% conversion rate

Supports provided: Other energy financial/affordability supports

Financial support provided	No.	%
Qld Electricity Rebate*	27	35%
Medical Energy Rebate	4	5%
Life support	0	0%
Energy efficiency advice	77	100%
Application of HEEAS relief	27	35%
Switched to better offer – current retailer	14	18%
Switched to better offer – new retailer	0	0%
Affordable payment plan established	30	39%
Referral to retailer hardship program	30	39%
Assisted to place account on hold	5	6%
Budgeting support	6	8%
Established matching payment incentive	3	4%

35%

Of referred households were not receiving the Queensland electricity rebate – the government's core support mechanism

18%

Of these highly energy stressed households were on retail offers that were more expensive than they needed to be, with savings possible 'simply' by switching *within* their current retailer.



Quantified support

- Energy efficiency advice \$26,950
- Application of electricity concession* \$10,044
- Application of HEEAS relief \$12,150
- Switched to better offer current retailer \$2,100

*Future impact updates will include other rebates

Uniting

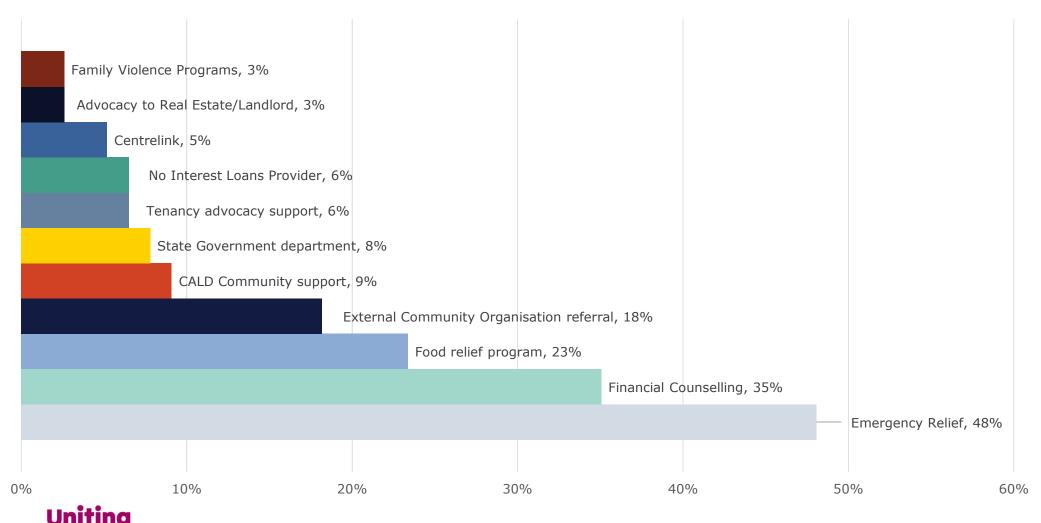
\$51,244

Quantified benefits, to households

\$24,294 direct cost savings/debt relief

\$26,950 energy efficiency advice

Supports provided: Referral and advocacy



Support provided: Energy efficiency tips shared

				Use clothes lin where possible					eracy,
			Clean filter on air conditioner, 43%						
Cooling temperature setting between 24-26C, 79%	Seal Draughts, 62%	Use of low-cost heating items (e.g. electric throw), 58% Switch cooling off when out of the house, 39%	Switch cooling off	Switch heating off overnight or when out of the house, 31%				s Service air conditioner, 26%	
	when out of the house, 39% Install external shading on entertainment appliances off at windows for		when out of the	Close doors	Service heating unit, 18%		Turn off extra fridge/freez er when not needed,		Servic e hot water syste m,
Heating temperature setting between 18-21C, 65%		windows and curtains when heating, 23%	Wash cold w 18%	clothes in ater,	Rep air frid ge s	r Finfo frma	Re Re pai pai r f h		



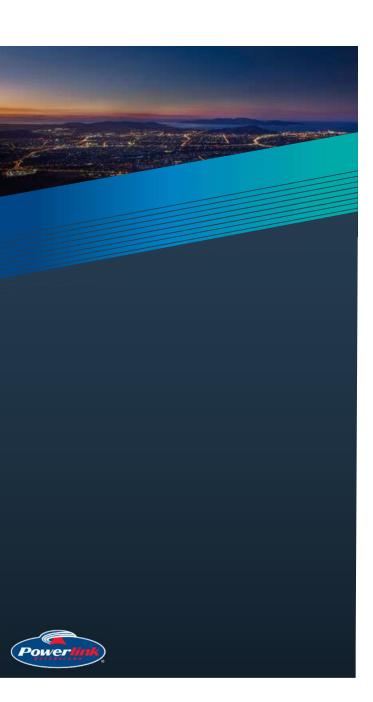
Thank you.

Matt Cairns, Senior Manager

M: 0466 949 826



Learn More unitingvictas.org.au



Afternoon Tea Break



Ring-fencing – The Basics

- What is ring-fencing?
 - Obligations on a business to separate (ring-fence) prescribed transmission services from non-prescribed transmission services.
 - These obligations may relate to, for example:
 - Cost allocation or accounting separation;
 - Functional separation of different services, activities or staff (eg. marketing staff);
 - Information sharing.
- Ring-fencing is designed to address two potential harms:
 - Cross-subsidisation between prescribed and non-prescribed activities; and
 - Discrimination in favour of affiliates or against competitors that could impact competition.



Ring-fencing – what's coming?

- New AER Electricity Transmission Ring-fencing Guidelines to commence in full on 1 March 2024.
- AER pending Rule change to include negotiated as well as prescribed transmission services within the ringfence.

Challenges?

- Marketing staff potential need to duplicate our customer connections team
- Limits to our ability to provide other services
- Restrictions around sharing information



Ring-fencing – Our Approach

Proposed Powerlink Approach

Comply where we can, vary where we must

We're here to serve Queenslanders

Deliver QEJP – REZs, Super Grid, Storage, Copperstring

Comply where we can	Vary where we must
Do everything we can to meet accounting/cost allocation requirements	 Retain 'one-stop-shop' business model and continue to deliver value to our customers
 No discrimination against competitors in providing prescribed Tx services Compliance reporting to AER 	 Play a central coordination function Want ability to use information to benefit all customers





October 11th Joint CEO Accountability Forum

- CS Energy, Energy Queensland, Powerlink joint forum
- CEOs, Senior Executives and Subject Matter Experts preparing and attending
- Session
 - Purpose
 - Draft scope/structure:
 - Looking back
 - Looking forward
 - Working session(s)



Working Session

- Looking back
 - Questions & feedback received in advance will be addressed
 - What feedback or question/s do you have for Powerlink on our reported activities for fy23 based on our Disclosure?
- Where we are up to with the energy transformation and looking forward
 - There will be time allocated for questions and feedback
 - 1 3 key questions you want our CEOs/Senior Execs to respond to about the future? (please prioritise your qns)
 - What do you want to know from our CEOs and Senior Executive about our future outlook overall?
 - Each organisation has set forward looking priorities (in their own format)
 - What do you want to understand about these priorities at this forum? Why?





WHAT IS SYSTEM STRENGTH

- The transition from conventional generation to intermittent renewable energy generation creates power network challenges.
- System strength is an attribute that describes how well the power system can return to normal operation following a disturbance or fault.
- Adequate system strength is required to maintain power quality and ensure, among other things, the stable operation of renewable connected to the HV network



Enables the network to maintain voltages during network disturbances and faults



Enables generation, to stay connected during system disturbances



Only acts locally and contribution reduces with distance



WHAT IMPROVES SYSTEM STRENGTH

Technologies that improve system strength in a HV network

Synchronous condensers

Conversion of generators at retired fossil fuel plant to synchronous operation

Pump hydro energy storage

Grid forming inverters with battery reserve

WHAT DOES THIS MEAN FOR POWERLINK

- Powerlink now has a new role of System Strength Service Provider (SSSP). This role requires Powerlink to plan
 for the required system strength as per AEMO's forecast for the next 10 years.
- In the past system strength services have been embedded into electricity prices and now the cost of system strength services are being unbundled from electricity cost. Traditionally these services have been provided as a by product of synchronous generation.
- To meet the new system strength standard, Powerlink will incur costs to provide and/or procure system strength resources to:
 - meet network performance standards; and
 - host the efficient level of renewable connections at various locations on the HV network.
- From 1 July 2023, system strength charges will apply to connecting parties who come under the new framework and use system strength but choose not to self-remediate their system strength impact on the network.



MARKET SUBMISSIONS FOR SYSTEM STRENGTH

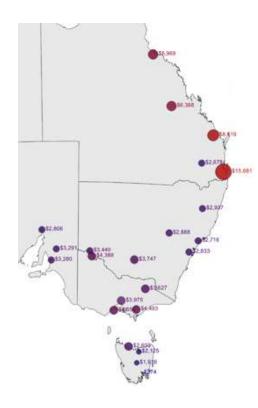
PQ seeking market submissions for a portfolio of system strength services

- PQ seeking a portfolio of system strength services to meet system strength forecasts out to 2033
- The type of technologies expected are:
 - Conversions of coal fired generators
 - Synchronous condensers
 - Pumped storage hydro
 - Grid forming batteries
- The submissions from the market through the RIT-T process were received in mid July 2023 and are currently being assessed.





Feedback on Powerlink's System Strength Unit Prices



- Powerlink published the SSUPs which apply from 1 July 2023 and apply to June 2027 (reset every 5 years).
- The map adjacent sets out Powerlink's SSUP as a comparison to TNSPs across Australia noting Queensland's SSUPs are on average higher than other States.
- Recent Generator feedback on Powerlink's published SSUPs highlights:
 - 5 years is too short for generator certainty in business cases for projects;
 - Powerlink's SSUP was built on traditional technology which is a higher price point than the recent RIT-T market submission of various technologies for system strength.
- The price signal created by the current SSUPs has resulted in current proponents indicating they will be self remediating for System Strength causing a potential delay in renewable generators connecting in Queensland.
- Powerlink now looking at options to change SSUP costs to be more cost effective





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