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Submission of PowerNet Limited
To the Electricity Authority
On Review of the Targeted Reform of Distribution Pricing

August 2023

Introduction

1. PowerNet Limited (PowerNet) appreciates the opportunity to make a submission to the Electricity Authority (the Authority) on the Review of the Targeted Reform of Pricing Distribution.

2. PowerNet is an electricity management company with its head office based in Invercargill. It is a joint venture company, owned (50/50) by Electricity Invercargill Limited (EIL) and The Power Company Limited (TPCL). This submission is supported by EIL, TPCL, and OtagoNet Joint Venture (OJV) and provides feedback to the discussion document published by the Authority.

3. EIL and TPCL established PowerNet in 1994 to achieve economies of scale through integrated network management across the Southern region's Electricity Distribution Businesses (EDBs). PowerNet manages the non-exempt EDBs of EIL and OtagoNet Joint Venture (OJV), the exempt EDB of TPCL, and the non-grid connected Stewart Island Electric Supply Authority (SIESA).

4. PowerNet manages an asset base and investments in excess of NZ$1 billion. The aggregated electricity distribution asset base managed by PowerNet is the fourth largest in New Zealand. It provides services to over 75,000 customers through more than 14,200 circuit kilometres. In addition to EIL operating in Invercargill and Bluff, TPCL operates in Southland and West Otago, OJV in rural and coastal Otago region that surrounds Dunedin City, Lakeland Network (LNL) in the Frankton, Cromwell and Wānaka regions, and SIESA on Stewart Island.

5. PowerNet has long-term management agreements in place with EIL, TPCL, OJV and LNL. With the benefit of integrated business management systems in place, and a core purpose and expertise in asset management capability and delivering operating efficiencies for the EDBs it manages.

6. PowerNet supports the Electricity Networks Aotearoa (ENA) submission in principle. This submission reinforces some of the key points made in the ENA submission and addresses where the networks PowerNet manage wish to highlight or emphasise issues. This is not intended however to lessen the relevance or emphasis of any of the points in the ENA submission.

7. PowerNet also supports the Government's aspiration to reach net zero emissions by 2050 and 100 percent renewable energy generation, that is not cost prohibitive, by 2030. We acknowledge the important role distribution networks will play in supporting New Zealand's transition to a low emissions economy.

Key points

Retailers are not cost reflective of EDB pricing

8. PowerNet is cognisant that there have been numerous requests made of EDB's around cost reflective pricing reform that have been met. We have implemented the Authority's preferred peak pricing over the last two years and provided this to retailers, continually updated our roadmap, phased in changes rather than wholesale change to ease the rate of change for consumers, and made changes to reflect the transition of low fixed charge rates.

9. Throughout this time PowerNet has seen little evidence of distribution pricing signals being adopted by some retailers through the tariffs being offered to end users. It is the view of PowerNet that as an EDB we have done what has been asked of us and have made significant change to meet the requirements of the Authority and regulatory change, however those changes are not always being reflected in the retail environment, nor cost reflective of EDB pricing.

10. In addition, distributors are left navigating through a process of retailer incentives such as 'free hour of power' that are counter to EDB pricing. Not only does this create a false peak, but it also results in the inefficient upgrading of networks to meet the demand and mitigate manipulated peak loads, rather than a more sustainable approach of educating consumers around energy use behaviours. Ultimately pricing can only do so much, and when price is no longer an incentive or disincentive, consumers will make their own choice around consumption.

11. PowerNet recently queried customer pricing with a large retailer, whereby we brought to their attention that the customer was being overcharged as they were not mirroring our pricing signals. The response from the retailer was that they were "moving away from mirroring the network pricing so we can offer more expansive/relevant pricing." We would encourage the Authority to investigate greater visibility around retailer pricing and reflection of line charge differentials.

12. PowerNet questions then, if one of the largest retailers in New Zealand are not going to pass through distributor pricing, what is the purpose of making distributors implement price signals and incur cost? There is significant time and capacity required to undertake this work within EDB's, and with this review implying further regulation, PowerNet seeks to understand from the Authority how they see changes made by the distribution industry flowing through the chain to retailers and ultimately to the consumer. Distributors' contractual customers are the retailers. When retailers rebundle prices, they remove the price signals being sent through the regulated industry of distributors. We acknowledge that retailers have their own challenges in a commercial environment and increased complexity may add concerns around customer retention.

13. However, we would like to see the Authority challenge the retail industry to pass through the many changes being made by PowerNet managed EDBs (and other EDBs) that respond to the needs of Government, regulation, and consumer demand, rather than try and find additional mandate through EDBs. We view mandating through regulation being seen as the easier option than addressing the concerns seen through the non-regulated retail industry.

Flexibility required in distribution pricing arrangements

14. PowerNet and the networks we manage have several significant distribution pricing arrangements underway and in discussion.

15. PowerNet has entered commercial arrangements that upgrade connections for decarbonisation and involve millions of dollars in investment. We have previously advised the Commerce

Commission, the Ministry of Business Innovation and Employment, the Energy Efficiency and Conservation Authority and the Authority that we are working through and doing this.

16. One of the strengths in our approach is that we provide several options for commercial and residential customers to optimise in a way that will meet their requirements and future-proof for years to come. There is no question that this will be compromised if our approach is mandated and/or restricted. In fact, PowerNet would argue that mandating does not guarantee greater efficiency in the network or in the security of supply for end users.

Decarbonisation & electrification

17. As outlined above, PowerNet has been working with major Southland customers, supporting their decarbonisation initiatives. Various customer stocktakes of electrification potential has been undertaken, including direct engagement with customers.

18. For the PowerNet managed EDBs, there are 44 customers with coal boilers in excess of 0.5 MW electrical capacity. This represents 10% of all New Zealand's manufacturing emissions and 1.2% of all New Zealand's CO_2 emissions. PowerNet has worked with individual businesses to develop the best network upgrade solution for them and made significant changes to the Capital Contribution Policies of its EDBs, to support decarbonisation and electrification. Thus far, these network upgrades have totalled tens of millions of dollars.

19. Our policy changes for the individual customers have struck the right commercial balance between EDB funded network upgrades and customer funded. It is critical that this flexibility be maintained, to be managed at local EDB level, in order to manage the transition to a net-carbon zero economy. This is a learning journey and further mandating at this stage may be counter productive to the outcomes sought through electrification.

20. PowerNet presented to the Authority's Chair, Chief Executive and staff in September 2022, outlining the work that is happening and planned in this area, including the evolution of the Capital Contributions Policy to meet customer needs.

Congestion and data

21. PowerNet has demonstrated commitment to designing pricing innovation for the managed networks. Currently these networks have Time of Use (TOU) pricing consisting of Peak, Night and Shoulder rates with a strong differential between Peak and Night. PowerNet's pricing roadmap includes reviewing pricing differential incentives and granularity and are working to determine where improvements could be made.

22. PowerNet understands there is some urgency for cost reflective pricing that ensures pricing delivers best outcomes for consumers. However, PowerNet understands that material congestion has not yet arisen on its managed networks and is not forecast to be a significant issue within the next five years.

23. Large connections are not considered a congestion issue as the scale of growth is typically a step change in demand that exceeds capacity well beyond what demand management can mitigate (although these options are considered with customers). PowerNet suggest there is a significant difference in the urgency between improving line charges and improving connection charges. However, PowerNet has demonstrated a commitment to facilitating connections for decarbonisation and the electrification of industry process and EV charging and we have not experienced material customer frustrations with pricing options.

24. PowerNet has a focus on developing congestion analysis and forecasting for its managed networks and believes this is necessary to understand the problem we may try to solve with line pricing rather than assuming immediate reform is necessary. PowerNet notes that this is dependent on access to quality data which remains a barrier for EDBs and causes some frustration around being expected to complete congestion analysis without this data.

25. PowerNet has good access to data (with some limitations) for EIL and TPCL where it owns the smart meters on these networks and so is relatively well positioned to develop congestion analysis on these networks. This has some flow over benefits for OtagoNet however our limited data access on the OtagoNet network exposes PowerNet to the frustration most EDBs face in needing to understand congestion to support electrification efficiency, while continuing to have poor access to data that in most cases could easily be made available.

26. The Authority and industry must acknowledge the significant undertaking that developing congestion analysis is for EDBs and therefore regulatory intervention should not be rushed ahead of understanding the need.

ICP vs GXP pricing

27. PowerNet is concerned that the EA have misinterpreted this issue and does not support mandating ICP pricing and supports retaining GXP based pricing. ICP and GXP based pricing relies on retailers correctly submitting energy volumes and has no relationship with after diversity peak demand; they are two different measures. PowerNet has demonstrated that by using profile codes and loss factor codes that innovative pricing can be achieved through GXP pricing, and we would be happy to share with the Authority how this operates in practice.

28. The unnecessary mandating of ICP pricing would require new billing systems and resources, creating considerable and unnecessary additional cost to networks and customers. PowerNet is interested to understand why the Authority prefers standardisation on ICP pricing (4.29(f)) and would welcome further discussion with the Authority to demonstrate otherwise. We view that the Authority have overstated the benefits of this approach and understated the costs.

29. The loss of input cost incentive due to GXP pricing methods would have to be minimal compared to the incentives created by EDB TOU pricing. Retailers do not appear to be responding where EDBs have established TOU pricing. This suggests that incentives for retailers to manage their input costs are weak and (EAs perceived) benefits to the customer by removing GXP billing would be negligible while burdening customers with development cost.

30. Instead of mandating ICP pricing the Authority should consider influencing the penetration of smart meters (TOU capable) as a root cause approach. This would allow energy reconciled correctly by time period to each retailer ensuring improved incentives for retailers. Additionally, it would enable TOU pricing to signal value to all customers in support of the efficient electrification of energy and mitigate the argument against mandatory opt-in to TOU line charges.

Significant commitment to Distribution Pricing reform

31. The EDBs that PowerNet manages have shown, and continue to show, significant commitment to distribution pricing reform. A special purpose board committee, the Distribution Pricing Methodology Committee, was established in 2019 for an 18-month period. Directors of TPCL, EIL, OJV/LNL made up this committee. PowerNet management worked with this committee to develop a common distribution pricing methodology across these three EDBs. This was delivered and all the EDB boards approved the new, common methodology in November 2020, for application from 1 April 2021, demonstrating complete governance commitment to distribution pricing reform.

32. The new common methodology was established through engaging with customers and significant analysis undertaken including use of smart meter data, socio-economic considerations, and other relevant analysis. The new distribution pricing methodology was introduced at the same time as the start of the phase out of the Low Fixed User regime.

33. PowerNet executives met and presented the new, common methodology to the Authority in July 2021, where it was recognised by the Authority as industry leading. PowerNet has also actively engaged with the Authority regarding the Scorecard review process and would be prepared to provide the Authority with a recap on the July 2021 presentation.

Other general comments

34. PowerNet does not consider peak pricing to be an immediately pressing issue as network constraints are not widespread. PowerNet considers that connections pricing is currently the area that warrants the most scrutiny due to the significant industrial decarbonisation-electrification already in progress.

35. In relation to GXP pricing, PowerNet would be happy to explain how this operates across our networks and the benefits it provides and would welcome the opportunity to speak to this. We utilise this across all our networks and view its application may not be as well understood as it could be. In addition, PowerNet would suggest that this issue is not pressing at this time and should be lowered in priority for the Authority.

36. While education is a critical component of effective price signals it is one piece of a much larger picture. PowerNet view that in order for price signals to be effective, wholistic energy efficiency and implications of consumption need to be more widely understood by the mass market. The Energy Efficiency and Conservation Authority (EECA) has the lead role to help consumers alter behaviour around energy use, and we would encourage increased communication and education in this area.

37. The Network's cost reflective pricing structure allows for a robust and equitable cost allocation between Residential and Commercial. Costs for Individual Customers greater than 100kVA are calculated based on their share of actual assets and their demand profile of the prior year. The remaining costs are then recovered across Residential & General/Commercial Customers. The exception is the Low Fixed Charge residential group where charges are calculated in accordance with the Electricity Regulations. These consumers will continue to benefit from the Low Fixed Charge option until 2027.

38. Our variable line charge prices, have three different prices depending on the time period [Peak, Shoulder and Night], which allows all customers to benefit by being able to make informed decisions on when to use certain appliances if the charges are reflected in retailer tariffs offered to customers.

39. PowerNet would support an approach from the Authority that provides support and guidance, rather than mandate and regulation. We reiterate that as an EDB we have done all that has been asked by the Authority and continue to see very little evidence of this flowing through to retailers and subsequently consumers. We consider that further change in pricing approach is not required, and the industry can work through this without the need for further mandate and regulation. We remain uncertain of the problem definition and cost benefit of further Targeted Reform of Distribution Pricing is attempting to achieve and support the industry working through options at a network level to meet the changing requirements of customers seeking electrification and decarbonisation options.

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EA Pricing Submission

Question Responses

Q1. Are there other options that you think the Authority should consider?

PowerNet favours the Authority working more closely with EDBs and the EEA to allow iteratively exploring and understanding options that best balance needs of stakeholders and ultimately customers. The Authority would better understand EDB plans and constraints and EDBs may get earlier indication and a better understanding of when the Authority develop a view of improvements being needed. PowerNet are concerned by the number of issues raised (and that presumably Authority wants to see change around) in relation to available resources to progress development. It is believed the highest priority areas raised should take any current review focus while providing a future looking plan/roadmap to work through other concerns identified so EDBs have time to plan resource for development.

Q2. Do you have any comments on the options outlined?

While urgency to improve pricing is recognised, PowerNet consider it too early to be prescriptive with regulation, especially in the context of changing demand and there is need to first test and review, in practice, pricing options including those favoured by Authority. Even principles-based regulation may risk unintended outcomes.

Call-in provides more flexibility however PowerNet is concerned that this would still have a prescriptive focus. Another downside is uncertainty, and it sounds potentially quite disruptive with likely shorter timeframes around call-in notice and making stretched resource available to respond.

Continued review and feedback on the Authority's comfort or concerns with progress is useful, as is discussion and guidance, practices note etc around applying methodologies preferred by the Authority including alternatives considered.

4 Peak period signals
Q3A. Do you agree that a combination of TOU tariffs and load control (appliance) tariffs would be useful for the smart management of peak demand?

Yes. There is evidence that when TOU pricing is exposed to customers that they are responsive and adjust consumption behaviour where they have flexibility available with minimal inconvenience. This is considered a key part of future pricing signal and is reflected in PowerNet's pricing methodologies.

To enable DER operation/flexibility services to benefit customers by deferring or avoiding network upgrades, EDBs must have definitive priority control of flexible loads when network constraint limits are reached. Load control tariffs may be used to provide EDBs this priority based on customer opt in as per existing hot water control. Priority load control means damage can be limited on the (typically infrequent) occasions where pricing mechanisms such as TOU fail to manage constraints. For example, an EDB may reduce demand from hot water or EV chargers to prevent blowing network fuses and a much wider customer impact on days where customer behaviour is inelastic to prices.

TOU may be less applicable and potentially inefficient to administer where no constraints exist on networks so pricing flexibility is preferred.

Q3B. Do you consider that TOU pricing could have unintended consequences for congestion on the LV network?

The 'free' hour of power retail scheme has proven that sharp time-related price signals can have unintended consequences by incentivising inefficient behaviour creating 'artificial' network demand peaks and driving the need for otherwise unnecessary network upgrades at large cost to all customers.

However, TOU pricing that is designed taking into account economic cost and expected consumers response should be able to drive improved cost efficiency and equity for customers. The key is to design pricing to target consumption behaviour that provides cost efficiencies for customers. Competition alone is clearly not enough to achieve this outcome.

PowerNet is of the view that TOU pricing is the most appropriate pricing structure at this point in time, but that the uncertainty of how consumers will respond and how technology will evolve means that it is important not to lock in distribution pricing structures through mandates.

Q3C.Do you consider that use of shoulder pricing as part of the TOU price structure could be an effective way to mitigate this risk? What other ways could be effective?

As part of the common distribution pricing methodology across the three PowerNet managed EDBs, shoulder pricing has been implemented. Shoulder prices (or greater granularity if appropriate) are expected to be effective and should be tested in practice, as PowerNet has progressed in its current pricing. There may be alternative approaches such as staggered time period pricing i.e. so not all customers see price incentives (such as lower power prices) in the same time period. Customer education is also quite effective where the value is easily understood, and the requested response has minimal inconvenience however sustained response over time, especially with increased inconvenience without additional incentives will test customer support.

Q4. Do you agree with the assessment of the current situation and context for peak period pricing signals? What if any other significant factors should the Authority be considering?

While there is evidently significant variation in pricing differentials across EDBs this would reflect the perceived benefits of incentivising behavioural change using line charges. This is arguably minimal at the current time for many EDBs.

PowerNet has taken the approach of updating pricing on its managed networks to include TOU peak, shoulder, and night rates with a plan to adjust differentials gradually over time to avoid price shock or unpredictable step changes in consumption behaviour risking revenue.

The roadmaps of the EDBs managed by PowerNet have identified refining peak price signals as the next step in pricing reform in the roadmaps. This includes LRMC modelling, congestion analysis, and assessment of consumer responses to guide future pricing decisions. We understand that numerous other EDBs are also looking at similar types of analysis to assess their peak prices. As EDBs can generally only change prices once per year, the work done on pricing signals does not immediately flow through to pricing – e.g., the work done in the past 9 months won't be evident until April next year.

If retailers need to wait for all EDBs to reform prices before they have sufficient incentive to respond and reflect TOU differentials in their pricing, then this likely indicates they will not reflect individual network pricing and constraints later if they do respond. Incentives for retailer line charge pass-through appears at this stage to be insufficient which does not bode well for supporting the cost-efficient electrification of energy leveraging customer consumption flexibility.

PowerNet also note that incentives go both ways. EDBs have cited lack of retailer pass through of distribution pricing as a disincentive to reform pricing and PowerNet agrees. In fact, retailer

repackaging is perceived to be a disincentive for PowerNet to creating strong differentials in lines prices. If retailers maintain flat pricing and then, for example, suddenly directly pass through of line charges to customers (perhaps as a result of regulatory intervention?) after PowerNet has phased in strong TOU price differentials, line charge revenue may be at risk from large changes in customer consumption behaviour against these TOU incentives. From the customer perspective price shock is a concern.

PowerNet managed EDBs historically had a strong Day to Night rate differential so did not need to manage 'phase in' for Peak and Night differential when updating its line prices to introducing a shoulder rate.

PowerNet would like to see the Authority investigate and create visibility of to what extent retailers have reflected PowerNet's managed networks' TOU line changes in their retail prices and if not consider if this is in customers best interests.

Q5. Do you agree with the problem statement for peak period pricing signals?

The Authority's observation in 4.27 does not link the need to move away from uniform tariffs with actual congestion. PowerNet suggest that network growth may be met by spare existing capacity or alternatively by extension (e.g., new subdivisions) rather than capacity upgrades in which case increased capacity often comes at far lower incremental cost. Therefore, it is important to understand whether actual constraints are arising that may be managed with pricing incentives.

Pricing regression around hot water control is likely related to the loss of incentive for EDBs to control hot water with TPM updates where GXP constraints are not currently an issue. With many load control plants near end of life and with minimal incentive to replace this equipment there is risk some EDBs may opt not to renew plants. PowerNet notes in the Authority endorsing the new TPM, it appears this is counter to what the Authority are trying to achieve with TOU pricing prior to actual constraints arising.

Q6. Do you have any comments on the Authority's preferred pricing for peak periods?

Regarding 4.29 (d) refer to Q4 response.

Regarding 4.29 (b) and (f) and associated footnotes (47 and 48).

PowerNet believe the Authority are misinterpreting GXP pricing. ICP and GXP based pricing relies on retailers correctly submitting energy (kWh) volumes to either the distributor or the reconciliation manager and has no relationship with after diversity peak demand; they are two different measures. Half hour smart meter data energy consumption should be accurately reported to the reconciliation manager, and this flows through to distribution GXP billing. Either method should be as accurate as the other. Through the use of profile codes and loss factor codes innovative pricing can be achieved through GXP pricing. Mandating ICP pricing would require new billing systems and staff creating considerable cost to networks and customers.

In any case, the loss of input cost incentive due to GXP pricing methods would have to be minimal compared to the incentives created by EDB TOU pricing. Retailers do not appear to be responding where EDBs have established TOU pricing. This suggests that incentives for retailers to manage their input costs are weak and (the Authority's perceived) benefits to the customer by removing GXP billing would be negligible while burdening customers with development cost.

The Authority should ensure their footnote (48) statement regarding ADMD is correct as some would consider load 'fully diversified' after a relatively low customer count.

Regarding 4.29 (c), network cost consequences should be an input to pricing decisions but should not necessarily be the sole determinant. While PowerNet considers that it is important that EDBs have a

strong rationale for peak pricing decisions which can be explained in their pricing methodology disclosure, it is important that they have the flexibility to consider a range of factors.

Customer response may not necessarily lead to outcomes in their best interest even where input costs are reflected accurately in pricing. Prices may additionally need to overcome customer behavioural friction or inertia (issues of habit, convenience, education, interest etc).
Care would need to be taken if considering reducing peak prices on the basis that there is no congestion. This may itself cause congestion as a network may not have congestion due to existing strong peak signals.
Uncertainty about future congestion in the context of evolving technology and demand may cause a distributor to provide peak price signals, even where congestion has not yet arisen or is forecasted.

Q7. Are there other options you think the Authority should consider for improving peak period pricing?

The outstanding issue PowerNet sees is customers being actually exposed to peak price signals via retailer pricing. Now that PowerNet has created peak price signals the Authority should review retailer response and if no pass through is observed consideration can then be given around how best to ensure this outcome occurs.

Q8. Which if any of the above options do you consider would best support distribution pricing reform around peak pricing signals and why?

Maintaining the current approach is appropriate for now. PowerNet value the guidance, discussion, and feedback that the Authority provides around pricing methodologies and believe this should be continued while EDBs can justify their current and planned pricing.

Resourcing any change will need to be managed carefully and forcing fast and broad changes will likely result in EDBs failing to provide quality outcomes whereas focussing on priority areas would deliver better outcomes. Peak pricing is not considered to be an immediately pressing issue as networks constraints are not a widespread issue. It is believed connections pricing is currently the area that warrants the most scrutiny due to the significant industrial decarbonisation-electrification already in progress.

5 Off-peak price signals
Q9. Do you agree with the assessment of the current situation and context for off-peak pricing signals? What if any other significant factors should the Authority be considering?

LFC regulations will continue to restrict revenue recovery from fixed charges until 2027. PowerNet has a low TOU night (off-peak) rate as a trade-off that recognises need to recover residual charges while creating strong incentives for off-peak consumption. This strong differential did not require 'phasing in' as it has historically already been a feature of PowerNet's pricing (while frustrated by lack of retailer pass-through).

Q10. Do you agree with the problem statement for off-peak pricing signals?

While the observation that material off-peak charges remain common it may be debatable that this is *sending* inefficient investment signals for technologies since in most cases customers are not exposed to strong TOU pricing signals after retailer repackaging. If retailers won't respond until all EDBs reform their pricing, this indicates they will not reflect individual EDBs pricing later if they do respond at all. There is some evidence retailers take a one size fits all approach and follow only the largest EDB price signals.

Q11. Do you have any comments on the Authority's preferred pricing for off-peak usage?

No

Q12. Are there other options you think the Authority should consider for improving off-peak pricing?

No

Q13. Which if any of the above options do you consider would best support distribution pricing reform around off-peak pricing signals and why?

With the impact of LFC being phased out in future years, regulation seems premature to allowing EDBs to naturally adopt more cost reflective pricing as they have the freedom to do so.

PowerNet believe that regulatory intervention if any should be on other priorities given retail pricing issues raised and the need to focus any development resource on more immediate challenges.

6 Target revenue allocation

Q14. Do you agree with the assessment of the current situation and context for target revenue allocation? What if any other significant factors should the Authority be considering?

PowerNet will need to complete further work to understand these issues fully. 6.17 acknowledges a key point on revenue allocation that the Authority has "not yet provided extensive guidance to distributors on cost allocation, and that distributors have been more focussed on the structure of usage charges than on changes to allocation between consumer groups".

Q15. Do you agree with the problem statement for target revenue allocation?

Agree allocation is an important part of pricing and it should be done equitably. However, there is perhaps much discussion still required as to what methods should be used to understand subsidy free ranges and positioning within. PowerNet wouldn't assume determining subsidy free ranges across networks can avoid complexity at this stage.

Q16. Do you have any comments on the Authority's preferred pricing?

PowerNet can acknowledge in theory simple pricing methodologies may benefit customers making connection decisions. However, in practice it seems unlikely that pricing could be simplified sufficiently for customers to start showing an interest in pricing methodologies. In any case lines companies can expect to continue to be directly approached by customers to discuss options and resulting prices which will naturally be at the time of decision points for connection.

Q17. Are there other options you think the Authority should consider for improving target revenue allocation?

No

Q18. Which if any of the above options do you consider would best support distribution pricing reform around targeted revenue allocation?

PowerNet believes continuing to engage with EDBs in discussion and providing guidance is the only credible option here. The Authority has (only now) created visibility of the issue and this information may prompt EDBs to consider their approach. This is an area the Authority could have targeted earlier but has not and should refrain from making this an urgent issue at the same time resource would be better directed to reviewing other decarbonisation priorities.

7 Connection Pricing

Q19. Do you agree with the assessment of the current situation and context for connection pricing? What if any other significant factors should the Authority be considering?

PowerNet is currently seeing significant growth through large decarbonisation-electrification upgrades. However, the Authority's analysis appears to be early stage and high level and has not presented sufficient evidence of issues that need to be resolved. PowerNet has done significant work to facilitate the decarbonisation and electrification of large industrial customer loads and public EV chargers. This is evident in our approach of partnering with EECA and consultants to direct government funding to electrification projects, supporting customers in understanding available options and helping with justification of electrification projects.

Q20. Do you agree with the problem statement for connection pricing?

No.

EDBs are incentivised to ensure connection prices are efficient to encourage growth on their network. Standardisation sounds ideal but not practical in a sense that would matter for customers. PowerNet are dealing with large scale growth projects and have worked to present customers with multiple options to negotiate best outcomes to suit each individual circumstance. PowerNet consider it very important that flexibility is allowed so this can continue as options for customers can be very diverse. PowerNet believe its connection pricing methodologies ensure customers pay equitable up-front costs and ongoing line charges.

PowerNet is not aware of any material evidence that customers have complained or are unsatisfied about connection pricing options. Quite the contrary, as PowerNet has developed arrangements that have been accepted by large, decarbonising customers, completely acceptable by both parties (the customer and EDB).

Q21. Do you agree with the Authority's preferred pricing approach for connection charges?

PowerNet support equitable pricing but is concerned at any implication that any category of connection should be cross subsidised by others i.e. inequitable sharing of subsidy free ranges. PowerNet suggest that any subsidisation to accelerate electrification should come via explicitly targeted government agency funding and notes that customers may already access such funding.

Q22. Do you have any thoughts on the complementary measures mentioned above and to what extent work on these issues could lead to more efficient outcomes for access seekers?

EDBs are developing systems to improve visibility of capacity on their networks however this is a very resource intensive project that will take time to develop. Data access for EDBs remains an issue to support this. For larger customers it is difficult to see how the range of options that would be discussed and presented to access seekers could be made available ahead of time. In PowerNet's case potential electrification customers have been identified proactively and initiated the ongoing engagement in progress to discuss options and intentions to facilitate efficient investment decisions.

There may be scope to improve market sourcing of build resources however where this is practical within a limited pool of resources EDBs will often leverage competitive tendering. The Authority may investigate if there is evidence of inefficient use of available resources.

Q23. Are there other options you think the Authority should consider for connection pricing?

No

Q24. Which if any of the above options do you consider would best support distribution pricing reform in the area of connection pricing?

PowerNet support further practice note guidance and discussion and strongly oppose regulatory intervention until such time as there is evidence of inefficiencies or inequities in connection pricing. Further investigation of perceived outliers in EDB pricing approaches to understand reasoning would be an appropriate first step for the Authority to take. Targeted intervention could be considered if

issues are found however a feedback, education and discussion approach would still be strongly preferred in the first instance.

8 Retailer Response

Q25A. Do you agree with the assessment of the current situation and context for retailer response? What if any other significant factors should the Authority be considering?

Change and Capability
PowerNet agree customers have previously had little ability to control consumption or get value from their consumption flexibility, but technology has rapidly developed, and smart meters now have enabled TOU monitoring of consumption. This means flat rates in the name of efficiency have made some sense historically but now with new load management and monitoring capability arising pricing must evolve. Pricing must reflect input costs that will have increasing granularity and variability to unlock the value of flexibility services, encouraging uptake and contribution.

PowerNet understands some retailers may not have capacity to adopt more granular pricing with their existing systems and therefore may be resistant to change. However, it is important retailers embrace increasing granularity of pricing targeting constraint management to support efficient electrification as customer flexibility value evolves. Capabilities in data management and automation are fast evolving to support these developments.

Incentives
Retailers may not have good overall incentives to reflect distributor price signals in retail pricing. Retailers have some incentive to manage their input costs (hopefully resulting in efficient pricing) however, they also have other incentives. Attracting customers is clearly a very strong driver for retailers while customers do not necessarily understand the implications of pricing packages. They may be attracted by specific pricing aspects heavily marketed by retailers but ultimately end up paying more. While there is evidence that customers do react to price signals, retailer repackaging of prices can potentially create perverse behaviour outcomes with poor design.

For example, the 'free' hour of power scheme has cost customers hundreds of thousands worth of network upgrades to supply 'artificial' peaks – an example where competition drives inefficient behaviour (hurting customers for the retailers benefit). Competition may continue to drive extreme pricing to get customers attention and it appears 'free power' schemes have now become fashionable. This conflicts with cost reflective pricing objectives.

PowerNet also has some concern retailers will compete with distributors for control of DER in ways that lead to poor outcomes for customers (particularly in relation to note Q3A response regarding load control tariff/arrangements).

Equity
The Authority appears to be advocating for business customers to subsidise residential customers to mitigate the issues created by LFC in 5.10 (b). While cost reflective pricing is prevented by LFC, PowerNet do not think it appropriate to recover residual charges from other customer groups (trading one evil for another?). If it is the government's intention to subsidise residential customers electrical energy consumption this should be targeted and explicit by other means.

Q25B. [for retailers]: What plans do you have for responding to distribution price signals as distributors reform their price structures? What barriers do you see to responding efficiently?

Whilst this question is for retailers, PowerNet notes that historically PowerNet's managed EDBs have historically had strong TOU incentives in their Day and Night rates, well before the introduction of the new Distribution Pricing Methodology in 2021. The question wording implies that retailers haven't already had opportunity to reflect pricing differentials in retail pricing which is not correct.

Q25C. [for distributors]: What plans do you have to increase the proportion of your customers that face time-varying charges (for example, making TOU plans mandatory for retailers whose end-users have an AMI meter installed)?

PowerNet TOU prices are already mandatory since we haven't offered an alternative.

Q26. Do you agree with the problem statement for retailer response?

PowerNet agree deemed profile is an inappropriate billing method. This saves retail overheads at the expense of supporting efficient energy electrification. But don't believe residual ICP pricing is a critical issue at this stage.

Instead of mandating ICP pricing the Authority should consider influencing the penetration of smart meters (TOU capable) as a root cause approach. This would allow energy reconciled correctly by time period to each retailer ensuring improved incentives for retailers. Additionally, it would enable TOU pricing to signal value to all customers in support of the efficient electrification of energy and mitigate the argument against mandatory opt-in to TOU line charges.

PowerNet reiterates that retailers appear not to have responded to the examples where of TOU pricing has been established and made mandatory. This suggests retailers will need additional incentive to develop their system capabilities and design prices that support the decarbonisation transition than the measures identified in the problem statement.

Q27A. Do you have any comments on the Authority's preferred pricing?

PowerNet is concerned the Authority may have misinterpreted the need for ICP pricing standardisation as highlighted in our response to Q6 and have understated that this is not a costless exercise.

Q27B. [for retailers]: What use do you make of deemed and residual profiles? Please explain the reasons for this. What barriers do you see to phasing out use of deemed and residual profiles?

N/A

Q28. Are there other options you think the Authority should consider for retailer response?

Potentially if not mandating direct line charge pass through, retailers could be mandated to reflect proportionate cost differentials in their retail prices that must correspond with line charge targeted time periods.

Q29. Which if any of the above options do you consider would best support distribution pricing reform in the area of retailer response?

PowerNet suggests the Authority first create visibility of the existing reflection of line charges in retail pricing and progress with an understanding of what changes need to occur by what time and the resulting cost as well as necessary resource's ability to respond. Retailers must be prepared to support more granular pricing that recognises individual EDBs and as flexibility services evolve to target more specific network areas and constraints.

Call-in may be immediately adopted where perverse outcomes for customers are created by retailers competing for customers rendering other price inputs ineffective. Principles based intervention may be appropriate to inform call-in appropriateness.

EDBs has previously queried the Authority on whether the distributors pricing will be reflected in retail pricing. Previous undertakings by the Authority in this area have been that EDBs should put in place cost reflective pricing, and then if retailers don't reflect these in their pricing, it will then be the opportunity for the Authority to focus in on retailer compliance. Given EDBs, and specifically the

PowerNet managed EDBs of TPCL, EIL and OJV/LNL have met the Authority's expectation of distribution pricing reform, we suggest they should now focus on retail pricing reform. A Roadmap for Retailers, as has been the case for distributions, would be a very good starting point, provided as appropriate in confidentiality to the Authority to mitigate any concerns around lessening competition.