Powerlink's Customer Panel Meeting

27 February 2020

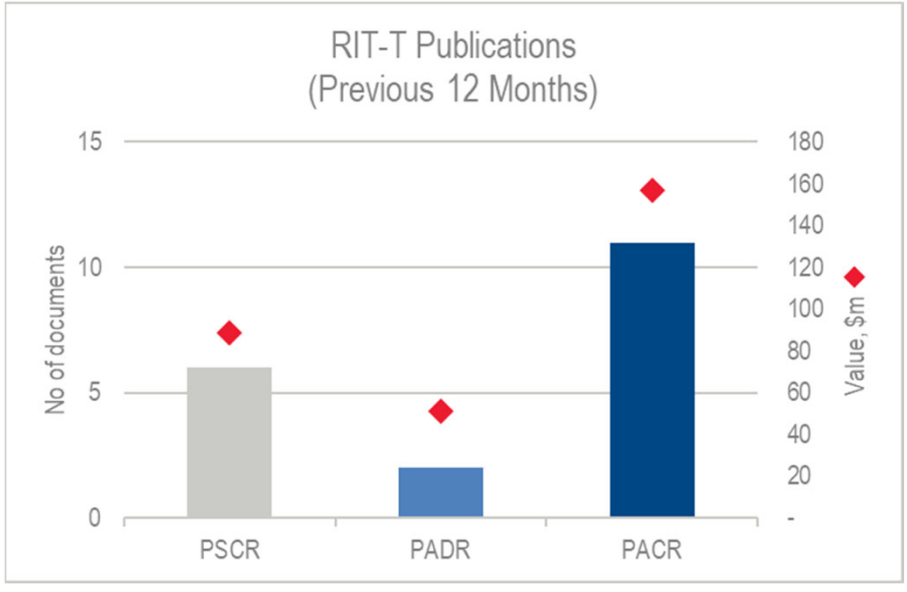
Agenda

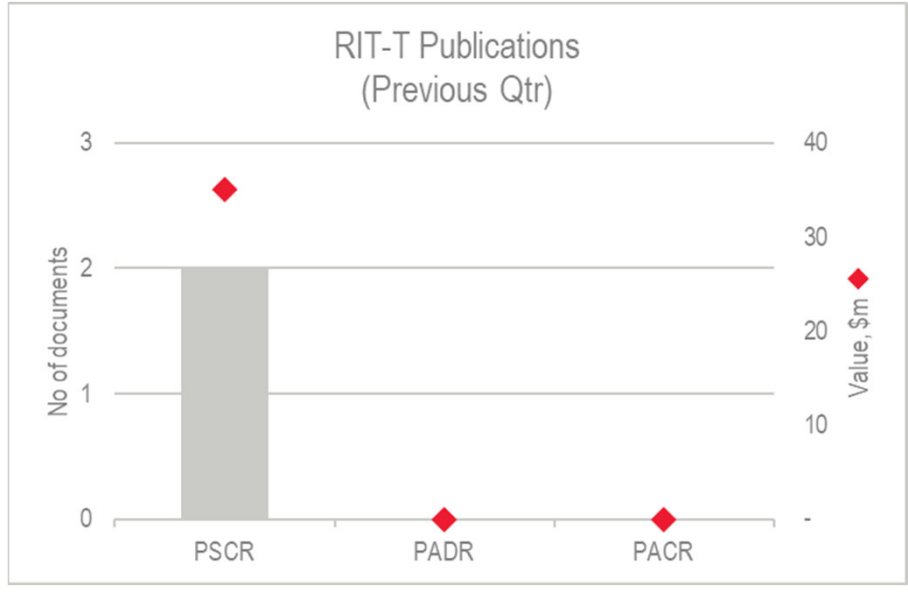
- Welcome and introductions
- Update on RIT-T for replacement projects
- AEMO's Integrated System Plan (ISP)
- Non-network IT expenditure – Benefits Realisation Framework
- Update from Revenue Proposal Reference Group
- Stakeholder perception survey and Energy Charter update
- *Afternoon tea break*
- Business Narrative
- Review and update engagement approach for 2023-27 Revenue Determination process
- Transmission pricing consultation
- Close and thanks

Update on RIT-T for replacement projects

Roger Smith
Manager Network & Alternate Solutions

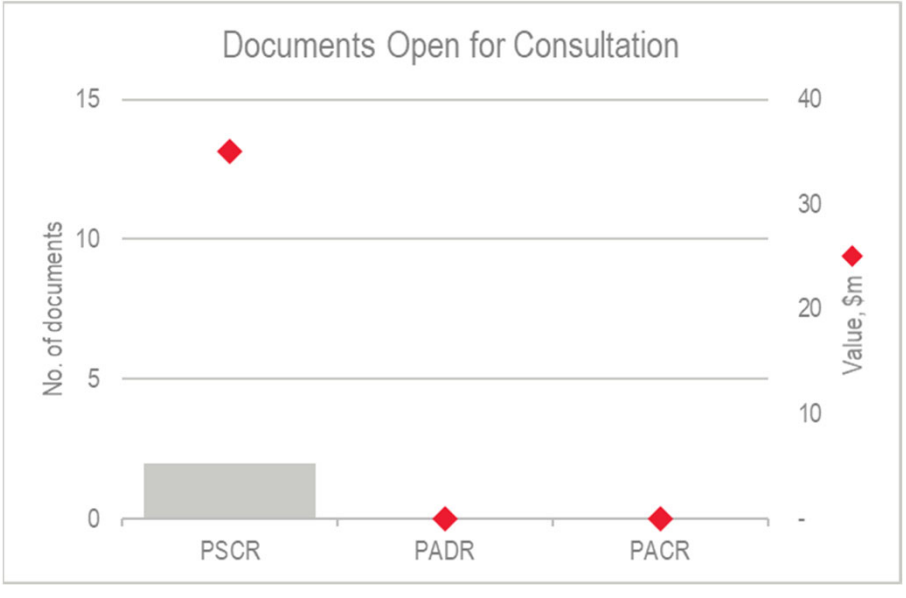
RIT-T consultations in progress and upcoming

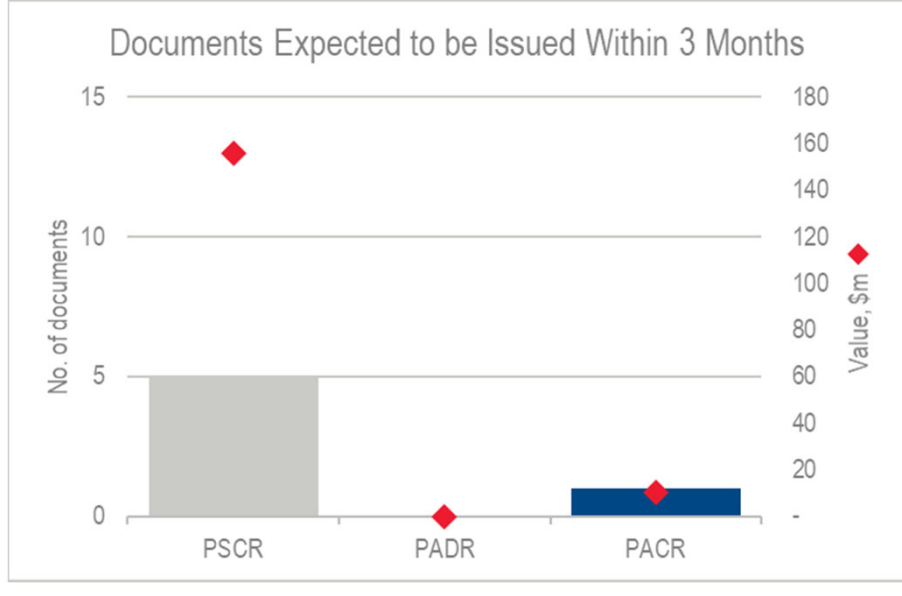




Current as at February 2020

RIT-T consultations in progress and upcoming





Current as at February 2020

RIT-T consultations in progress and upcoming

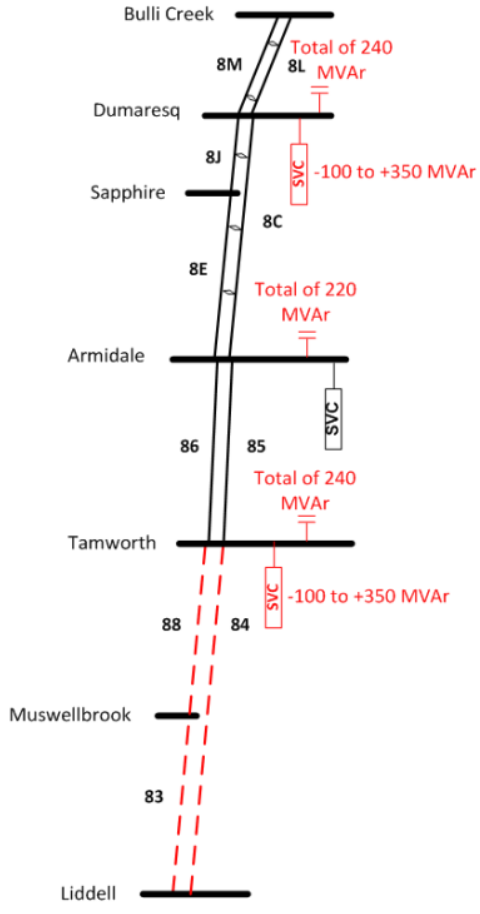
Engagement level	Project characteristics	RIT-T consultations	Proposed engagement activities
Minor (PADR Exempt)	• Non-network options unlikely • No material market benefits identified • Preferred option <$41 million	• Mt England Secondary Systems • Gladstone South (& QAL West) Secondary Systems • Cairns secondary systems • Innisfail secondary systems • Davies Creek to Bayview Heights transmission line refit • Broadsound bus reactor (TBC)	• Notification to Powerlink Non-Network Engagement Stakeholder Register • AEMO Notice and summary • Publication of RIT-T project details on Powerlink website • Dedicated email contact to Customer Panel members • Alerts through Powerlink's Twitter and LinkedIn accounts
Normal	• Minor network reconfiguration/ material impact on network users • Possibility of non-network options • Material market benefits identified	• Ross to Chalumbin transmission line refit (TBC)	In addition to engagement activities at minor level: • Webinars • Stakeholder briefings • Discussion at Powerlink's Customer Panel
Complex	• Network reconfiguration/material impact on multiple network users • Likelihood of non-network options • Significant market benefits identified		In addition to engagement activities at normal level: • Stakeholder engagement plan • Phone calls to key stakeholders • Emails to all identified stakeholders • Dedicated engagement forum to seek feedback on options

RIT-T update – Expanding transfer capacity on Qld/NSW interconnector

- PACR issued 20 December 2019
- Dispute period ended 22 January 2020 – no disputes raised
- AER contingent project application process underway
- PACR confirms selection of Option 1a
  - approximately $170 million in net benefits over the assessment period
  - reduce the need for new generation and large-scale storage in NSW following Liddell Power Station's forecast retirement
  - generate sufficient benefits to recover the project capital costs seven years after the option is commissioned.

RIT-T update – Expanding transfer capacity on Qld/NSW interconnector

- Key components of Option 1A:
  - uprating the Liddell to Tamworth lines
  - installing new dynamic reactive support at Tamworth and Dumaresq
  - installing shunt capacitor banks
- Works due to be completed in stages with all stages completed in 2022.



RIT-T update – Expanding transfer capacity on Qld/NSW interconnector

- Non-network option of a ‘virtual transmission line’
  - comprises grid-connected battery systems and/or braking resistors
  - magnitude requires substantive additional network testing to determine technical feasibility (~12 months)
  - may form a potential credible non-network option as part of the proposed medium term QNI upgrade.
- Powerlink undertaking the necessary preparatory activities and will work with TransGrid to develop a schedule to publish the PADR for the proposed medium term QNI upgrade
  - PADR by 10 December 2021 allows for comprehensive assessment of the technical feasibility of virtual transmission line technology (encourage submissions to ISP).

AEMO’s 2020 Draft Integrated System Plan (ISP)

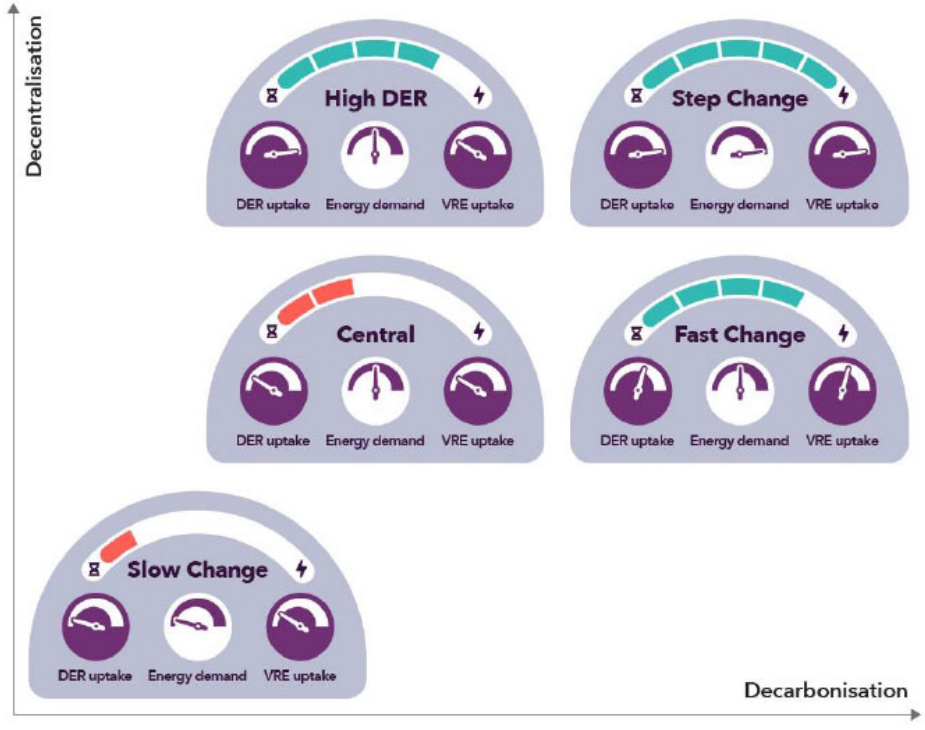
Enrique Montiel
Senior Planning Engineer Network Limitation

Agenda

- AEMO's analysis approach
- The plan
- Powerlink's submission

AEMO's analysis approach

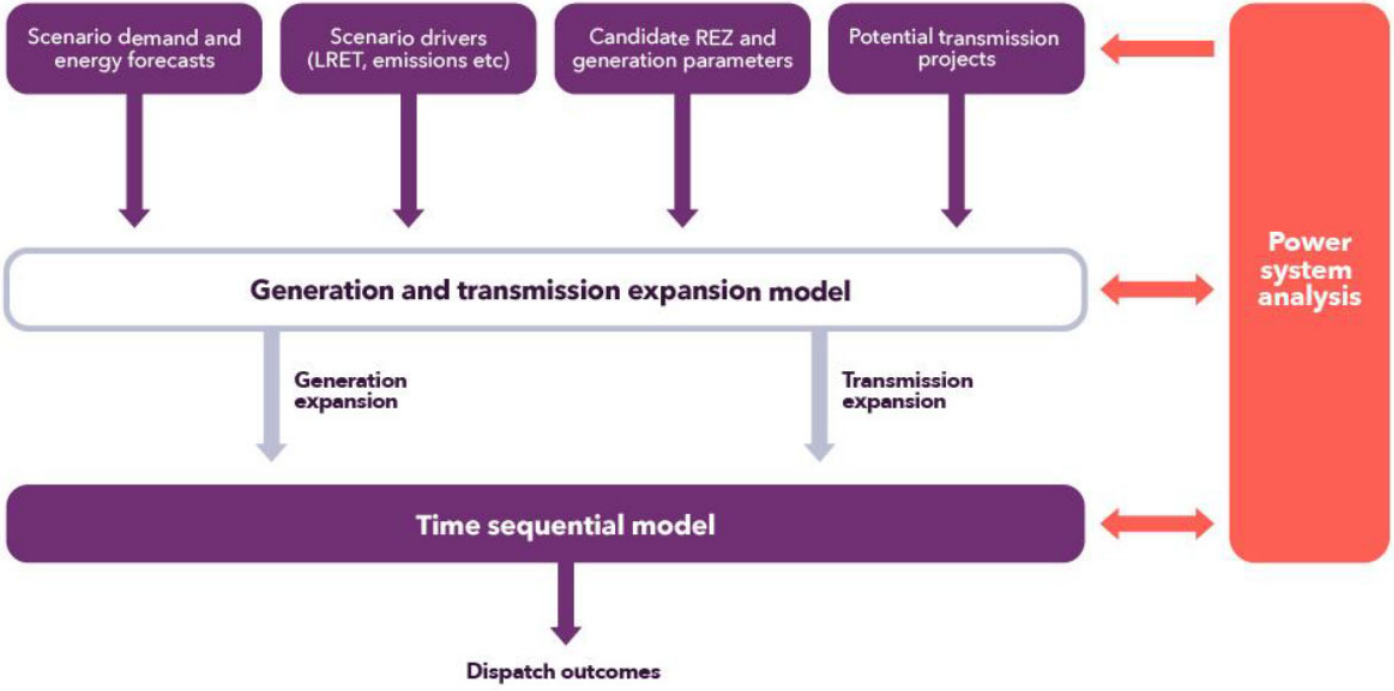
- Scenarios and scenario planning



- Scenarios and scenario planning
  - Five scenarios: central, slow change, high DER, fast change and step change
  - Six sensitivities:
    - Four year delay of Snowy 2.0 to 2028/29
    - 2027 full closure of Yallourn Power Station (~4 year advancement)
    - Completion of Marinus Link by 2026/27 and (optionally) a further link (750MW) in 2031/32
    - Queensland Renewable Energy Target
    - 2GW of variable renewable energy in Central West New South Wales Renewable Energy Zone by 2028
    - Closure of Alcoa Portland Aluminium Smelter in 2021/22.

AEMO's analysis approach

- Market modelling/optimisation

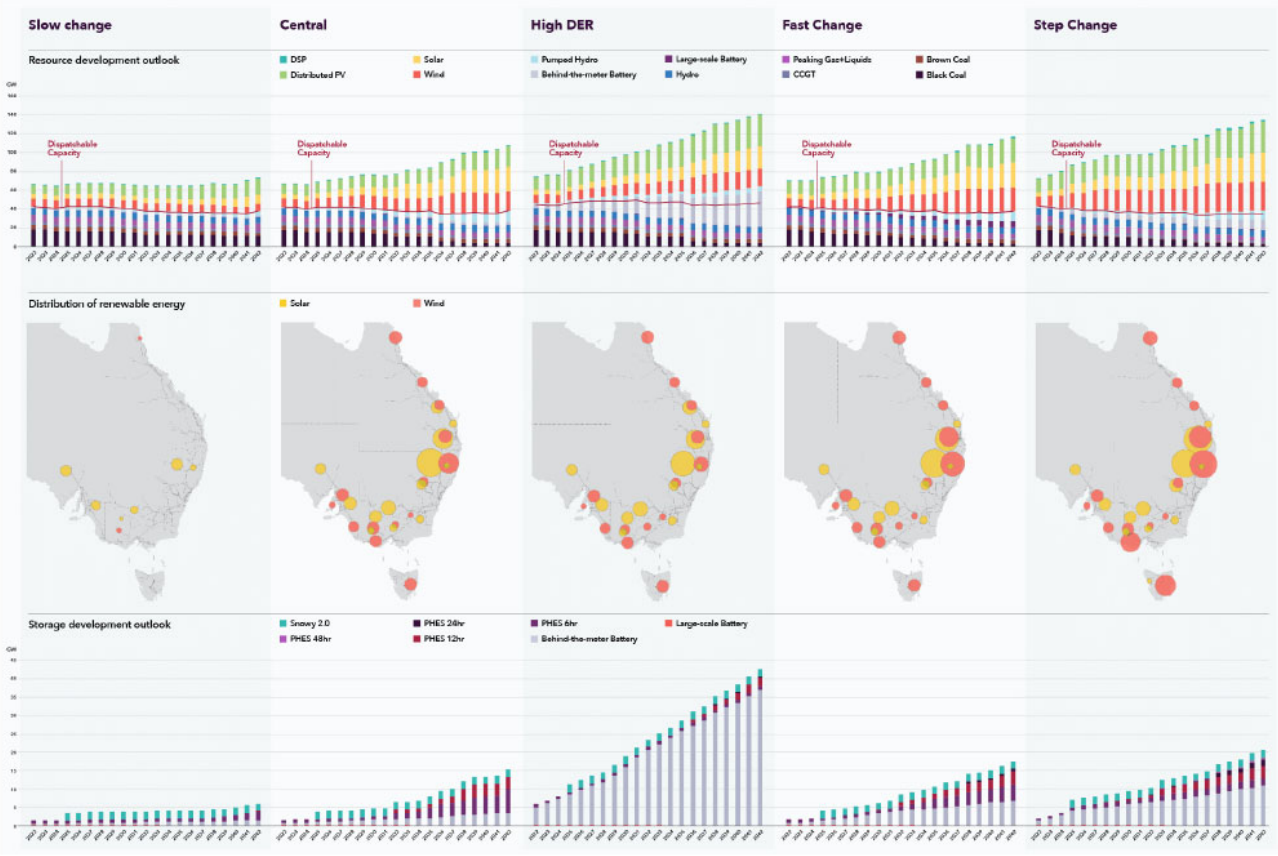


- Dealing with an uncertain future
  - Base case per scenario/sensitivity: $\{C1_{S1}, C1_{S2}, C1_{S3}, C1_{S4}, C1_{S5}\}$
  - Transmission development path: $\{C2_{S1}, C2_{S2}, C2_{S3}, C2_{S4}, C2_{S5}\}$ – possibly five different paths
  - Regret analysis

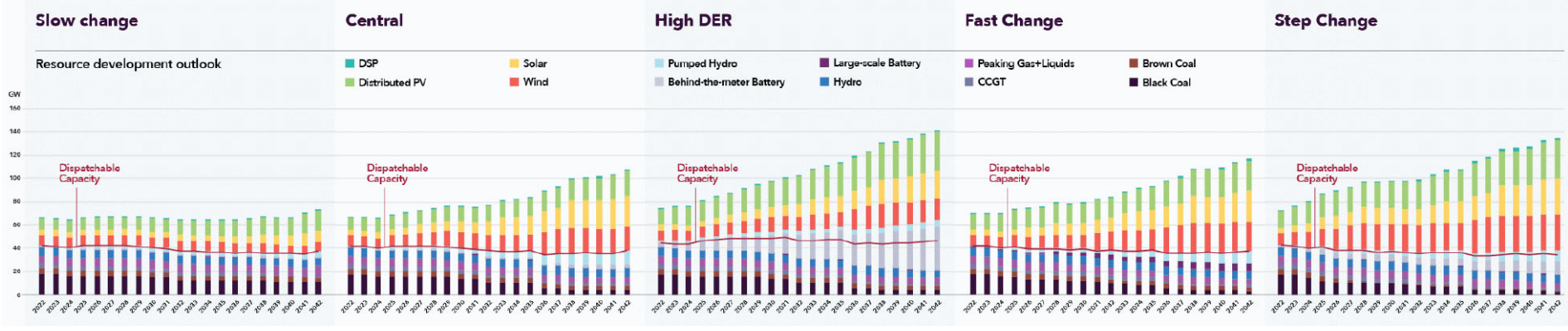
	Path 1	Path 2	Path 3	Path 4	Path 5
Scenario 1	$##	$##	$##	$##	$##
Scenario 2	$##	$##	$##	$##	$##
Scenario 3	$##	$##	$##	$##	$##
Scenario 4	$##	$##	$##	$##	$##
Scenario 5	$##	$##	$##	$##	$##
Maximum	$##	$##	$##	$##	$##

'The plan' is the path with the least maximum regret

Results – the plan



Results – the plan



Results – the plan

Table 4 Ideal timing and benefit of "no-regret" grid augmentations (NPV, $ billion)*

Scenario	No regret grid augmentation projects				Cost-benefit analysis		
	QNI Minor	VNI Minor	Energy Connect	HumeLink	Total system costs† without projects	Total system costs† with projects	Net market benefits
Central	2022-23#	2022-23	2023-24	2025-26	87.53	85.34	**2.18**
High DER					80.27	78.50	**1.78**
Step Change					92.15	90.98	**1.17**
Slow Change					57.69	56.77	**0.93**
Fast Change					85.74	83.84	**1.90**

† Note that absolute Total System Cost NPV across scenarios should not be compared as they are based on different assumptions, not all of which directly related to the energy sector.

* Represents the present value of annual net market benefits from 2019-20 to 2041-42, determined by comparing total system costs of the no-regret investment decisions against an alternative without these investment decisions.

Currently on track to be commissioned by December 2021, earlier than originally advised as practical, and assumed in this Draft ISP modelling.

Results – the plan

Table 5 Benefit and ideal timing for regional interconnectors (NPV, $ billion)

Scenario	Interconnectors (further to 'no regret' augmentations					Cost-benefit analysis		
	QNI Medium	QNI Large	VNI West	Marinus Link 1st Cable	Marinus Link 2nd Cable	Total system costs without interconnectors	Total system costs with interconnectors	Net market benefits
Central	2028-29	2031-32	2031-32	2036-37		85.34	84.91	**0.43**
High DER	2028-29		2031-32	2036-37		78.50	78.28	**0.21**
Step Change	2026-27		2027-28	2026-27	2031-32	90.98	89.81	**1.16**
Slow Change	2028-29					56.77	56.60	**0.17**
Fast Change	2026-27		2030-31	2036-37		83.84	83.63	**0.21**

Results – the plan

Table 14 Regret costs of the 'adapted optimal' of each development path under each scenario (NPV, $ million)

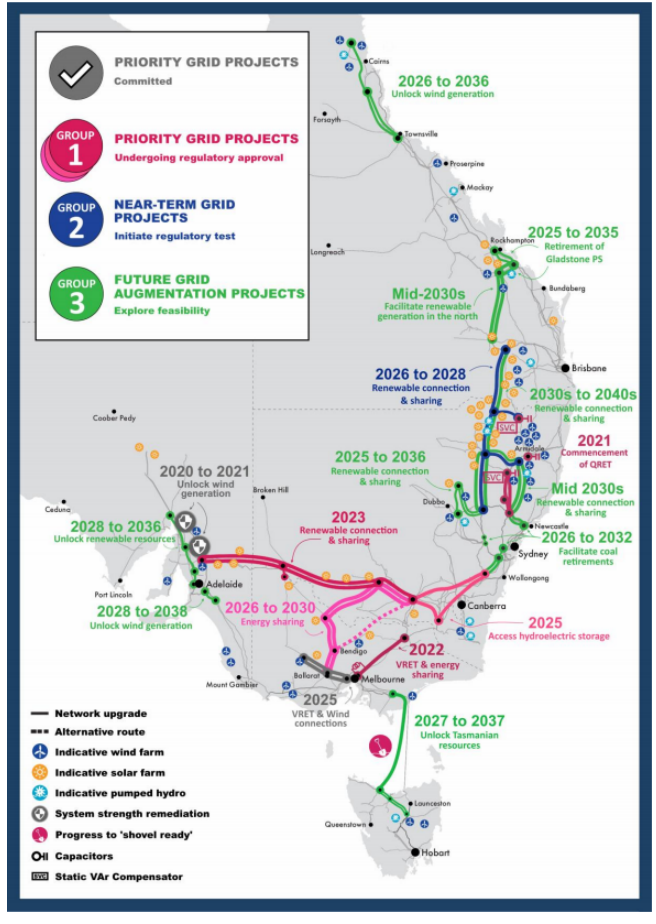
Scenario / Sensitivity	No accelerated action	Accelerated VNI West	Accelerated Marinus Link	Accelerated VNI West and Marinus Link	Accelerated VNI West and shovel-ready Marinus Link
Central	0	-67	-288	-380	-108
High DER	0	-83	-279	-470	-124
Step Change	-240	-139	0	0	0
Slow Change	0	-25	-130	-155	-155
Fast Change	0	-80	-25	-170	-121
Worst Regret	-240	-139	-288	-470	-155
Early retirement	-118	0	-156	-307	-41
No QRET	0	-49	N/A	N/A	-94
Snowy 2.0 delay	0	-66	-281	-372	-107
Central West NSW REZ	0	-83	N/A	N/A	-129
Early load closure	0	-32	N/A	N/A	-78

Results – the plan

Table 13 Net market benefit of each development path under each scenario (NPV, $ billion)

Scenario	No accelerated action	Accelerated VNI West	Accelerated Marinus Link	Accelerated VNI West and Marinus Link	Accelerated VNI West and shovel-ready Marinus Link
Central	2.61	2.55	2.32	2.23	2.51
High DER	1.99	1.91	1.71	1.52	1.87
Step Change	2.10	2.20	2.34	2.34	2.34
Slow Change	1.10	0.99	0.98	0.87	0.87
Fast Change	2.11	2.03	2.08	1.94	1.99

Results – the plan

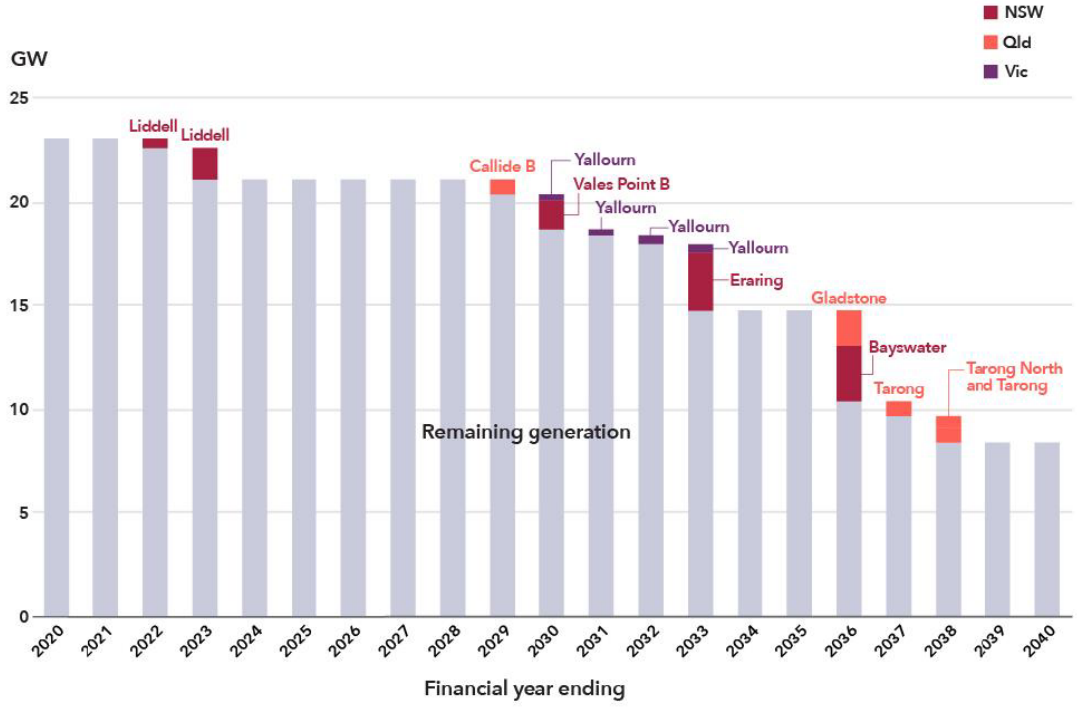


Powerlink's submission

- Further analysis for 2020 ISP
  - Consideration of 'virtual transmission line' option
  - Understand sensitivity of investment to rooftop penetration rate
- Network hosting capacity
- Improvements to 2022 ISP
  - Marginal loss factors
  - Asset reinvestment cost opportunities

Central scenario

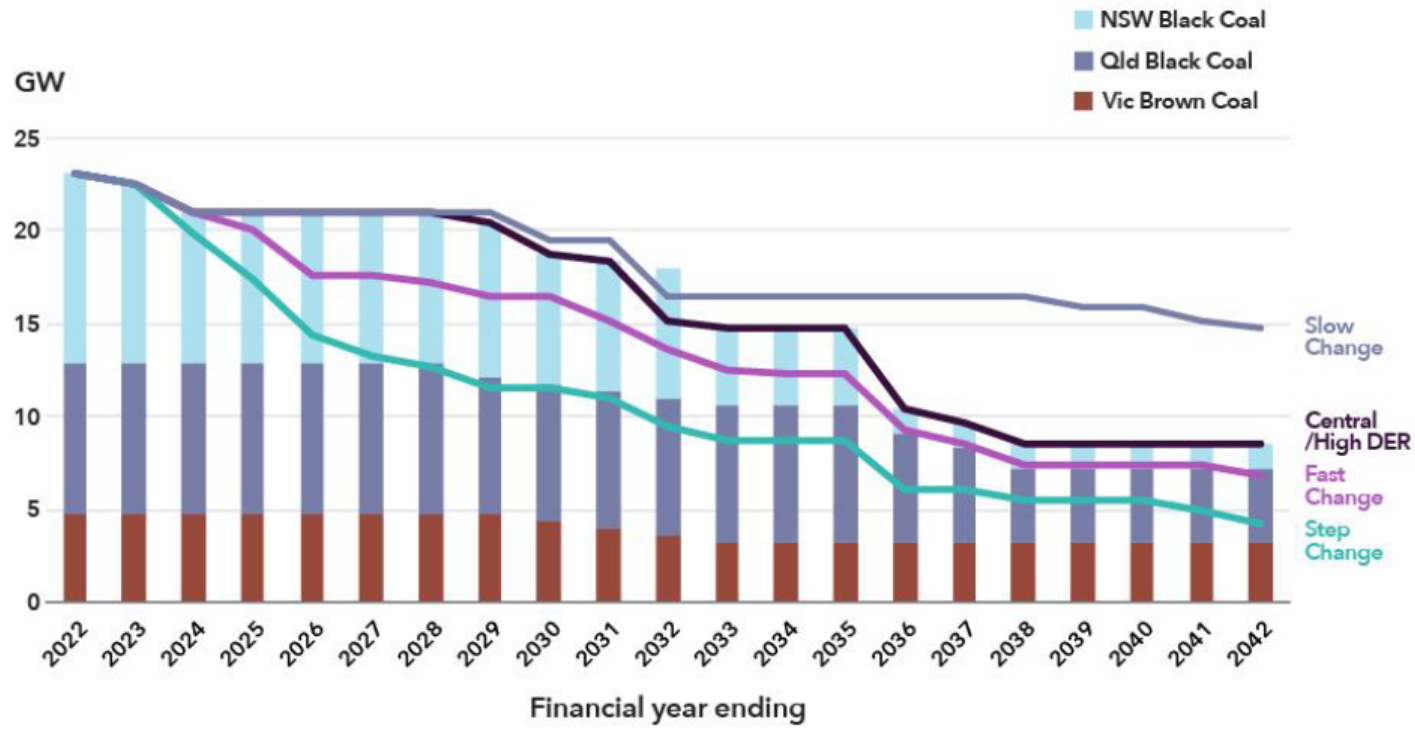
Figure 9 Coal-fired generation remaining as power stations retire*



* Based on expected closure years provided by participants as of November 2019. Modelled outcomes vary slightly from these timings and are based on expected closure years reported in August 2019.

Central scenario

Figure 14 Coal-fired generation capacity to 2042, all scenarios



Central scenario

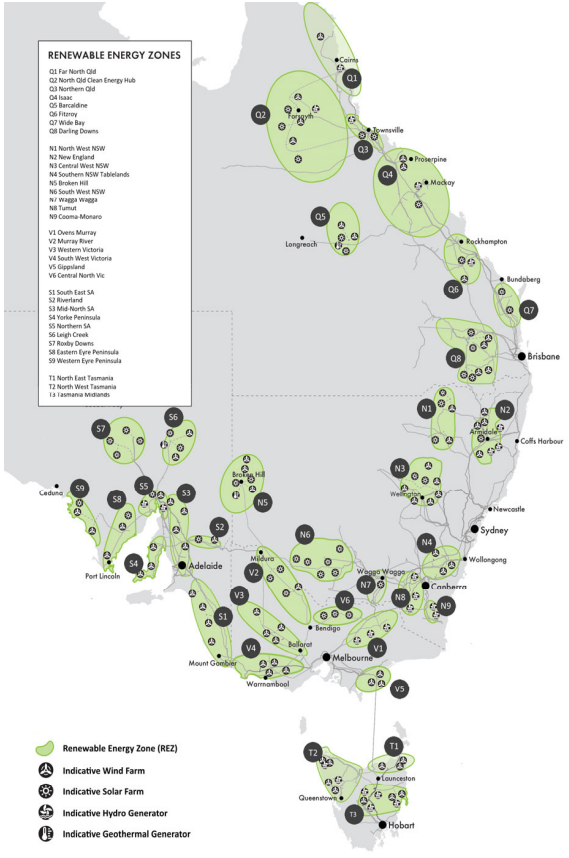
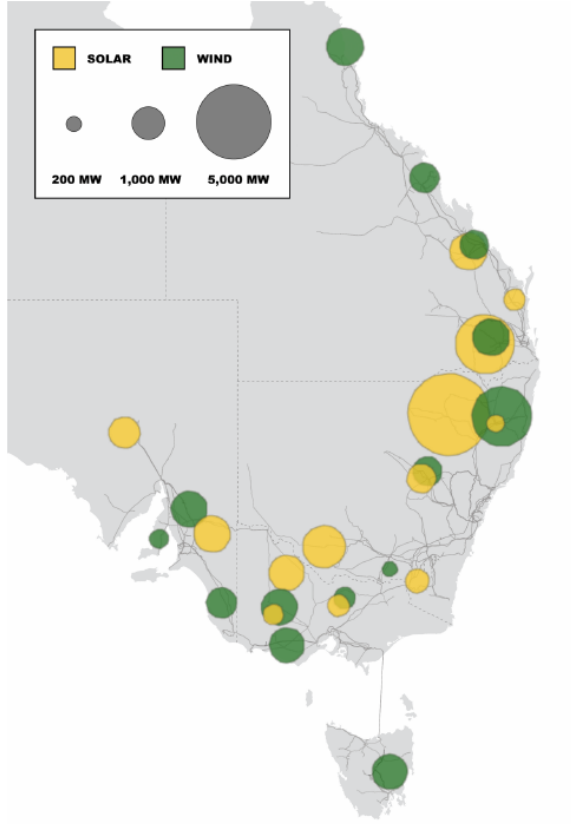


Figure 8 Forecast geographic and technological dispersion of new developments by 2040, Central scenario



Queensland generation development

- FNQ/Isaac generation capacity

Variable Renewable Energy Outlook

Scenario	Solar PV (MW)				Wind (MW)			
	Existing / committed	Projected			Existing / committed	Projected		
	< 2022	2022-30	2030-35	> 2035	< 2022	2022-30	2030-35	> 2035
Central	10	The modelling outcomes, for all scenarios, did not project additional solar generation for this REZ			180	700	700	1,700
Step						1,500	1,500	2,300
High DER						700	700	1,600
Fast						700	900	1,800
Slow						-	-	600

Pumped Hydro

Far North Queensland has good potential pumped hydro locations just north of Cairns and towards the North East around Desailly. The transmission network near this location are weak and upgrades would be required to accommodate large scale pumped hydro. There is also potential pumped hydro locations near Herberton within proximity of the Walkamin/Woree – Chalumbin 275 kV lines.

	*Pumped Hydro for Queensland (MW)		
	Projected		
	2022-30	2030-35	> 2035
Central	-	1,200	2,900
Step	300	1,850	3,000
High DER	-	-	1,350
Fast	-	1,550	3,500

Variable Renewable Energy Outlook

	Solar PV (MW)				Wind (MW)			
	Existing / committed	Projected			Existing / committed	Projected		
	< 2022	2022-30	2030-35	> 2035	< 2022	2022-30	2030-35	> 2035
Central	562	The modelling outcomes, for all scenarios, did not project additional solar generation for this REZ				-	-	1,000
Step						1,000	1,000	1,000
High DER						-	-	1,000
Fast						600	1,000	1,000
Slow						-	-	-

Pumped Hydro

There are numerous potential pumped hydro locations to the North East and South East of Nebo. With large variable generation projected for North and Central Queensland, strategic development of large scale storage could defer some transmission augmentations.

	*Pumped Hydro for Queensland (MW		
	Projected		
	2022-30	2030-35	> 2035
Central	-	1,200	2,950
Step	300	1,850	3,000
High DER	-	-	1,350
Fast	-	1,550	3,500
Slow	-	-	-

- Wide Bay/Fitzroy generation capacity

Variable Renewable Energy Outlook				
	Solar PV (MW)			
	Existing / committed	Projected		
	< 2022	2022-30	2030-35	> 2035
Central	131	-	-	500
Step		500	500	500
High DER		-	-	500
Fast		-	500	500
Slow		-	-	-

Variable Renewable Energy Outlook								
	Solar PV (MW)				Wind (MW)			
	Existing / committed	Projected			Existing / committed	Projected		
	< 2022	2022-30	2030-35	> 2035	< 2022	2022-30	2030-35	> 2035
Central	-	1,500	1,500	1,500	-	300	300	900
Step		-	-	-		900	900	900
High DER		1,800	1,800	1,800		-	-	900
Fast		-	-	-		600	900	900
Slow		-	-	-		-	-	-

Pumped Hydro			
Potential pumped hydro locations have been identified near Bouldercombe and Calvale. There is a significant projection in Solar and Wind generation North of the CQ-SQ cut set. Significant transmission build would be required to accomodate such large projection in generation. Having pumped hydro in this location or any location in the north of Queensland would assist to reduce the new development project. Fitzroy is a good location, storage here would assist to firm up the solar generation projected under the Central scenario	*Pumped Hydro for Queensland (MW		
	Projected		
	2022-30	2030-35	> 2035
Central	-	1,200	2,900
Step	300	1,850	3,000
High DER	-	-	1,350
Fast	-	1,550	3,500

Queensland generation development

- Darling Downs generation capacity

Variable Renewable Energy Outlook								
	Solar PV (MW)				Wind (MW)			
	Existing / committed	Projected			Existing / committed	Projected		
	< 2022	2022-30	2030-35	> 2035	< 2022	2022-30	2030-35	> 2035
Central	417	1,500	1,500	3,600	453	1,400	1,400	1,400
Step		1,000	3,800	7,700		3,000	3,000	4,100
High DER		1,400	1,400	3,500		900	900	1,400
Fast		400	2,600	6,400		-	1,400	3,300
Slow		-	-	-		-	-	-

Pumped Hydro				
	*Pumped Hydro for Queensland (MW)			
	Projected			
	2022-30	2030-35	> 2035
Large scale solar and wind generation is projected in the Darling Downs area. Darling Downs has good access to the Brisbane load centre as well as the load in New South Wales via the Queensland to New South Wales interconnector. Storage in this location would be beneficial to help firm the solar generation projected across all scenarios except for the slow change.	Central	-	1,200	2,900
	Step	300	1,850	3,000
	High DER	-	-	1,350
	Fast	-	1,550	3,500
	Slow	-	-	-

Central scenario

Figure 81 Forecast NPV of total costs to 2041-42, comparing optimal development path to counterfactual, Central scenario

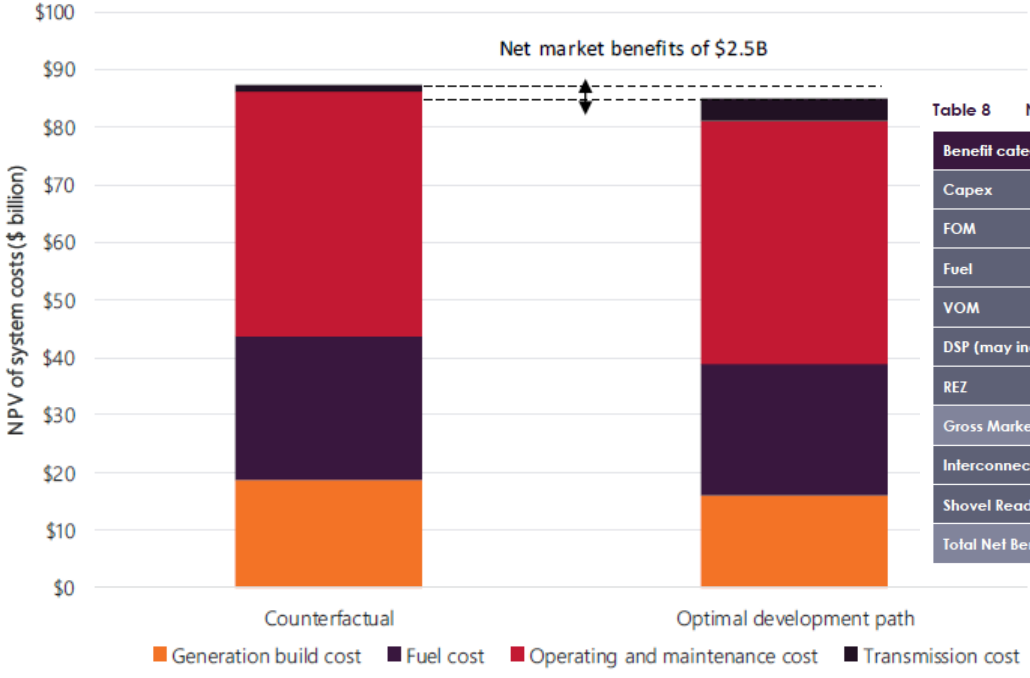
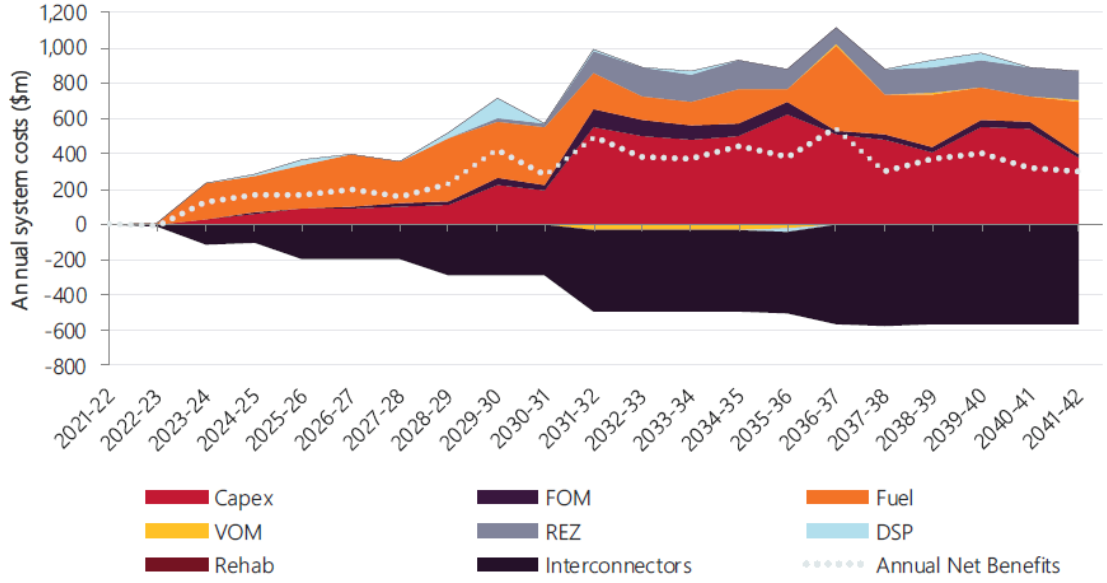


Table 8 Net market benefits of optimal development path by category, Central scenario

Benefit category	Net Benefit ($M)
Capex	$2,554
FOM	$317
Fuel	$2,248
VOM	-$87
DSP (may include USE below the current reliability standard)	$136
REZ	$598
Gross Market Benefits	$5,766
Interconnectors	-$3,220
Shovel Ready Costs / Bring Forward Costs	-$45
Total Net Benefits	$2,501

Central scenario

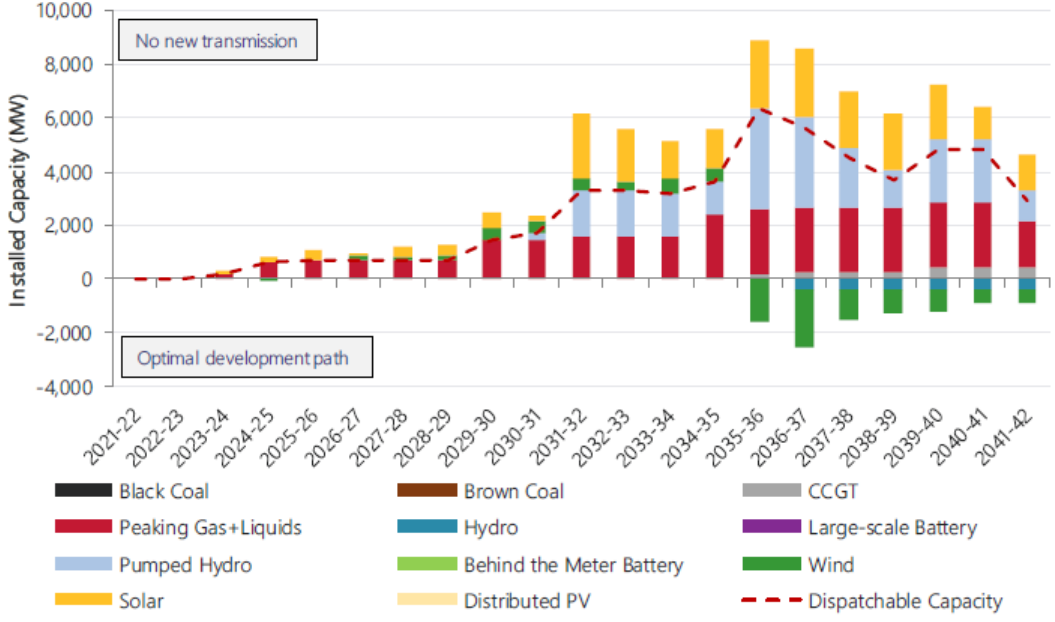
Figure 80 Forecast optimal development path net annual benefits to 2041-42, Central scenario



Note: The annual system costs in the figure do not include the costs associated with the development of Marinus Link or VNI West as "shovel ready". In this scenario, the shovel ready costs associated with Marinus Link are presented in the accompanying table.

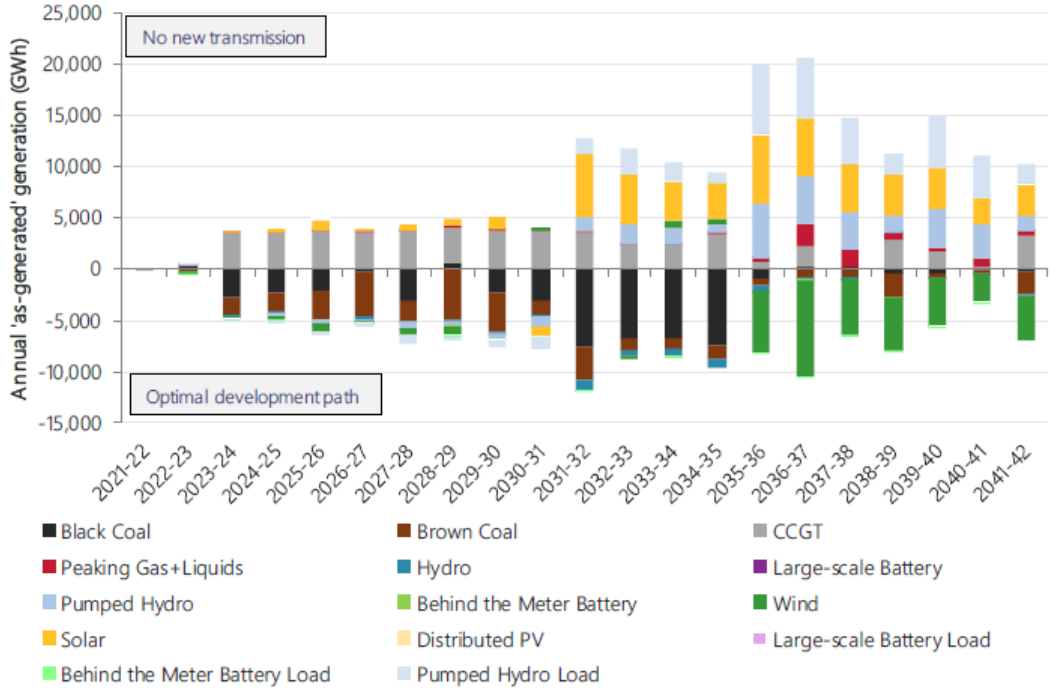
Central scenario

Figure 82 Forecast capacity developments to 2041-42 for the optimal development path compared to no interconnectors, Central scenario



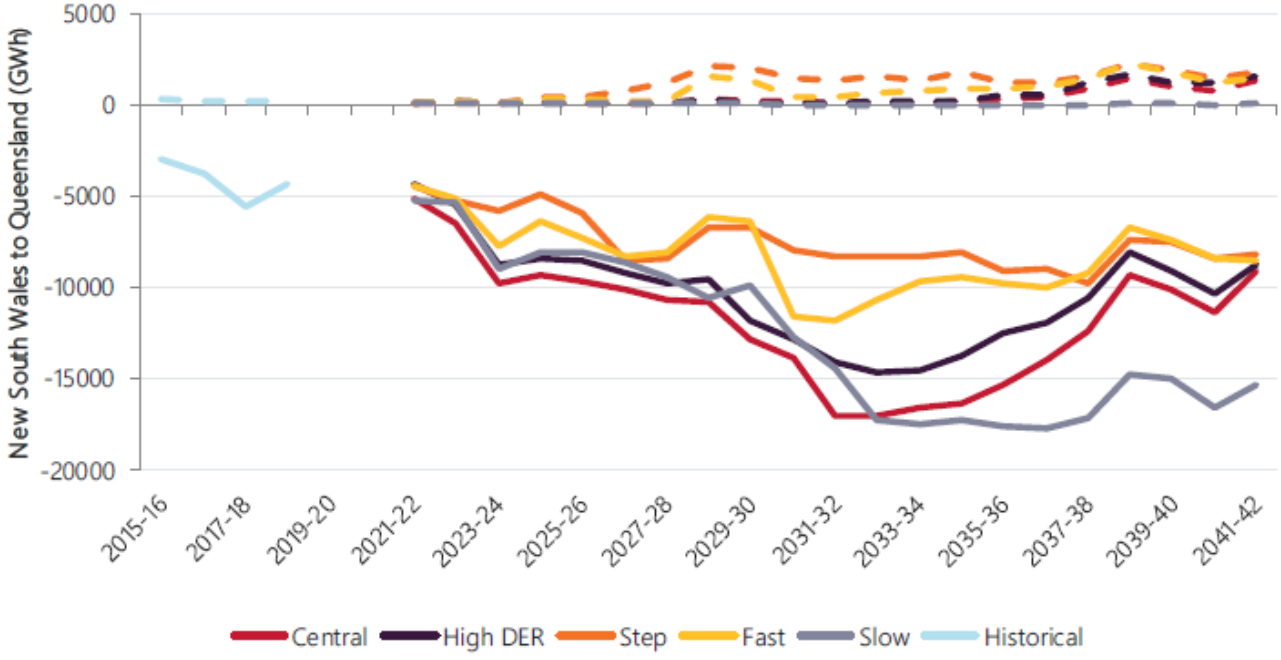
Central scenario

Figure 83 Forecast generation outcomes to 2041-42 for the optimal development path compared to no interconnectors, Central scenario



QNI utilisation

Figure 110 Inter-regional transfers New South Wales to Queensland



Non-network IT expenditure – Benefits realisation framework

Mark Pozdena
General Manager Business IT

Brian Atkin
Manager IT Planning, Investment and Value

Customer Panel's initial feedback

At the December 2019 Customer Panel meeting, we asked:

In a new IT Benefits Realisation Framework, what would be **mandatory assessment criteria** and **associated metrics** to support decision making throughout the portfolio and project lifecycle?

What did we do with your feedback?

We applied it to our new Benefits Realisation Framework and incorporated it across our Program and Project Delivery Framework.

Summary of Customer Panel feedback

Your feedback: what would be …"**a mandatory assessment criteria**"… to support decision making?

- Benefits – justifiable and defendable
- Absolute "must haves" – gatekeepers
- Improved alignment to architecture
- Full lifecycle cost – be wary of hidden costs e.g. training, subscriptions
- Change management considerations
- Risk – analysis at front end
- What is the real impact on the business?
- Capacity/capability of business to absorb (and roll-out) resulting level of change
- Security – improves over time
- Can investment be staged to roll over period of time?
- Fit-for-purpose approach e.g. business cases
- 'Reliability' relative to being on target to meet standards (required parameters to achieve desired parameters)
- Whole-of-life assessment
- Economic cycle investment considering regulatory impacts (five year) for opex/capex
- Objective criteria as much as possible. Clearly understand the objectives we are trying to achieve.
- Translation of outcomes into consumer/customer terms
- Traceability to customer outcomes (public documents)
- "Better service/safer service" is identified with costs e.g. "better data collection"
- Quantifiable/tangible terms (relatable)
- Lessons learnt input
- Establish thresholds for categories (including bringing to Customer Panel for discussion/similar to RIT-T).

* As per Customer Panel December 2019 Minutes.

Summary of Customer Panel feedback

Your feedback: what would be …"**associated metrics**"… to support decision making?

- % increase of investment = % increase of benefits
- Consider scrutiny on all projects (potential investment) → but set the bar higher for bigger $
- Aligns to architecture principles
- Process changes, business capability to realise and embed benefits
- Very explicit link between projects and opex (manages scope creep risk – onus on Powerlink to manage costs)
- Ongoing analysis during project lifecycle
- Tools (and expenditure) meet true business needs – removes gold plating e.g. iPhone 7 vs iPhone 10
- Dollar per customer
- System rationalisation
- Efficiency productivity
  - time savings
  - responsiveness
  - dollar per user in context
- Training time – ease of access and how receptive staff might be
- Number of projects submitted not taken up e.g. Gates 1 and 2
- Reliability profile – is it evolving the way it was planned?
- Operational
- Cost per service
- End $ compared with approved $

* As per Customer Panel December 2019 Minutes.

February 2020 update

- Business IT has developed a new IT Benefits Realisation Framework using the **AER Guidance** for non-network ICT capex expenditure (28 Nov 2019) (including categories) and incorporating feedback from the **December 2019 Customer Panel** discussion (for assessment criteria and measures).

- This Benefits Framework and assessment criteria has been applied across the Business IT **Program and Project Delivery Framework** and is transitioning towards full implementation for 2020/21. It will be continuously reviewed and improved over the next two financial years.

- The Benefits Framework covers the end-to-end process from initiative idea through to planning, delivery and benefits realisation.

- It will improve investment decision making when choosing the right projects and help us to make informed decisions as investment progresses (e.g. stopping projects where it is determined that benefits can no longer be realised).

Categories and criteria

IT Expenditure Categories – AER guidance

Category	Sub-category	AER assessment tools
Recurrent		Trend analysis Benchmarking Business case
Non-recurrent	Maintain	Business case
	Comply	Business case
	New/expand	Cost benefits analysis with positive Net Present Value (NPV)

IT assessment criteria and high-level measures/values

Criteria	Type of measure	Value
Cost and return on investment	Financial	Positive NPV of 10% higher than cost
Counterfactual	Financial	Positive NPV
Strategic alignment and value	Scored assessment	Greater than 50%
Ease of business change	Scored assessment	Greater than 50%
Architecture alignment	Scored assessment	Greater than 50%
Ease of delivery and operation	Scored assessment	Greater than 50%

Sample of scoring assessment

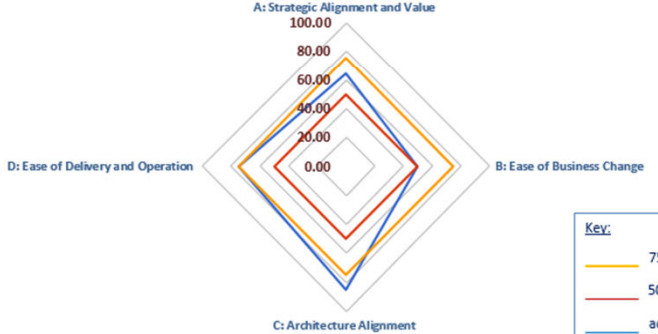
D5	Customer Engagement *Customer = beneficiary of the services/products that the initiative delivers*	5	No customer(s) have been identified or engaged	-	-	Customer(s) have been identified but not yet engaged	-	Customer(s) have been or will be engaged appropriately during the project to provide input		5
D6	Stakeholder Engagement *Stakeholder = people who are required to contribute to / give input for the initiative*	5	No stakeholder(s) have been identified or engaged	-	-	Stakeholder(s) have been identified but not yet engaged	-	Stakeholder(s) have been or will be engaged appropriately during the project to provide input		5
D8	Articulation of measures *(output, outcome, benefits)*	3	Measures are not articulated	Measures are vague and not measurable	Measures are vague and measurable	Measures are specific but not defined	Some measures are fully articulated (specific and defined)	All measures are fully articulated (specific and defined)		3
	Operational Impact									
D9	Level of support required post implementation	1	Major impact on operational processes and additional resources required	Major impact on operational processes but no additional resources required	Moderate impact on operational processes and additional resources required	Moderate impact on operational processes but no additional resources required	Limited impact on operational processes and no additional resources required	Little impact on operational processes		1
D10	New hardware to be introduced *(server, storage, routers, firewall)*	5	Major new hardware implemented into landscape from new vendors	Major new hardware implemented from existing vendors	-	Some new hardware introduced (later products from existing vendors)	Some upgrades required to existing landscape (additional platforms of same models]	Solution can be deployed within existing landscape		5
D11	Will there be any impacts to capacity and performance to affected or downstream systems:	3	Extensive impact (requires additional capacity and other infrastructure)	Significant impacts (requires either additional capacity or other infrastructure)	Major impacts	Moderate impacts	Minor impacts	No impacts		3
D12	Will there be any change to ongoing operational costs:	3	Excessive additional costs (>$150K)	Significant ($101 - $150K)	Major additional costs ($76 - $100K)	Moderate additional costs ($51 - $75K)	Minor additional costs (<$50K)	None		3

Assessment Scores

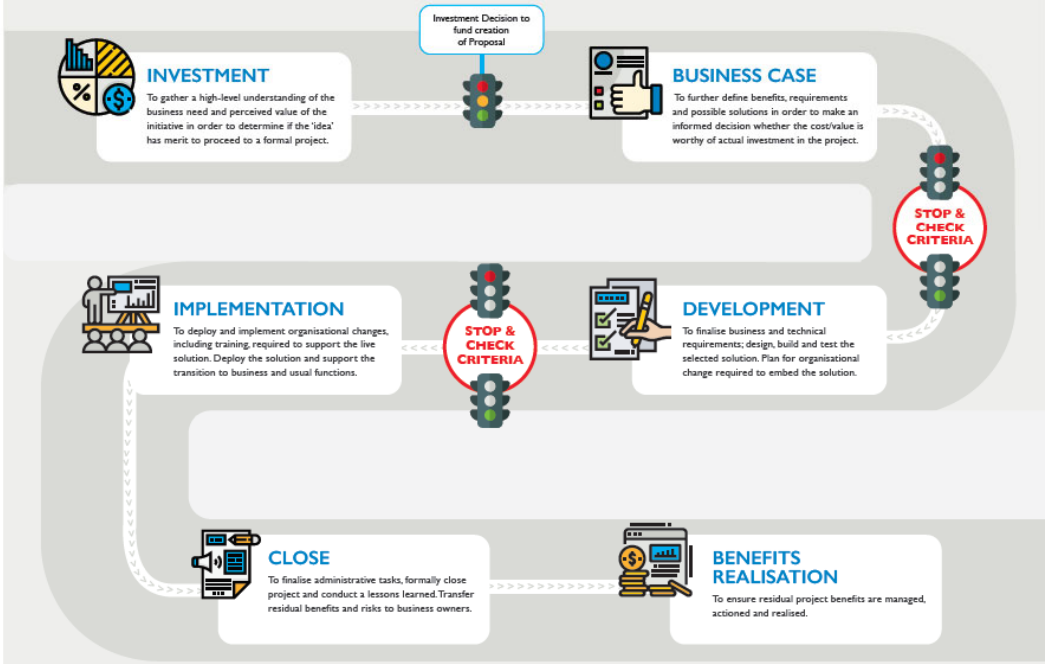
Item Key:	
Ungraded Items:	0
Potential impacts	3
Potential Cavets	13
Potential no concerns	17

Assessment:	Score	Risk Outcome:
A: Strategic Alignment and Value	64.00	Medium Risk
B: Ease of Business Change	50.00	Medium Risk
C: Architecture Alignment	84.80	Low Risk
D: Ease of Delivery and Operation	74.40	Low Risk
Overall Score (not weighted)	**68.30**	**Medium Risk**
Overall Weighted Score	**68.12**	**Medium Risk**

Assessment Profile:



IT PROJECT PHASES



These criteria and measures will be assessed and continuously improved over a multi-year period after initial implementation.

IF THE PROJECT DOESN'T MEASURE UP AGAINST ALL OF THESE CRITERIA THEN IT IS STOPPED, IF IT DOES STILL MEASURE UP THEN IT WILL CONTINUE.

These criteria are specifically applicable to projects that are categorised as Non-recurrent with new or expanded capability.

GATE CRITERIA	MEASURES	TYPE OF MEASURE
1 COST AND RETURN ON INVESTMENT	The overall full cost of the initiative and the expected return on investment.	Financial Positive NPV of 10% higher than cost
2 COUNTERFACTUAL	The overall full cost of not doing the initiative. This is the cost of continuing not to mitigate the inefficiency and/or risk that the initiative is expected to mitigate.	Financial Positive NPV
3 STRATEGIC ALIGNMENT AND VALUE	How the initiative contributes to the strategic outcomes of Powerlink. There must be a demonstrable link between the deliverables of the project/initiative and Powerlink's strategy.	Scored Value greater than 50%
4 EASE OF BUSINESS CHANGE	The change management effort involved in implementing the project.	Scored Value greater than 50%
5 ARCHITECTURE ALIGNMENT	Whether the project will utilise existing technology that Powerlink already has capability to support and/or can integrate without introducing new risk.	Scored Value greater than 50%
6 EASE OF DELIVERY AND OPERATION	Ease with which the project can be delivered and how well Powerlink as a whole is positioned to effectively utilise the outputs of the project/initiative.	Scored Value greater than 50%

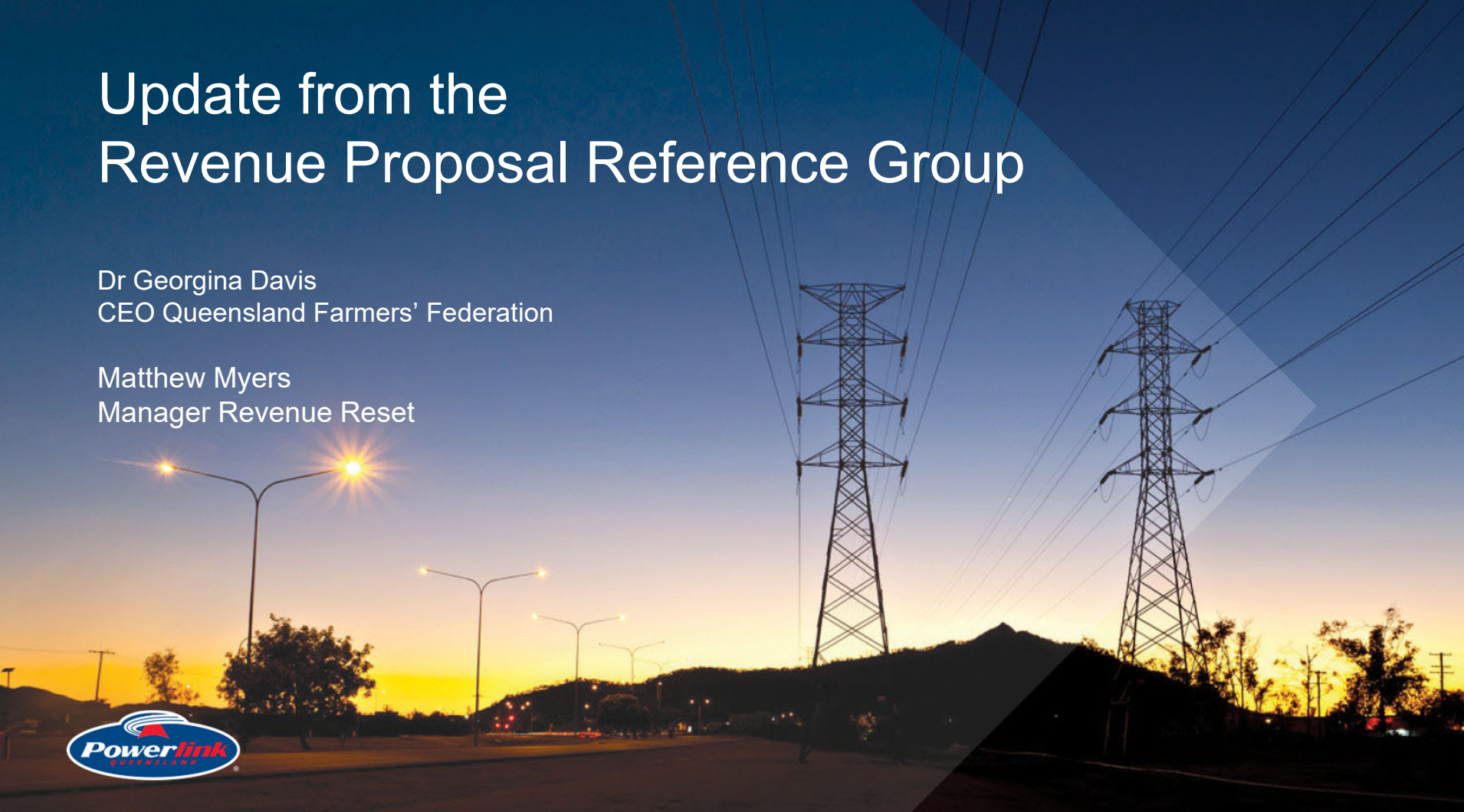
PROGRAM AND PROJECT DELIVERY – BENEFITS LIFE CYCLE

PHASE	Pre-Project	Discovery		Delivery	Close	Post-Project
STAGE	INVESTMENT	BUSINESS CASE	DEVELOPMENT	IMPLEMENTATION	CLOSE	BENEFITS REALISATION
	Approved Business Case to fund Delivery Phase		Approved Business Case to fund Delivery Phase			
TRIGGER	Approved Initiative (Portfolio Plan or approved solution request)	Investment Proposal; Cyber Security Rating	Business Case; PMP; Approved Contract	DRAFT Service Management Plan; Testing sign-off; Detailed Design	IT Acceptance Certificate; Commissioning Notice	Project Closure Report
STAGE OBJECTIVE	**To confirm the business need with the 'Customer' and ensure there is enough information for PPD to commence the initial project planning.**	**To further define benefits and requirements and engage the market to provide a Business Case so the Project Board & Financial Delegates can consider whether the cost/value is worthy of investment in the project.**	**To finalise business and technical requirements; design and test the solution & undertake detailed planning of implementation approach.**	**To confirm detailed plans for deployment and organisational changes, deploy the solution (and decommission where applicable). To support new solution and disband the project.**	**To complete final administrative tasks, formally close project and conduct a review.**	**To manage the realisation of benefits stemming from the delivery of the BIT non-network capital portfolio**
KEY BENEFIT ACTIVITIES	Identify high level benefits to be delivered by the project/program by key stakeholders. • Identify benefits probable owners, how they would be measured and dependencies. • Analyse change drivers to determine the objectives for the investment. • Identify stakeholder implications for benefits realisation. • Determine which benefits will justify the investment. • Identify high-level strategic and architectural alignment of initiative. • High-level estimate of counterfactual and ROI. • Assessment of initiative for portfolio prioritisation against 6 key metric. **Benefits Related Tools** • Initiative assessment tool	• Fully define benefits to be delivered by the project/program by key stakeholders utilising benefits management techniques. • Establish baseline measurements for the identified business metrics. • Establish realistic benefits target based on available proof points and assumptions. • Undertake analysis of options based on the costs and benefits. • Identify and assign owners and data sources for benefits. • Allocate benefits management roles and accountabilities and re-affirm governance structures. • Gain approval to commence the project management lifecycle, and to proceed to the benefit realisation planning sub-process. • Complete the benefits profile, including measurement and reporting mechanisms. • Update the business case with benefits information. • Finalise options analysis with ROI and counterfactual dis-benefit. **Benefits Related Tools** • Benefit Workshops • Benefit dependency network • Benefit Profiles • Benefits Realisation Plan	• Ongoing review and evaluation of the benefits to ensure business value is still aligned within ROI • Ensure project/program outputs match the benefits profiles. • Develop an understanding of which benefits are still achievable, which require further planning. • Identify any additional benefits/dis-benefits determined during the delivery phase of the program/project. • Update the benefits realisation plan (if required) • Escalate any change in benefits to the program/ project that cause the project to be, or project it to be, in exception of its tolerances. **Benefits Related Tools** • Benefits Register • Benefits Realisation Plan	• Ensure project outputs are fit for purpose and can be integrated/transitioned into BAU operations. • Evaluate the benefits baselined in the business case vs realised. • Optimise business change planning for maximum benefits realisation • Review and mitigate residual risks and dis-benefits • Escalate any change in benefits to the program/project that cause the project to be, or project it to be, in exception of its tolerances. **Benefits Related Tools** • Benefits Register • Benefits Realisation Plan	• Update benefits realisation plan with realised benefits. • Identify any additional benefits/ dis-benefits determined during the delivery phase of the program/ project. • Incorporate benefits outcomes into the project closure report and lessons learnt. **Benefits Related Tools** • Benefits Register • Benefits Realisation Plan • Project Closure Report • Lessons Learnt	• Review unrealised benefits in the project closure report. • Review lessons learned report and incorporate learnings into delivery framework and BAU practices. • Provide finance with post-project budget adjustment schedule based on future identified financial benefits. • Report portfolio benefit status on a quarterly basis to DTGAEC **Benefits Related Tools** • Post-project budgetadjustment schedule
ASSURANCE	• **Manager PPD to review and accept Investment Proposal document.**	• **Compliance process across documents** • **Technology Board / Project Board approval to enter next gate**	• **Compliance process across documents** • **Project Board approval to enter next gate** • **Solution Design Approval**	• **Compliance process across documents** • **Project Board approval to enter next gate** • **Hand over to Support Approval**	• **Compliance process across documents** • **Post Implementation Review** • **Customer Closure Report Approval**	• **Compliance process across documents** • **Quarterly report to DTGAEC**
APPROVAL	Customer EGM approval to confirm initiative still needed; EGM approval to fund planning work	Project board decision; EGM/CE approval of benefits and future realisation plan	Project board decision	Project board decision	EGM/CE approval of benefits and future realisation plan	Project board decision
OUTPUTS	Initiative Definition	Business Case	Service Mgmt Plan; Testing sign-off; Detailed Design Sign off	IT Acceptance Cert; Op Supp Transcript; Comm Notice	Project Closure Report; Lessons Learnt	Adjusted Future Budget

Update from the Revenue Proposal Reference Group

Dr Georgina Davis
CEO Queensland Farmers' Federation

Matthew Myers
Manager Revenue Reset



QUEENSLAND FARMERS' FEDERATION

Review of the Revenue Proposal Reference Group Meeting 31 January 2020

1. Annual Benchmarking Report (data 2017/18)
    *while Powerlink was at the bottom, position starting to lift due to a reduction in OPEX

* Energy not supplied
* One-off events impact despite little change to productivity change
* Does this lead to perverse outcomes (overinvestment)
* Next AER benchmark report due before RP submission
* AER reluctant to comment

QUEENSLAND FARMERS' FEDERATION

2. ISP and Contingent Projects

* Definition (projects that 'pop up' between RP periods)
* Still need a RIT-T (could be done in parallel)
* Implications for some of the new interconnectors proposed
* Question to AER regarding monitoring of what is BAU with RIT-T versus ISP projects
* Different levels of assessment <$1B versus over
* Review of ISP 2020
* Impacts of REZs – need for further investment but need to protect consumers
* Role of AER
* Cost assumptions in ISP made by AEMO – advocate concerns
* Duplication of work between AEMO and TNSPs

3. Business Narrative

* We are reviewing this today
* Initial comments, included target audience, expand on risks and environment, revisit vision as Powerlink provides energy to non-Queenslanders

4. Service Target Performance Incentive Scheme (STPIS)

* Incentive for reliability and availability of electrons – more just reliability now
* Historically performed well
* Impact of RE/REZs on future signal strength
* Approach to AER to reconsider scheme
* $40M fines for Powerlink – who pays?

2019 Stakeholder Perception Survey Insights

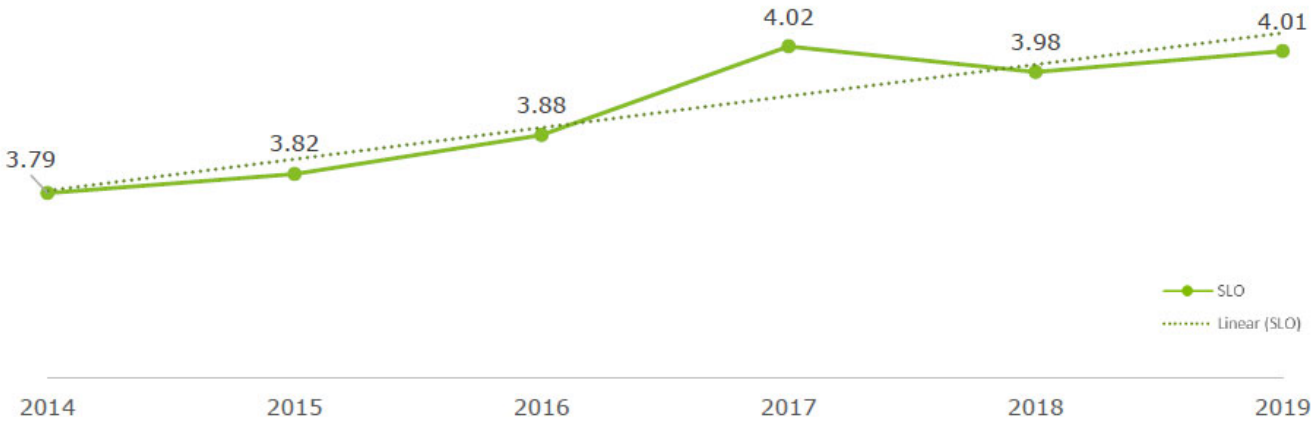
Nicole Maguire
Manager External Communications

Methodology

- This year is an online ‘pulse’ survey – 95 respondents using self complete web-based questionnaire
- Survey provides insights into:
  - Social licence to operate (SLO) and reputation scores
  - Key stakeholder issues
  - Customer service perceptions

Social Licence to Operate

2014 - 2019 Social licence to operate

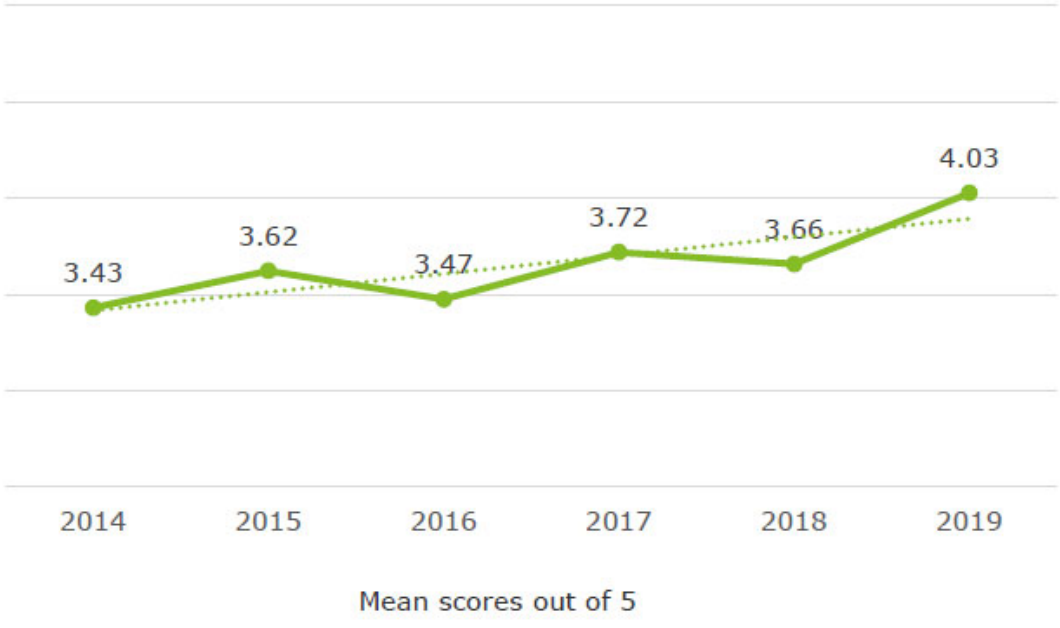


- Powerlink's social licence to operate is in the high approval range

sextile 1/6th	lower bracket	upper bracket	range and verbal label
6	4.30	5.00	>4.30 to 5.00 = full trust
5	3.93	4.30	>3.93 to 4.30 = high approval
4	3.56	3.93	>3.56 to 3.93 = low approval
3	3.08	3.56	>3.08 to 3.56 = high acceptance/ tolerance
2	2.40	3.08	>2.40 to 3.08 = low acceptance/ tolerance
1	1.00	2.40	1.00 to 2.40 = withheld/ withdrawn

Reputation

2014 to 2019 overall reputation



Reputation by stakeholder group

Stakeholder Group	Reputation Score 2019
Contractor/Supplier	4.50
Consumer Advocacy Group	4.50
State Government	4.44
Local Government	4.33
Industry Association	4.00
Environmental/Community group	4.00
Utilities	3.83
Landholder	3.67
Regulator	3.67
Customer	3.32
Overall	4.03

Maximum possible score 5

Key issues and insights

Top 3 Stakeholder Issues

- Dealing with the energy system transition
- Transparency and stakeholder engagement
- Price

What stakeholders most value from Powerlink

- Transparency and stakeholder engagement

What exceptional customer service looks like from Powerlink

- Collaboration and stakeholder engagement
- Communication and transparency
- Capability and commerciality

Insights are reflective of challenges in responding to the rapidly changing environment.

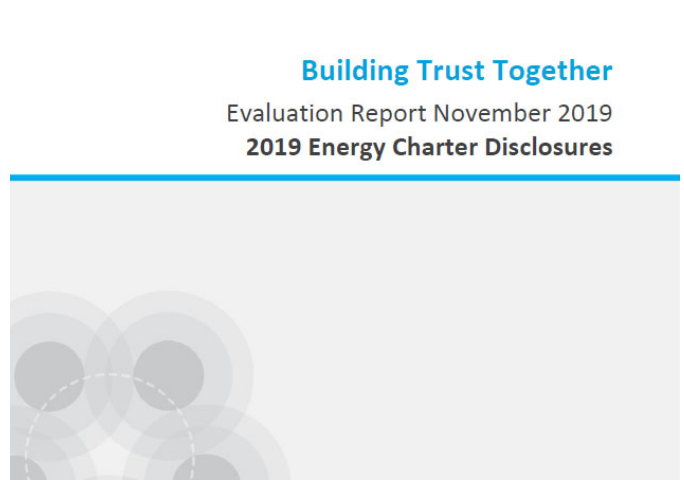
Energy Charter update

Gerard Reilly
General Manager Communications

Accountability Panel Report

- Published on 4 December 2019
- Placed a high level of value on CEO meetings
- Six major themes identified:
    1. Know your customers and communities
    2. Go above and beyond compliance
    3. Leverage high-impact points for change together
    4. Develop metrics and report on progress
    5. Close the loop on initiatives
    6. Elevate and optimise dispute resolution
- 32 recommendations

The Energy Charter
INDEPENDENT ACCOUNTABILITY PANEL

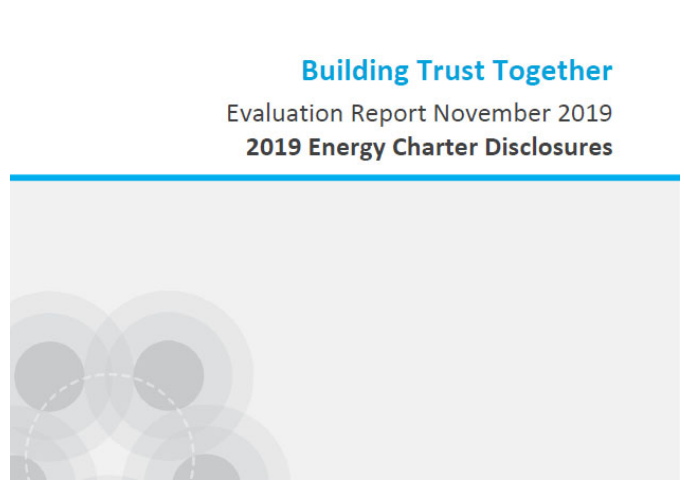


Accountability Panel Report

Improvements for Disclosure Statements:

- Better categorise customer segments
- Include summary of Disclosure development and approval process
- Be clear on areas for improvement including acknowledging past poor performance
- Target shorter document - 15 pages long
- Avoid repetition of information across principles
- Avoid reference to outcomes which are related to compliance with regulation or rules
- Provide clarity on how staff incentives are directly related to better customer outcomes
- More focus on community and environment from a safety perspective.

The Energy Charter
INDEPENDENT ACCOUNTABILITY PANEL



Keep it concise and accessible (15 pages)

- Introduction by Chair, CEO and Customer Panel (1 page)
- Self-assessed maturity across all Principles in a table (1 page)
- “Our customers and our communities” (1-2 pages)
- Case studies – our customer outcomes 2020 and reporting on commitments from last year’s disclosures (1-2 pages)
- Each Principle – evidence of maturity and opportunities for continuous improvement (7- 10 pages)
- Corporate Scorecard (1- 2 pages)

The Energy Charter

Q. How else can we improve our 2020 Disclosure Statement?

Better Together Initiatives

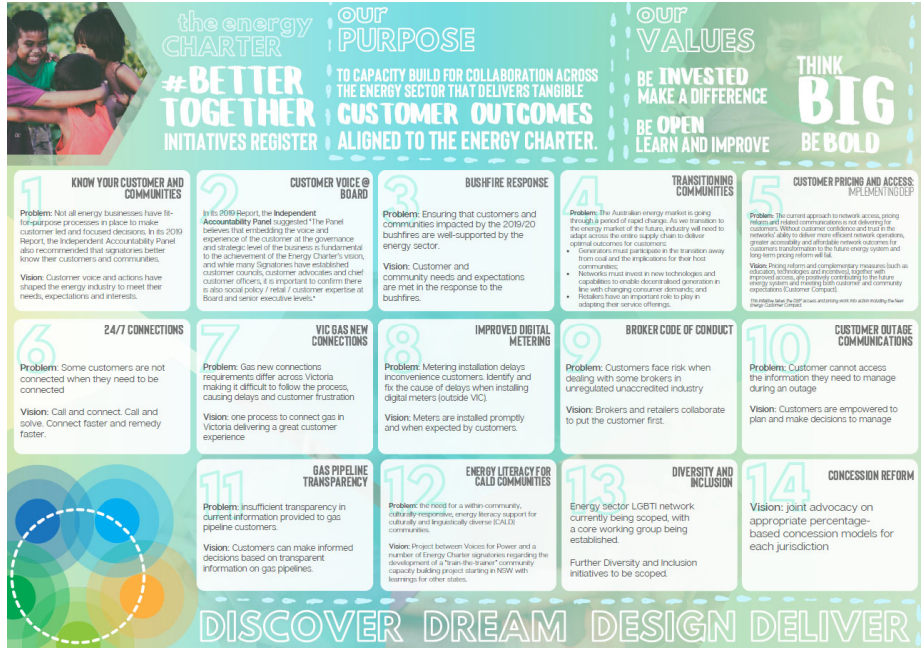
- Purpose is to progress collaboration across the energy sector that leads to tangible customer outcomes aligned to the Energy Charter
- Currently 14 Better Together Initiatives
- Ensuring that initiatives align with priority areas identified by Accountability Panel Report

BT#1 – Know your customer and communities

- More consistent approach to customer engagement across the industry
- Better-practice repository
- Identify opportunities for collaborative engagement by energy businesses

BT#2 – Customer Voice

- Ensuring customer voice is embedded at Board level
- Forming working group with view to publish report in late 2020



Afternoon tea break

Business Narrative

Gerard Reilly
General Manager Communications

Purpose

- Provide a broader context to Powerlink's 2023-27 Revenue Proposal, including our long-term view about our operations, challenges and opportunities and how we plan to deliver better value for our customers.

Feedback received from RPRG

- Clearer on target audience
- Reference environment as driver
- Customer driver needs to focus on more than just affordability
- Stronger emphasis that we do not replace 'like for like'
- Outline how the Revenue Proposal will respond to challenges

We are seeking feedback from the Customer Panel:

- What are your views on the updated business narrative (topics covered, detail provided, readability)?
- What improvements should we consider?

Review of customer engagement approach – 2023-27 Revenue Determination process

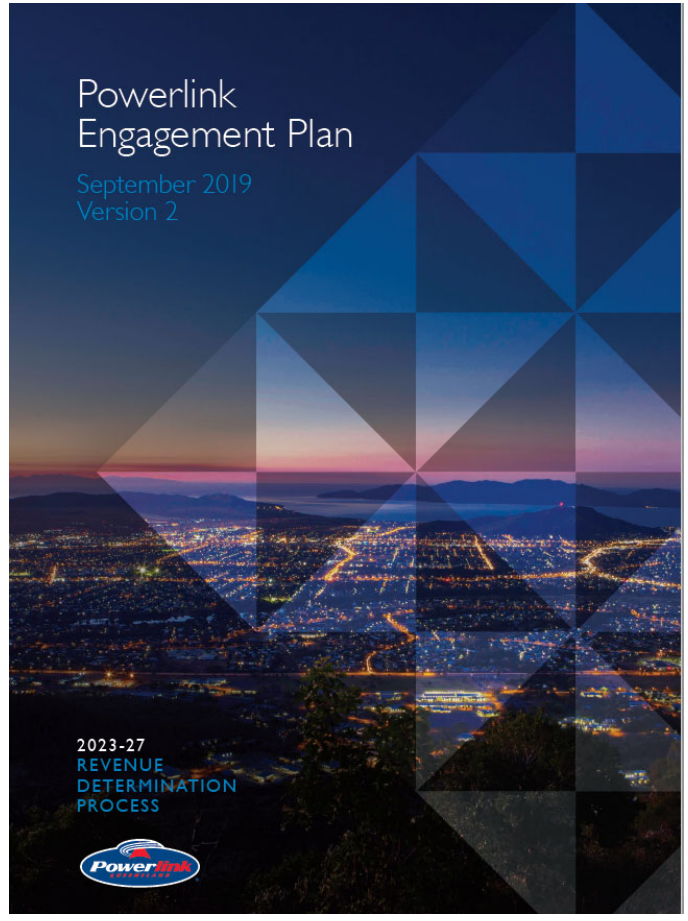
Gerard Reilly
General Manager Communications

Progress to date

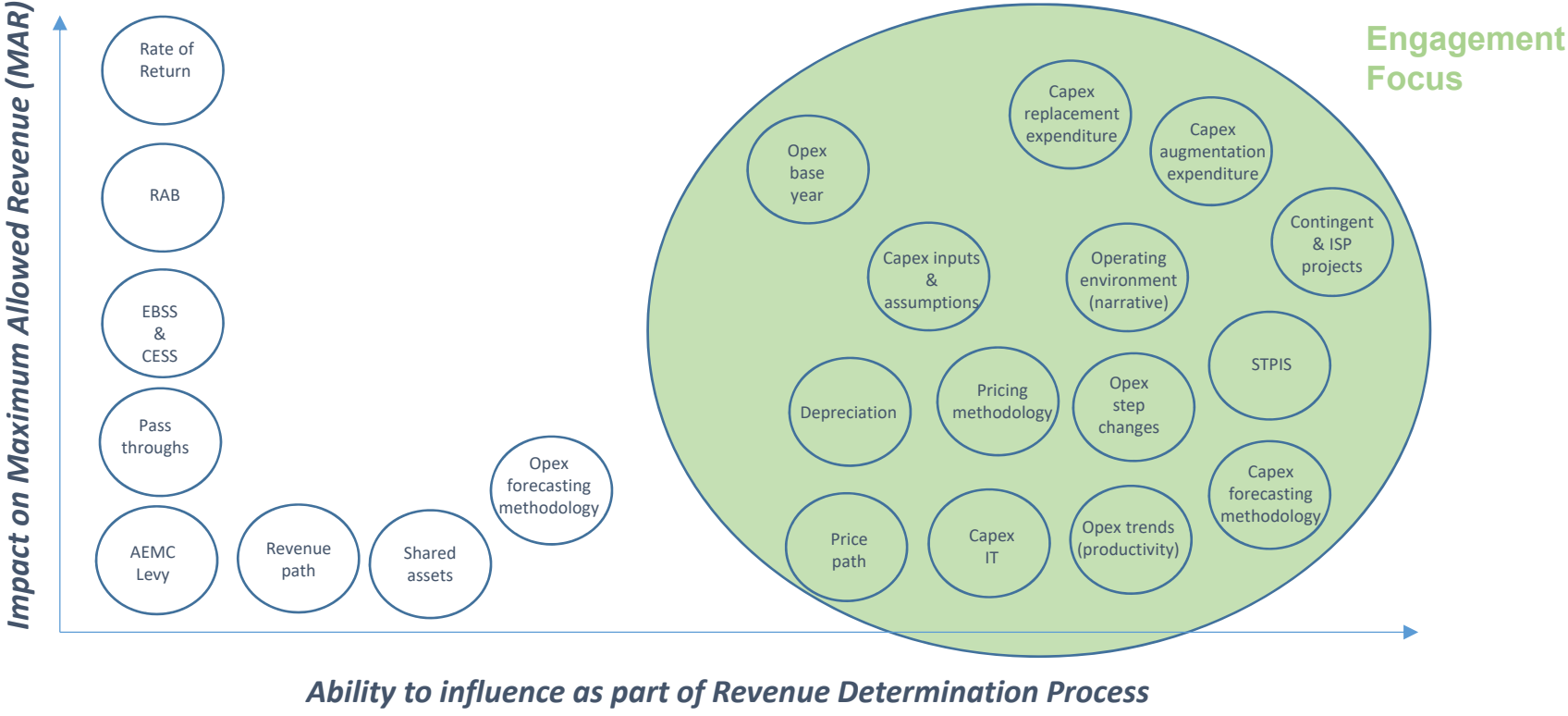
2023-27 Revenue Determination Process Engagement Goal

To undertake engagement to deliver a Revenue Proposal that is capable of acceptance by our customers, the Australian Energy Regulator and Powerlink

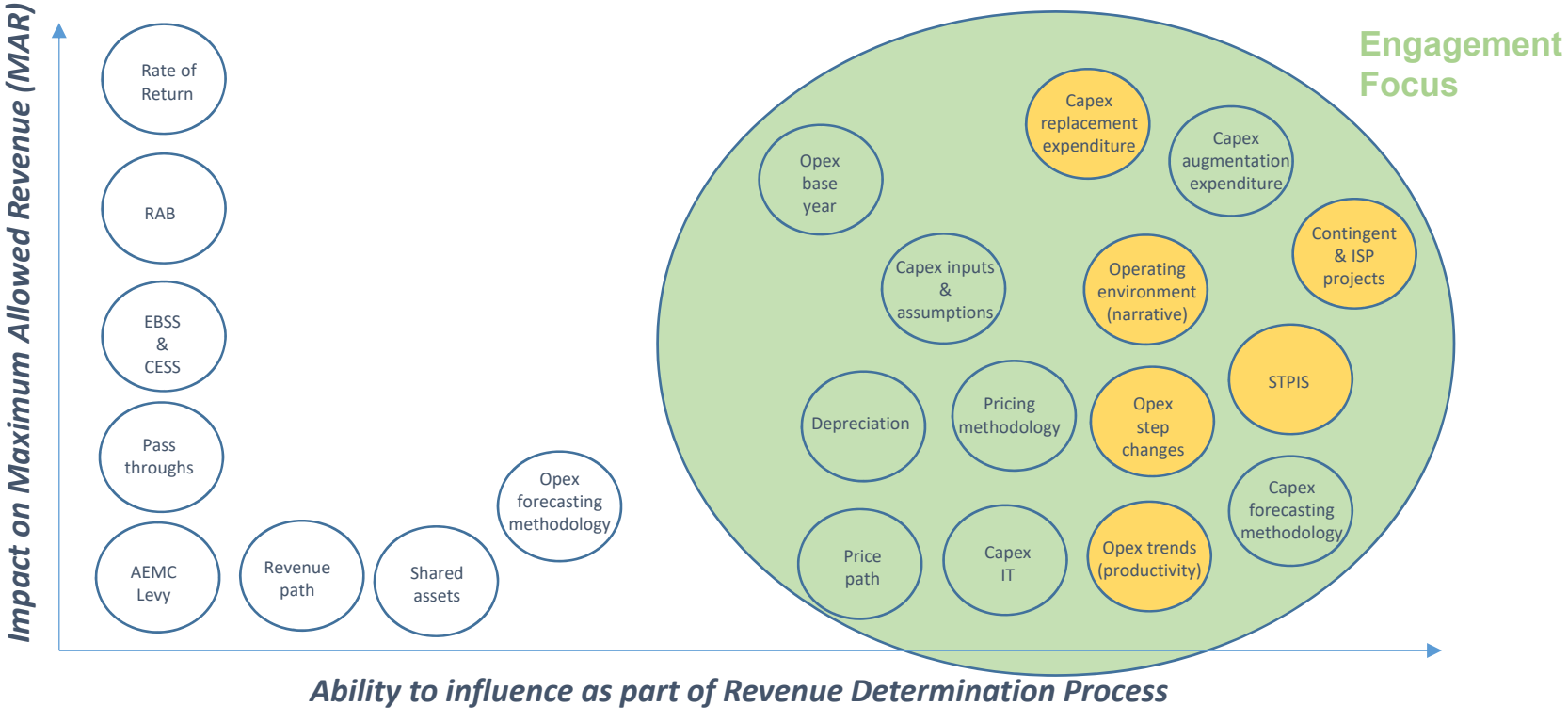
- Co-Design Workshop – May 2019
- Draft Engagement Plan circulated for comment – August to September 2019
- Established Revenue Proposal Reference Group – December 2019
- High level early forecasts released – December 2019



Engagement scope



Engagement scope



Highlighted circles indicate Powerlink's current view of areas of higher engagement focus.

Q. Do we need to change the elements of the Revenue Proposal in our engagement focus?

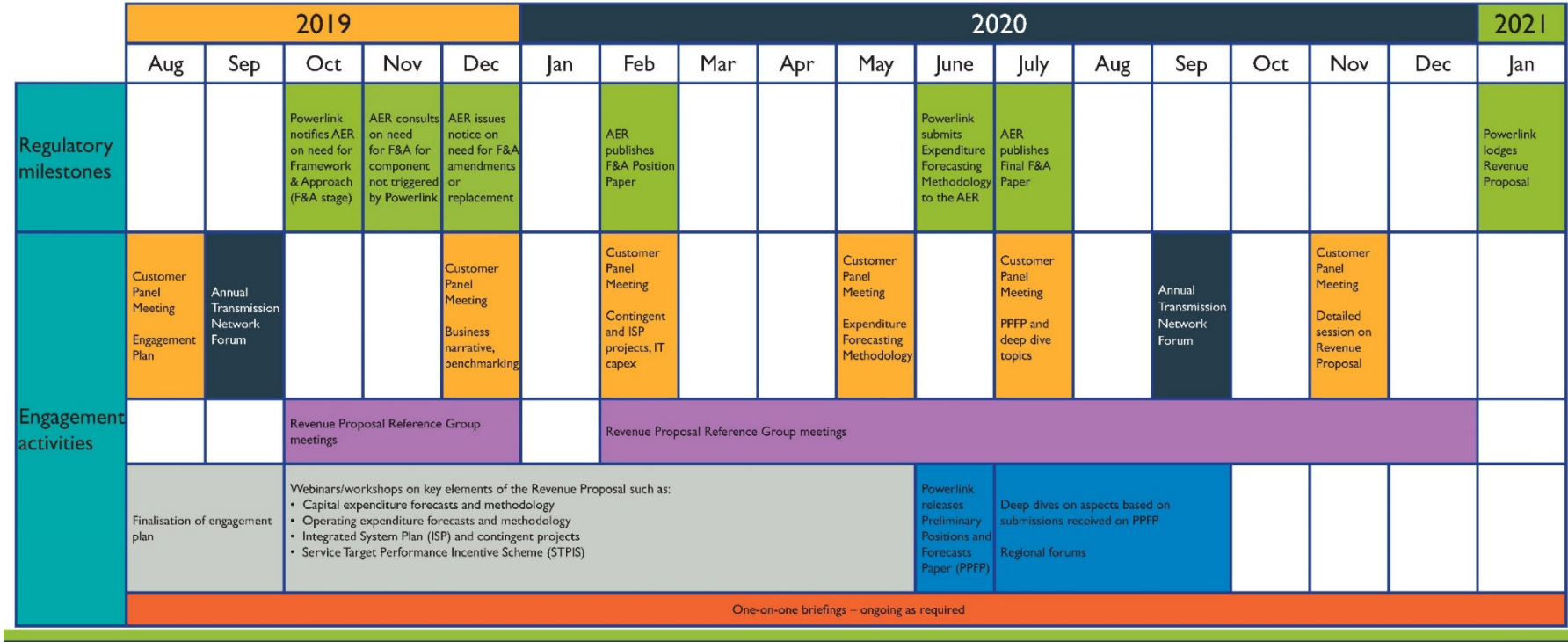
Engagement evaluation

What are we measuring	How are we going to measure	KPI
Effectiveness and quality of information provided to stakeholders	• Pulse check surveys • Informal debriefs • Test materials (e.g. information sheets) with customers	70% of participants rated the information provided relevant and accessible
Satisfaction level of stakeholders with engagement activities	• Post-activity satisfaction surveys • Informal debriefs and feedback.	An overall satisfaction rating of 7/10 for engagement activities
Stakeholders were engaged at appropriate level on the IAP2 spectrum	• Survey/solicit feedback from external stakeholders • Internal review • Peer review/audit	Identified that majority of stakeholders had appropriate level of influence on Powerlink decision-making
Impact of engagement on Powerlink decision making and quality of feedback/input received	• Survey/solicit feedback from external stakeholders • Internal review • Peer review/audit	Ability to demonstrate what changed as a result of engagement.
Timely delivery of engagement program	• Internal monitoring	Engagement program delivered on-schedule.
Improvement in social licence to operate score and reputation scores	• Formal research via the Stakeholder Perception Survey	Improvement in social licence to operate and reputation scores, and positive verbatim feedback regarding Revenue Determination process engagement.

Q. Can we improve the way we evaluate our engagement?

Engagement timeline

OUR PROPOSED ENGAGEMENT SCHEDULE



We will update this schedule from time to time, based on our engagement feedback and customer interest in topics.

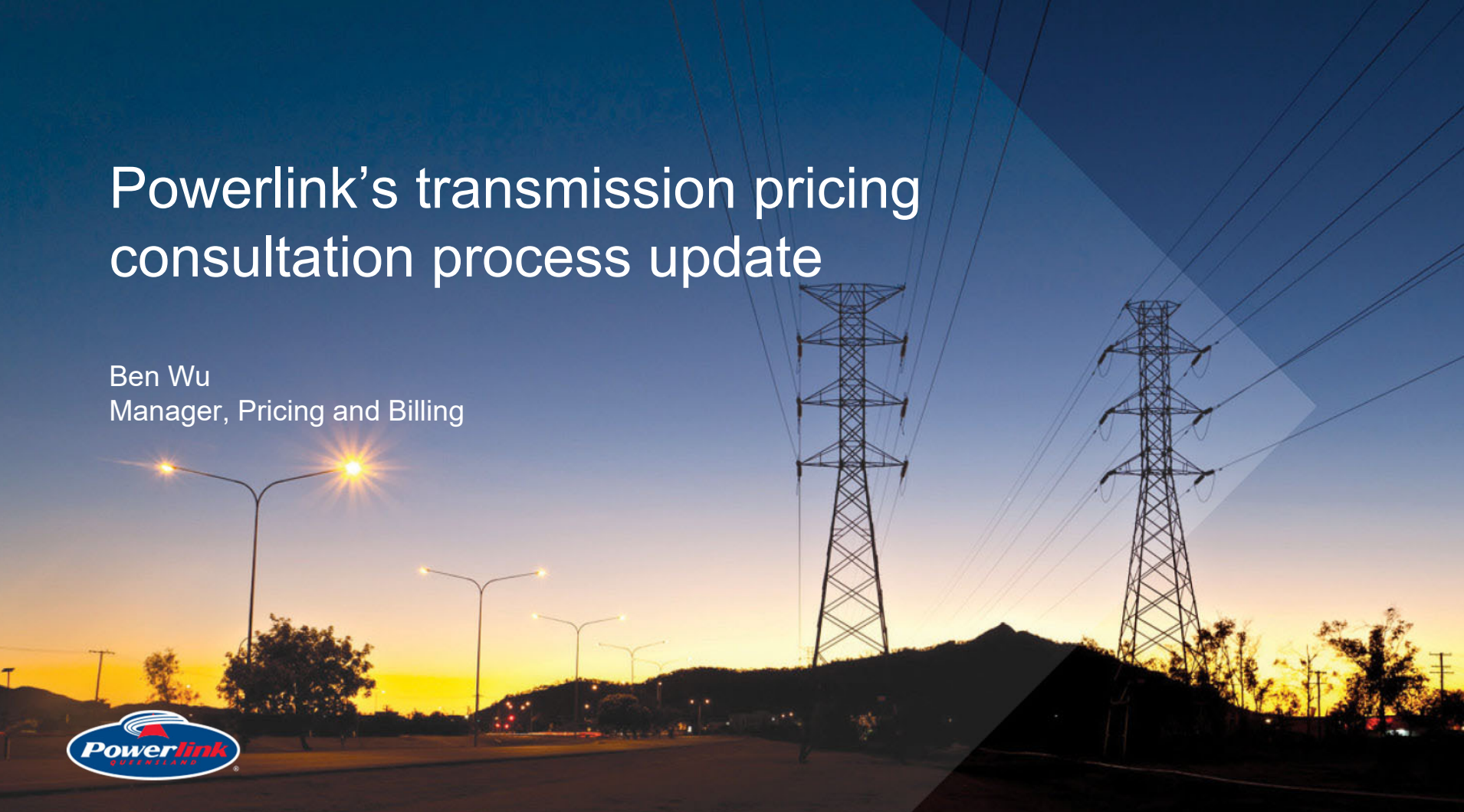
Proposed new timings

- Change the timing of the Preliminary Positions and Forecasts Paper from June to July 2020
- One month public submission period in August 2020
- Deep dives in August/September 2020, as required
- Regional engagement forums in August/September 2020
- Customer Panel meeting in November 2020 will focus on Revenue Proposal.

Q. Are there any other ways we can improve our engagement?

Powerlink's transmission pricing consultation process update

Ben Wu
Manager, Pricing and Billing



Pricing consultation recap

- Transmission pricing Consultation Paper published July 2019
- Rationale: promoting more efficient use of the network and lower costs for customers in the future
- Engagement: informed and guided by Customer Panel, our customers, network service providers and other stakeholders
- Pricing criteria: equity/fairness, price stability and transparency, and efficient price signals
- 10 pricing options across four broad groups:
  - alternatives to cost reflective network pricing
  - improving how transmission customers are charged
  - peak and off-peak
  - other initiatives.

Stakeholder feedback

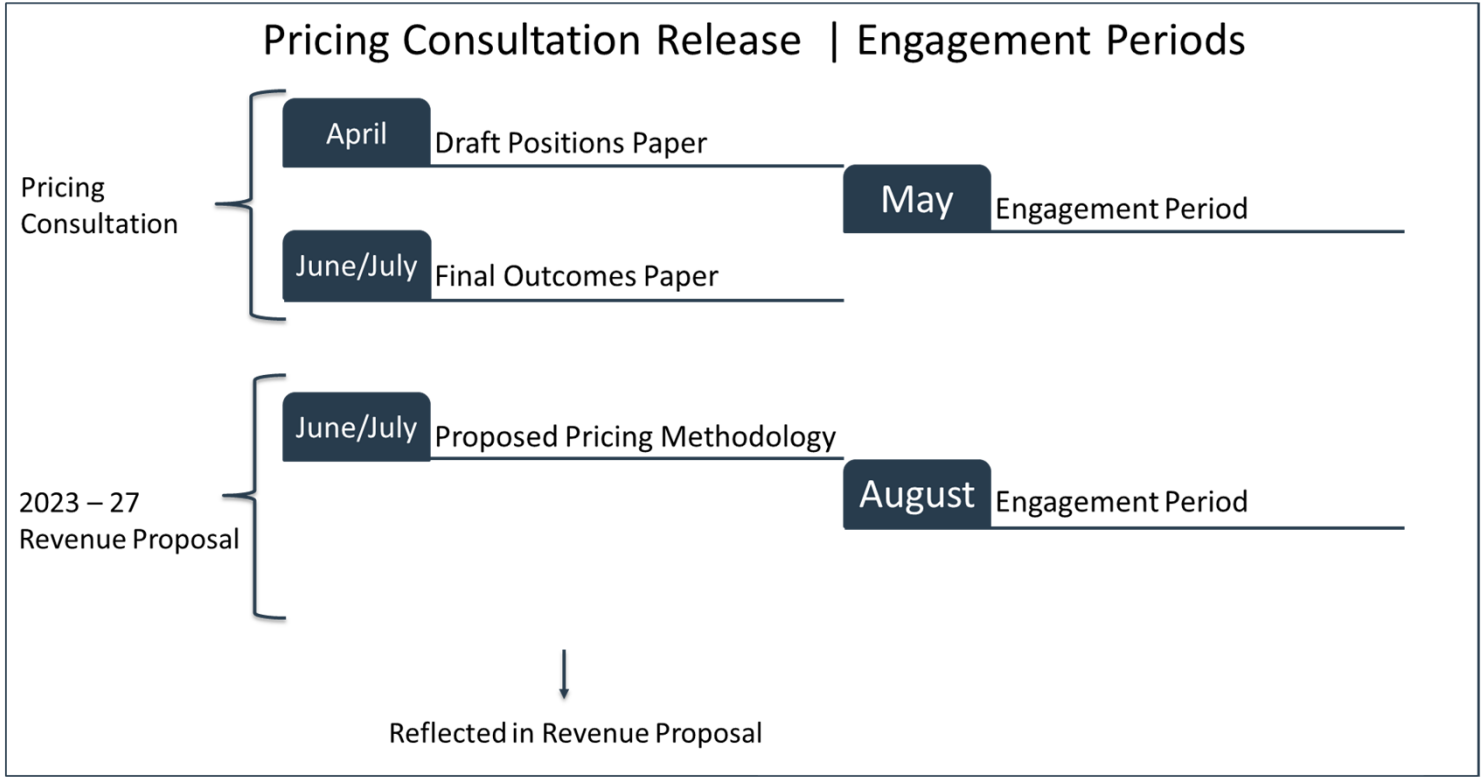
- General support for the proposed criteria, noting there would be potential trade-offs
- Support for the general direction of the review and acknowledgement there may be potential value in greater alignment with distribution pricing structures
- Customers want to understand the full implications of alternative pricing methodologies before providing specific comments
- Some customers considered there was merit in investigating a higher weighting of locational costs, moving towards capacity based pricing and alternatives to peak/off-peak pricing
- Interest in why Powerlink is looking to enhance demand based signals when demand is not driving network constraints.

Proposed way forward

Based on discussions and feedback received on the initial paper and recognising the balance between enhancing cost reflective pricing signals, interaction with pricing criteria and customer impacts, Powerlink intends to provide detailed information on the following options:

- Rebalancing between locational and non-locational components to a 60/40 split
  - efficient price signal
- Locational charges determined on peak demand only
  - price stability
- kVA charging
  - equity/fairness

Indicative 2020 pricing consultation timetable



We are seeking input from the Panel on the following:

What else should we consider in developing the Draft Positions Paper?

Close and thanks