2023-27 POWERLINK QUEENSLAND REVENUE PROPOSAL

Appendix 16.05 – PUBLIC

Submissions to Powerlink's Transmission Pricing Consultation Paper

15 October 2020

Ben Wu
Manager Pricing and Billing
Powerlink Queensland
PO Box 1193
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Dear Mr Wu

Submission on Powerlink Draft Position paper on potential reforms to transmission charges in 2022-2027 regulatory control period

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide feedback to Powerlink's consultation paper that outlines the proposed changes to the structure of Powerlink's transmission charges in the next regulatory control period, from 1 July 2022 to 30 June 2027.[1]

We support in principle Powerlink's proposal to universally adopt a peak demand basis for the locational charging component given that transmission network augmentation costs are more likely to be driven by peak demand, rather than average demand. We also note that this proposal will result in Powerlink being more consistent with the approach taken by other jurisdictional TNSPs, which may deliver better economic outcomes to the extent that current inconsistencies have distorted investment and usage decisions of large customers, particularly where they are directly connected to the electricity transmission network.

On the basis of the information set out in the consultation paper, we are concerned that Powerlink's proposal to increase the allocation of costs to the locational charge component from the current 50/50 split to the proposed 60/40 split does not satisfy Clause 6A.23.3 a(2) of the National Electricity Rules. Our concern relates to whether Powerlink has provided adequate evidence that the proposed 60/40 split is consistent with the objective of providing more efficient locational signals to market participants, intending participants and end users. It is likely that the AER will also share our concerns given that the economic weaknesses of cost allocation processes are well documented in the economic literature.[2] To address this issue, we encourage Powerlink to base this proposal on a robust estimate of Long Run Marginal Cost (LRMC) at the individual transmission connection point level. Not only will this approach strengthen Powerlink's case that this proposal is consistent with the economic principles in the Rules, it will also provide customers with greater certainty over the future direction of the locational charge applicable to their transmission connection point. For example, customers being supplied transmission services in

[1] www.powerlink.com.au/transmission-pricing-consultation-process
[2] AEMC 2005, Review of Electricity Transmission Revenue and Pricing Rules – Consultation program, Issues paper, p.26/27, November.

locations where the LRMC is low (such as where peak demand is declining) should be able to make investment and usage decisions with a reasonable degree of confidence over the future direction of the locational component of their transmission charges over the medium to longer term.

Notwithstanding our concerns above, we have undertaken some preliminary analysis of the impact of the proposed changes to the locational charges on the annual TUOS bill outcomes for our existing customers on an Individually Calculated Customer (ICC) network tariff.[3] Under our ICC price-setting methodology, with the exception of Entry/Exit connections, our the annual transmission costs are treated as a direct passthrough to ICC customers with rates applied to those forecast quantities of each ICC customer. In its pure form, the following overall annual impact is expected to be observed under each of Powerlink's transmission pricing reform option is summarised at the total TUOS cost level, locational peak demand charge component level and the ICC tariff class level.

Table 1: Indicative annual change in transmission costs – total TUOS cost, locational charge component and ICC tariff class

Distributor	Category	Option 1: Peak demand basis of locational charge	Option 2: Increase in peak demand cost allocation to 60/40 split	Option 3: Adopt a MVA basis for peak demand charge	Option 4: Remove side constraint applying to change in peak demand charge
Ergon	Total TUOS Cost	-0.9%	2.1%	1.6%	-2.4%
	Locational demand component	-3.2%	21.5%	-1.5%	-13.6%
	ICC tariff class	7.8%	-6.2%	-2.0%	-2.8%
Energex	Total TUOS Cost	1.3%	-1.4%	-0.4%	-0.3%
	Locational demand component	2.5%	21.9%	-2.0%	-13.1%
	ICC tariff class	10.3%	-5.7%	0.4%	4.3%

Note : The above indicative outcomes relate to each option in isolation. It could be possible that more than one option is implemented by Powerlink.

[3] Note: The proposed changes to the locational component will only have a direct impact on ICC customers given that our methodology for setting these tariffs aim to preserve the Powerlink transmission price signal.

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The key point from this analysis is that in terms of EQL's overall TUOS cost, the transmission pricing reform options being considered by Powerlink are expected to have only a modest impact, ranging from -0.9% to 2.15% for Ergon and -1.4% to 1.3% for Energex. This implies that the impact of the Powerlink reform options will be modest for residential and small to medium sized business customers where the TUOS component is based on a highly average approach i.e not a direct passthrough of the Powerlink transmission charges. As expected, the option of increasing the cost allocation to a 60/40 split will have a material increase in the locational peak demand charge of around 21.5% for Ergon and 21.9% for Energex. While this is a significant increase it should be noted that this increase will be offset to a large extent by reductions in the other charging parameters within Powerlink's transmission pricing structure. For the ICC tariff class, the adoption of a peak demand only basis of the locational demand charge component is expected to have a significant impact of 7.8% for Ergon and 10.3% for Energex. It should be noted that these significant increases in the locational peak demand charge will not be immediately passed through to ICC customers given that EQL is required to adopt transitional TUOS pricing arrangements to comply with the customer impact principle in the National Electricity Rules. In this regard, EQL believes that Powerlink should support these transitional pricing arrangements by delaying the introduction of these reforms until the commencement of our next regulatory control period - 1 July 2025. This will ensure that EQL will be able to engage with our ICC customers on these changes as part of our next Tariff Structure Statement process.

We have also developed preliminary TUOS impact analysis for our ICC customers, as part of Powerlink's consultation process. A confidential high level summary has been provided as an attachment.

We also note from the consultation paper that Powerlink is considering proposed changes to its transmission pricing arrangements that require an amendment to the Rules. While we offer our general support for Powerlink's proposal to move from a kW to kVA basis for transmission charges in Queensland, we do not support Powerlink seeking a rule change to relax the side constraint under the Rules.[4] We have a number of concerns over this aspect of the consultation paper. Firstly, unlike the distribution pricing principles in Chapter 6 of the Rules, Powerlink and the other jurisdictional TNSPs are not subject to a customer impact principle. It is difficult to support this proposal in the absence of this regulatory safeguard given there is a risk that relaxing the side constraint will result in some transmission customers being adversely impacted in circumstances where they are unable to fully mitigate these impacts due to the sunk nature of their plant and equipment.

We believe that it is important for Powerlink to develop a clear transition path under its proposed transmission charges in compliance with the existing side constraint set out in the Rules. This transitional approach will ensure that directly connected transmission customers will have sufficient time to prepare for the change to their transmission pricing arrangements. We encourage Powerlink to pursue this approach and to provide a clear transitional pathway for its customers.

[4] Chapter 6A of the Rules limit the extent that locational charges applying to a transmission connection point can increase in a given year to no more than CPI-X+2%, calculated on a weighted average volume basis.

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If you have any questions or require clarification on any of the matters raised in this submission please contact Bob Telford, Manager Network Pricing and Tariffs, on 0418 929 173 or Bob.Telford@energyq.com.au

Kind regards

Karen Stafford
General Manager Legal Regulation and Pricing

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Attachment 1: Summary of ICC TUOS impact under Powerlink pricing reform options

EQL has undertaken indicative modelling of the TUOS bill impact under each reform option for each existing individual ICC customer in both Ergon and Energex's network area. A high level summary of this indicative analysis is provided in the table below:

Table A1: Summary of Indicative annual % change in transmission cost for individual ICC customers under Powerlink reform options

Distributor	TUOS bill impact	Option 1: Peak demand basis of locational charge	Option 2: Increase in peak demand cost allocation to 60/40 split	Option 3: Adopt a MVA basis for peak demand charge	Option 4: Remove side constraint applying to change in peak demand charge
Ergon	Maximum	32%	15%	150%	32%
	Average	10%	-4%	3%	-3%
	Minimum	-51%	-59%	-62%	-81%
Energex	Maximum	36%	16%	104%	16%
	Average	13%	-3%	4%	3%
	Minimum	1%	-14%	-10%	-10%

Note : The above indicative outcomes relate to each option in isolation. It could be possible that more than one option is implemented by Powerlink.

The key points from this indicated analysis, as summarised in the table are:

- The average impact on the TUOS bills of individual ICC customers is highest under Option 1, which is estimated to be 10% for Ergon and 13% for Energex.
- There is a considerable divergence of annual TOU bill impacts across individual ICC customers under each reform option. The highest spread is expected to be associated with Option 3 (adoption of MVA basis) with:
    - The maximum impact estimated at 150% for Ergon and 104% for Energex.
    - The minimum impact is estimated to be an annual TOU bill saving of 62% for Ergon and 10% for Energex.

We have undertaken indicative bill impacts for each individual ICC site and we will provide this information to Powerlink only upon the individual ICC customers request.

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RTA Yarwun Pty Limited
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Australia

Ben Wu
Manager Pricing and Billing
Powerlink
Email submission to:
pqpricing@powerlink.com.au

25 September 2020

Dear Ben

Re: Consultation Paper: Transmission Pricing Consultation – Draft Positions August 2020

RTA Yarwun Pty Limited (RTAY) welcomes the opportunity to make a submission to Powerlink on the Transmission Pricing Consultation – Draft Positions paper (the "Consultation Paper"). This paper outlines four options that Powerlink is consulting on in respect of pricing methodology and the revenue determination that applies from 1 July 2022 to 30 June 2027.

The Yarwun alumina refinery contributes strongly to the Gladstone region, with around 1100 full time employees and contractors employed at the refinery and a 2019 direct economic contribution to the Australian economy of $615 million, including a $202 million local spend and $107 million in wages and salaries paid.

With regard to transmission pricing and the location of load, RTAY recognises the importance of making positive choices with regard to the location of load with respect to transmission infrastructure as part of managing the broader transition to a secure, reliable, least-cost grid that supports meeting Australia's emission reduction commitments.

While Powerlink's consultation is in respect of the distribution of charges between consumers, RTAY urges that Powerlink works with all stakeholders to seek to minimise the absolute cost of transmission and set strong objectives to lower costs to Queensland industry and households in respect of the revenue determination from 1 July 2022 to 30 June 2027. Changes to the distribution of charges have the potential to be much more acceptable in a context where no customer is worse off.

Powerlink has outlined for consultation four specific changes in the Consultation Paper, specifically:

Should Powerlink propose in its 2023-27 Pricing Methodology:

a. a 60/40 split of locational/non-locational charges (Change 1); and/or
b. having locational charges based on peak demand only (Change 2)?

These arrangements can be put in place under the existing National Electricity Rules (the Rules).

Should Powerlink progress as part of a future Rule change:

a. MVA charges (Change 3); and/or
b. changes to the side constraint mechanism (Change 4)?

RioTinto

With respect to the four specific changes Powerlink has raised in the Consultation Paper, the primary intention of the changes is to drive more effective locational decision making within the Queensland grid. However, demand in Queensland is expected to be relatively flat in the revenue determination period so there is actually limited locational decision making in respect of load that is likely to be made. Furthermore, the Yarwun Alumina refinery is already well located in respect of minimising the impact that it has on the transmission network – the Gladstone region has both significant loads and significant generation – the underlying physics of generation and load will mean that most electrons flow locally, particularly for RTAY which is for most of the year a net generator supplying both the steam and electricity demands of the Yarwun Alumina refinery and also exporting electricity to the grid. For those short periods when the Yarwun gas turbine is shut down, the Yarwun refinery is located very physically close to the Gladstone Power Station and the underlying physics mean it will draw from this local generation infrastructure. This is an extremely effective location in terms of transmission infrastructure utilisation. The Yarwun alumina refinery plans outages during the off-peak period of the year, further minimising impact on the transmission infrastructure.

As has been discussed with Powerlink, the practical outworking of the Yarwun alumina refinery operation as a generator exporting electricity to the grid for most of the year and importing for a small outage period is that RTAY's transmission charges are dominated by the locational component of the transmission charge i.e. RTAY is in fact experiencing a much stronger signal regarding locational charges than almost any other load in Queensland. This effect is currently so large that were the current side constraint mechanism (Change 4) to be lifted, RTAY's transmission charges would fall significantly.

Accordingly, the primary concern of RTAY is that by increasing the locational/non-locational split (Change 1) and making locational changes based on peak demand (Change 2), this will materially and inequitably drive increased costs for RTAY as it will exaggerate the already strong locational pricing structure that RTAY already sees. RTAY has no way to alleviate these increased charges and the net effect is that one of the most well located and already efficiently price signalled assets in Queensland would be materially disadvantaged. Additionally, the current COGATI process and proposed changes being considered by the Energy Security Board for transitioning the National Electricity Market (NEM) to a post-2025 design are also focussed on driving the decisions of both load and generation regarding location and have the potential to interact materially with Powerlink changes 1 and 2 that increase the emphasis on locational pricing. For these two reasons, RTAY does not support these changes.

Changes 3 and 4 require changes to the National Electricity Rules and as set out in the consultation paper do not have strong precedent elsewhere in the National Electricity Market. As noted already, with the wave of changes anticipated and contemplated in the NEM, we are cautious about the interactive effects with other changes and particularly the appetite of stakeholders to pursue the changes required for removal of the side constraint. As noted above, removal of the side constraint would reduce RTAY costs to a more equitable level – while we are supportive of this change our concern is that the threshold in terms of both process requirements and stakeholder engagement to achieve this cost reduction is much higher than for Changes 1 and 2 which we do not support. On balance, we would therefore support a position where there are no changes implemented by Powerlink in respect of the 2022-2027 Revenue Determination and that Powerlink instead focus on reducing the overall cost burden for all consumers.

RioTinto

RTAY looks forward to engaging with Powerlink further on the content of the Consultation Paper and also would welcome the opportunity to discuss this submission as part of that process. If you have any questions in the interim, please contact Daniel Woodfield (Daniel.Woodfield@riotinto.com).

Yours sincerely,

Mark Gilmore
General Manger – Operations
Yarwun Alumina Refinery

Wilmar Sugar

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24 September 2020

Mr. Ben Wu
Manager Pricing and Billing
Powerlink Queensland
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By email: bwu@powerlink.com.au

Dear Mr Wu,

RE: Wilmar Sugar Response to Powerlink's Pricing Consultation - Draft Positions Paper (dated August 2020)

Wilmar Sugar (Wilmar) appreciates the opportunity to respond to Powerlink's proposed changes to its Pricing Methodology for the next regulatory period (2022-27) and contained in Powerlink's Pricing Consultation - Draft Positions Paper dated August 2020)

We also appreciate the effort that Powerlink has displayed by their open and transparent engagement process. Wilmar acknowledges the challenge being faced in managing network pricing criteria, in seeking to balance (enhanced) cost reflective pricing signals with (minimised) customer impacts.

However in short, Wilmar does not support any overhaul to Powerlink's current pricing approach and outlines the following comments for your consideration:

- Incumbent sites with low load factors are likely to be proportionally disadvantaged under any of the proposed changes. Such sites face significant price increases should any of the changes be implemented
- It should be expected that loads have a capability to achieve similar outcomes i.e., achieve the intent of Powerlink through other avenues without the need for fundamental pricing reform as that proposed. For example, sites can make changes to operating protocols / behaviour to reduce authorised AD / changes to their load profile / to power factor
- Side constraints are a necessary stabiliser for prices, allowing consumers and business to adapt and make long term decisions and optimise operations and capital investments. In other words, side constraints are appropriate and should remain in place.
- The proposals being considered in the draft positions paper are significant. Consideration should also be given to the timing of the other significant reform processes currently underway (eg COGATI, ESB) which may have broad and unexpected impacts on the proposed TNSPs pricing methodologies. We fear that a quick move now may produce a sub-optimal solution for consumers, generators and Powerlink in the short and medium term.
- Further consultation is required as to why the individual options are being considered, including whether they will be implemented individually or on a collective basis. For instance, if implemented on a collective basis, the changes represent a tripling in TNSP costs to one of our sites alone. Such sudden and significant changes threaten the viability of long time established connections and their businesses.

For the reasons above, Wilmar opposes any change to Powerlink's Pricing Methodology in the forthcoming regulatory period. Should any changes be adopted Wilmar suggests that transitional or grandfathering arrangements will be required given the potential size of the impact on existing businesses that cannot move. Furthermore, Wilmar reminds Powerlink that any fundamental change that requires a business to implement significant capital investment will have a typical project horizon spanning years from design to implementation.

Wilmar would like to thank Powerlink once again for the opportunity to respond to their Pricing Consultation - Draft Positions Paper and their assistance in this matter.

We look forward to continuing work with you in this regard.

Please do not hesitate to contact me (please refer to signature below) if you have any further questions.

Yours sincerely

Paul Trayner
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WU Ben (Powerlink)

From: Walsh, David <David.Walsh@qmag.com.au>
Sent: Friday, 25 September 2020 12:00 PM
To: Powerlink Pricing
Subject: FW: Powerlink Pricing Consultation - Draft Positions Paper - for your feedback
Attachments: Draft Positions Paper - 26 August 2020.pdf
Signed By: David.Walsh@qmag.com.au

To whom it may concern,

On behalf of QMAG Limited, I wish to submit the below feedback in response to the Draft Position Paper dated 26 August 2020.

Question 1: Should Powerlink propose in its 2023-27 Pricing Methodology: (a) 60/40 split of locational/non-locational charges1; and/or (b) having locational charges based on peak demand only?
QMAG: We REJECT the proposal. Given the spare capacity in the Central West Rockhampton Region, we believe that the application of a higher weighting of the locational component will detrimentally impact our business – as we are an EITE organisation any increases in energy costs will have a further erosion on our ability to compete globally. QMAG believes that the current pricing methodology provides a reasonable basis for price allocations and as a long term customer in the region with relatively unchanged operations does not feel that any changes to network price methodologies are justified.

Question 2: Should Powerlink progress as part of a future Rule change: (a) MVA charges; and/or (b) changes to the side constraint mechanism?
QMAG: We REJECT the proposal. We do not see any compelling reason that would necessitate the change. For similar reasons to Q1, the changes to the MVA have the potential to further erode competitiveness of our business in the global market.

With best regards

David Walsh
Finance Manager

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WU Ben (Powerlink)

From: Choi, Pedro <choiyo@Sunmetals.com.au>
Sent: Tuesday, 29 September 2020 4:48 PM
To: WU Ben (Powerlink)
Cc: Sleigh, Simon; Choi, Michael
Subject: RE: Future Transmission Pricing

Hi Ben,

Please see our feedback as below. Thank you for your patient.

After reviewing the proposed changes, Sun Metals Corporation has the current questions and feedback regarding the proposed methodologies.

- We don't see any benefits on 60/40 TUOS charges due to:
  - The transmission network becoming more bi-directional where the flows no longer represent where locational demand exists, rather it is more dynamic due to large and small distributed energy?
  - Given the load in SE Queensland and subsequent revenue support available we see that the transmission lines in North Queensland aren't at a level to be supported regionally through 60% locational charges.
- We support the use of peak demand as being 100% for locational charges
  - Our peak demand will be structured for periods outside peak times
- MVA charging
  - For NQ system strength gap will only loads pick up the MVA charges or will also generators on the distribution network?
  - How will Sun metals be treated in the MVA charging due to it behind the meter semi-scheduled generator who already gets charged FCAS fees on total generation? Will we get charged again as net load (demand less generation)at the point of connection thereby effectively get charged twice for MVA charging.
- Side Constraint removal
  - The removal of mechanism to protect from price shocks relative to the average customer base has a benefit to SMC as provided therefore we would want it to be maintained.

Regards,
Pedro

Pedro Yongbin Choi

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WU Ben (Powerlink)

From: [redacted]
Sent: Monday, 21 September 2020 4:52 PM
To: WU Ben (Powerlink)
Cc: HARRIS Jennifer (Powerlink); [redacted]
Subject: RE: [EXTERNAL SENDER] Transmission Pricing Consultation - Draft Positions Paper

Hi Jenny and Ben,

Thanks for taking the time to answer our questions and provide customer specific information in respect of the Draft Positions paper for consultation on the 2022 Powerlink Pricing Methodology.

Aurizon Network recognises the broader efficiency objectives that are obtained from prices for use of services being more closely aligned to the costs of providing the service. While strengthening the locational price signals is consistent with those objectives it would appear from the information presented that Powerlink's ability to implement stronger locational and peak demand price signals in an equitable manner is contingent upon relaxation of the 2% side constraint.
The implications for redistribution of the existing prescribed transmission services cost base between Powerlink customers with and without the side constraint is apparent in the material difference outcomes between those states in adopting both the 60/40 allocation between location and non-locational charges and the move to peak load pricing. In this respect, Aurizon Network appears to be disadvantaged relative to other network users based on:

- the relativity of the costs recovered from nominated demand relative to actual demand in comparison to the median; and
- the application of the side constraint.

Given the relatively small change in the FY21 prices modelled from implementation of both the 60/40 allocation between location and non-locational charges and the move to peak load pricing this appears to suggest that Aurizon Network's prices are relatively cost reflective.
The practical effect of implementing these changes with the side constraint is that neither the efficiency or equity criteria are fully pursued as:

- not all customers will move to the cost reflective price and therefore the strength of the price signal is diminished;
- customers such as Aurizon Network with low peak to average utilisation ratios could bear a disproportionate amount of cost redistribution despite having limited operational flexibility to shift demand between peak and off-peak periods.

On this basis, it appears that the draft positions:

- will only weakly satisfy the pricing criteria unless the side constraint is also relaxed to allow for tariff rebalancing across all network load; and
- will involve cost redistribution with no expected efficiencies through avoided investment in response to a strengthening of the locational price signal.

However, Aurizon Network also recognises the importance of the side constraint in protecting users from not just volatility in pricing but removing its exposure to material changes in network flow unrelated to its own demand. In addition, these large variations are likely to be driven by changes in the generation mix and locational decisions of new generators. The operation of the 2% side constraint appears to operate in conflict with the objectives of cost reflective network pricing in the current market transition.

Aurizon Network considers that the implications for network pricing with the 2% side constraint and the price uncertainty associated with rapidly and evolving nature of flows on the network from future renewables generation investment without the side constraint need to be fully evaluated. Aurizon Network would welcome further engagement with Powerlink and other stakeholders on how these issues can be reconciled and whether a broader transmission network pricing review is required to evaluate how to address the impacts of the significant changes in the NEM on transmission pricing.

Aurizon Network notes the benefits that would be obtained from the application of MVA pricing and would support further evaluation and consideration by the AEMC through a rule change process. Nevertheless, given the wide distribution of impacts for directly connected load customers it seems unlikely that Powerlink would obtain stakeholder consensus for this approach.

If you could please consider the above when forming your Pricing Proposal, and let us know what the next steps are. More than happy to engage further on the above.

Thanks,
[redacted]

[redacted]
[redacted]
Network
T[redacted]
[redacted] aurizon.com.au
Join my Personal Meeting

Safety is our core value