23 October 2018
Electricity Price Review
Secretariat, Ministry of Business, Innovation and Employment
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Public version

Electricity Price Review, Joint Submission Top Energy Limited and Northpower Limited

This letter has been prepared in response to the release of the Electricity Price Review *First Report for Discussion*. It supports the joint submission from Top Energy and Northpower.

Combining forces for Northland

Top Energy and Northpower have a long history of supporting economic prosperity in our regions. Both companies have built a consistent track record of effective network business management, development of enabling infrastructure which might otherwise not be present in the region, and of working closely with local communities to tailor services to their needs. As governors of these companies, we view them as essential enablers of a prosperous future for Northland, and our role of effective stewardship of the assets they manage across the generations.

As we look forward, we see a bright future for the North emerging. Populations are growing, and tourism, agriculture and horticulture continue to build their economic contribution in the region. This is a very positive direction in a region which struggles with employment and low incomes. In support of this trend, we have set a clear focus for both companies – 'actively position your services to enable the very best outcomes to be achieved from new energy markets as they emerge'.

The nature of the joint submission, and this joint covering letter, reflects a purposeful collaboration as key infrastructure companies in the North. The most recent iteration of this process is reflected in a formal Memorandum of Understanding. Collaboration efforts extend across operational management, customer and commercial interfaces, and development of technical platforms (e.g. ADMS) which will be central to new energy markets. Efforts are driven by our respective CEOs and endorsed by our Boards and Trust owners.

Ultimately, we see structured collaboration as a key tool to enable us to position both our companies effectively in the light of energy market change, and in response to some unique challenges we face in the North.

Supporting effective energy market development

In Northland, energy hardship is a real concern, and an area we were pleased to see the electricity pricing review engaging with in this discussion. Despite positive green shoots emerging, the North continues to experience many challenges including high levels of poverty and high unemployment. The region has a large geographical area to service in distribution terms, with over 10,000 kilometres (Top Energy 4,000, Northpower 6,000) of distribution circuit length delivering to 89,000 ICPs. We are critically concerned as governors of local energy companies to ensure that the often rural and remote communities we serve continue to receive a reliable, equitable and fair price for energy services, and that their interests are not "lost in the averages".

Critical to effective ongoing service for our region is strong, regionally led asset stewardship. Both Top Energy and Northpower have a track record of prudent investment, and this is for good reason. The consumers, communities, farms and businesses we serve are often located in rural and remote locations and typically do not have the benefit of multiple supply options. Servicing them requires disciplined management of asset condition, a strong local knowledge of networks and terrain, and an ethos of efficient network design and maintenance. Our communities can neither afford assets to be in poor condition, nor for them to be over engineered or over serviced.

Looking forward, we are conscious that the Top Energy and Northpower businesses need to evolve as enabling 'platforms' that provide ongoing access to traditional markets, while increasingly enabling energy to be generated and shared locally. These businesses need to do this in a way that delivers a net benefit to our communities, and in a way that ensures fairness across our consumer owners. Making this shift requires visible and skilled leadership, and our local leadership teams of the two businesses have been carefully screened by our Boards to represent leading thinkers in our sector, and leading voices in our community.

We see Top Energy and Northpower playing an important role in leading a local discussion regarding energy market change, via our local management teams.

Delivering improved performance over time

Looking beyond Top Energy and Northpower's role as energy distributors, both organisations have been set a clear remit to make a wider economic contribution in our region. Both companies have, over the years, established a track record of effective infrastructure investments, where these align with the skills of the respective organisation, where they can be deployed on a profitable basis, and where they can bring enabling infrastructure to the region which might not otherwise be present.

Examples of targeted business investment include Top Energy's investment in geothermal generation, which improves local security of supply and reduces the wholesale cost of electricity; Northpower's deployment of fibre, which has provided access to high speed internet, to enable local businesses and communities; and the development of Northpower's contracting business which has brought scale and employment opportunities to the region. All of these businesses have achieved strong profitability within the sectors that they operate, which will improve distributions to our consumer owners over time.

Our two companies have evolved over the past 25 years into considerably bigger and different entities, these differences being supported by our respective communities. However, the commonality of many aspects of our line distribution activities allows many of these specialist activities to be addressed jointly, reflective of the joint nature of this submission.

Effective and targeted investment in adjacent businesses provide a valuable financial contribution at a group company level and diversity of income for consumer owners. As these business lines mature, both businesses are well positioned to lift the level of group return to consumer owners, and as a result, Northland consumers will benefit from some of the lowest net distribution charges (line charges less distributions) in New Zealand within the decade.

A sharp focus on governance

We take governance seriously, ensuring that the Trusts appoint Boards with the right skills, Directors who understand the challenges facing distributors and are moving to support new energy markets, and governance that gets the very best outcomes for our communities. Both organisations employ Directors with a collective skill set equal to any of the top tier organisations in New Zealand.

Regular reviews are conducted on Board performance by independent parties, with the Top Energy Consumer Trust completing this most recently in late 2017 and Northpower in July 2018. In recent years, a sharp focus has been applied to ensuring right skills are at the table for both companies to support the transition to the future. We recognise that we are governing over a period of industry transition, and that this requires a unique blend of expertise and oversight.

The five yearly ownership review process for both companies provides an opportunity for us to step back and review whether our performance could be improved through an alternative corporate structure. Our consumers and communities continue to support the existing ownership structure, with Top Energy receiving 95.4% support in 2016 and Northpower 97.8% in 2017. Whilst there is currently overwhelming support for continuing our current models, ownership reviews will continue to provide a robust process to consider alternatives in the future.

Supporting effective market transition

As governors for key energy companies in the North, we recognise the critical role the Electricity Pricing Review will have in ensuring New Zealand energy markets are appropriately configured for the future. We support the need for this review.

We are pleased to see that many of the themes under consideration by the review panel are issues that we have also been grappling with, as we look to do the very best for our consumer owners. As you will note from the body of this letter, we are well advanced in ensuring Top Energy and Northpower do their part to play a critical enabling role for energy markets in Northland.

In our governance role and on behalf of residents in the communities in which we operate, we encourage the review panel to 'call out' any further areas needed to ensure effective and equitable market operation; this can only be good for our region.

As a final thought, we point out that markets typically benefit from a strong enabling platform, where that platform company plays an active role in promoting competition, and an advocacy role for customers. We believe that Trust owned distributors are ideally placed to play this role, as a result of their ownership structure, local stake in communities, and on-the-ground leadership presence.

We understand that the panel is after bold solutions from the industry in response to its report and we trust that you find our joint submission has provided some helpful considerations.

Yours faithfully

Richard Krogh
Chairman
Top Energy Limited

Nikki Davies-Colley
Chair
Northpower Limited

Yvonne Sharp
Chair
Top Energy Consumer Trust

Erc Angelo
Chairman
Northpower Trust

ELECTRICITY PRICE REVIEW

Submission of

Northpower Limited and

Top Energy Limited

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Opening statement

Northpower and Top Energy are party to the following submissions:

- Submission by the Electricity Networks Association.
- Submission by PWC on behalf of the Distribution Group, comprising small and medium sized distributors.
- The TPM Group, in relation to the issues around transmission pricing reform.

We acknowledge the Panel has requested consolidation of submissions where practicable and have limited this submission to additional considerations from our perspective as Trust owned and predominantly rural networks.

We appreciate the opportunity to respond to the First Issues Report in this submission and would welcome the opportunity to discuss these issues and proposed solutions further with the Panel.

Contact details

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Part three: Consumers and prices

Consumer interests

1. *What are your views on the assessment of consumers' priorities?*

The priorities, identified by the Issues Paper, of reliable electricity and fair and affordable prices are consistent with feedback from our consumers. Examples of recent feedback include:

- In a 2018 satisfaction survey of 400 customers on Northpower's network, residential consumers rated reliability (77%), responsiveness to outages (37%) and fair pricing (27%) as their top priorities for their lines company. The priorities were similar for commercial customers.

- In a 2018 satisfaction survey of 300 customers on Top Energy's network, residential consumers rated reliability (62%), responsiveness to outages (55%) and value for money (53%). Commercial customers responded differently with lower scores of 58%, 36% and 24% in the same areas. These results reflect a satisfaction survey score of at least 8 out of 10.

Another 2018 survey of 400 Northpower consumers to understand attitudes towards new technology, confirmed concerns around the affordability of electricity pricing.

Concern about electricity consumed by your household

- Around a fifth of respondents were concerned about the amount of electricity their household uses (Whangarei 21%, Rural 20% and Mangawhai 20%).
- Of those who were concerned, the majority were concerned about price over the impact on the environment.

Effort made to reduce household electricity consumption

- Over half stated they make an effort to reduce the amount of electricity their household uses (Whangarei 54%, Rural 57% and Mangawhai 58%).
- Close to a third claimed they put on additional layers of clothing daily rather than turning on a heater (Whangarei 30%, Rural 29% and Mangawhai 30%).

Important attributes of electricity supply

- Affordability was the most important attribute across all areas (Whangarei 81%, Rural 84% and Mangawhai 75%).
- Around seventy percent of respondents felt it was important that it is *'Easy to understand the plan my household is on'* (Whangarei 70%, Rural 67% and Mangawhai 74%).
- Around two-thirds indicated it was important that their electricity supply was *'Good for the environment'* (Whangarei 66%, Rural 66% and Mangawhai 61%).
- The least important attribute tested was *'Flexible'* (Whangarei 49%, Rural 52% and Mangawhai 42%).

Consistent with the concern around affordability, is feedback that consumers are not prepared to pay more for reliability improvements.

- In the 2018 Northpower satisfaction survey above, only 3% of surveyed residential customers were prepared to pay more for improved service levels.

- In the 2018 Top Energy satisfaction survey above, only 6% of surveyed residential customers were prepared to pay more for improved service levels; a higher portion of these were rural customers.

2. *What are your views on whether consumers have an effective voice in the electricity sector?*
We have both historically retained strong customer interfaces, including primary responsibility for customer outage notifications (planned and unplanned) and customer connection processes. We find ourselves increasingly taking on a role to help customers understand the industry, get things done and provide advice. Further, as consumer owned distributors we have assumed a role in advocating for consumer perspectives in regulatory processes to ensure they have an effective voice (e.g. changes to Transmission Pricing Methodology). While regulatory frameworks are addressed in detail in Part 5, from a consumer perspective direct and meaningful participation in regulatory processes is a challenge, particularly in light of the technical nature of the issues under consideration, information asymmetries between industry and most consumers, and a consumer's ability, appetite and resourcing to engage on issues. In our view, there is opportunity to improve the consumer voice across all sectors of the industry. Solutions are discussed at question 11.

3. *What are your views on whether consumers trust the electricity sector to look after their interests?*
At a high level we agree that trust is essential as parties navigate change in energy markets. It is important that customers have access to clear explanations around the reasons for change and are consulted. Where change creates winners and losers, a well-managed and appropriate transition period is important. Looking at our own communities, we are confident that we have a foundation of trust and confidence to support our consumers through a critical period of change. We survey customers annually to obtain feedback on service expectations, and consistently receive satisfaction scores above 80%. These levels of satisfaction are hard earned and reflect our long-standing role in the communities in which we operate, and our demonstrated commitment to enabling economic prosperity for our region. This confidence is also supported by the high level of support which is evidenced during both our owners' five yearly Ownership Review. We believe the sector could do better around transparency of information for customers, including around tariff options and the best plan for consumers and we are working hard to ensure the information we provide in relation to the services we provide for our customers do their part in bringing that transparency.

Prices

4. *What are your views on the assessment of the make-up of recent price changes?*
In addition to the analysis provided by PWC in the Distribution Group submission, we also point out that recent price changes are only one component in evaluating price levels within the electricity industry and relativity across segments. Further analysis needs to be undertaken to understand the drivers of each component before meaningful insights can be made or action taken. For example, in Northland, the following are also relevant to distribution price changes over the last 10 years: (a) Acquisition of transmission assets which has transferred cost from transmission to distribution. Both Northpower and Top Energy have acquired assets from Transpower over the last six years. The acquisition of these assets has addressed both security of supply and cost-effective operational issues. (b) Investment cycles of networks. For example, over the last 10 years Top Energy has invested over $170m in the network, focusing on system security and reliability projects. This has increased the regulatory asset base from $137m to $252m over this period and positioned the network for the future. The investment has been achieved within the Default Price Path as set by the Commerce Commission. A third of the Top Energy network was originally built through the Rural Electrification Fund due to being uneconomic and this issue still exists today. As a result of this investment, Top Energy, under the current DPP has a high price path (CPI+7% x factor) and claw-back. This makes a single year view problematic and also distorts the variance between line prices of Top Energy and Northpower as neighboring distributors.

5. *What are your views on the assessment of how electricity prices compare internationally?*
Not answered

6. *What are your views on the outlook for electricity prices?*

We agree there is a high degree of uncertainty around the timing and location of increases in energy demand, and how those will translate to electricity prices, however we are confident that with the right policy settings, the situation can be effectively managed.

From a distribution sector perspective, we note that our sector is ideally placed to 'do more with less' as new energy markets evolve. Total volumes of electricity will invariably increase as electrical vehicles become mainstream, and as installed prices fall, distributed energy solutions such as PV will play an important part - distributors can transport these volumes at a very low marginal cost provided the loads can be shifted into off peak periods.

We believe this point needs to be at the very core of any future policy settings for distributors. The ability for distributors to act as enabling platforms which support additional volumes of electricity through existing networks and existing assets has the potential to unlock very material value for consumers. Distributors must be encouraged to take active steps to enable this outcome.

But getting the settings right is important. We consider the key focus here should be on getting policy settings right on a forward-facing basis. We anticipate that energy markets will evolve quickly, and policies that prompt distribution participants to prepare effectively for the future are important. These include:

- Pricing structures that are fit for purpose and flow through to consumers.

- A regulatory regime that enables networks to utilise new technologies as an alternative to network investment (e.g. a remote power supply as an alternative to building uneconomic lines has a 28-year payback versus approximately 60-years).

- Reviewing the embedded generation limit of 50MW, to enable more efficient network investments to meet reliability targets.

  For example: analysis by Top Energy supported the investment in diesel gensets for reliability improvements to smaller communities in the event of planned maintenance and network faults. The investment in gensets was $10m, compared to traditional solution of new lines at $38m.

- Cost effective access to data at the customer level to inform network investments and improve customer outcomes.

Affordability

7. *What are your views on the assessment of the size of the affordability problem?*
We agree that affordability in an increasing issue. We are particularly concerned at this trend given the communities which we serve include a high proportion of remote, rural, and low-income populations, including high numbers in rental accommodation. These communities face price issues on multiple fronts and are likely to be less able to access technologies such as insulation, EVs, PVs, and batteries which have the potential to reduce the cost burden. We agree that targeted solutions are required, including improving outcomes for vulnerable customers, but in our view this issue is best addressed through targeted Government distributions or assistance (e.g. energy payments, home insulation schemes) rather than blanket regulatory changes which runs the risk of distorting the market, driving unintended consequences and causing further inequities (such as the Low Fixed Charges Regulations).

8. *What are your views of the assessment of the causes of the affordability problem?*
We agree with the Panel's assessment of the affordability problem and support the analysis provided in the PWC submission on variations in distribution pricing (e.g. network density and regulatory settings). **Retailers/Consumer** We believe the industry could do more to ensure that consumers are on the best price structure for their needs. In our experience with supporting consumer queries, consumers find it difficult to understand and compare options due to complexity in tariffs, metering structures, and pricing plans. We applaud Meridian's position to end prompt payment discounts and see this as a recognition that these discounts unfairly penalise those who struggle to meet regular bills.

9. *What are your views of the assessment of the outlook for the affordability problem?*
We agree that changes in technology will exacerbate energy affordability for those unable to take advantage of these developments. This is because the nature of these solutions is often capital intensive in nature. As noted in previous questions, this is a particular concern for the communities which we serve. **Emerging Technology** We are concerned that some in our communities will not only be locked out of benefits associated with new technology but will actually suffer as a result of its implementation. Some emerging technology will drive incremental network costs; for example, uptake of electric vehicles is likely to increase demand on networks requiring incremental investment, and solar injection into the network is likely to require voltage regulation as supply grows. Under current pricing structures, those that can afford these new technologies will secure benefits that outweigh these increases, however as network costs are largely fixed, the cost of distribution would go up for those who can't afford the same technologies.

Distribution pricing reform is required to rebalance how fixed network costs are shared. One contributing element to fairer pricing would be the removal of the Low Fixed Cost Regulations. The removal would enable costs to be shared in a fairer and more cost reflective manner. It is likely to increase daily costs but decrease per kWh charges, reducing the incremental cost to turn the heater on in winter, and spread lines charges more evenly across the year, taking pressure off winter energy bills. However, with any change, a well-managed transition is important. The other key change is a strong shift towards a fixed / demand-based tariff on distribution networks, to enable consumers to benefit by enabling greater volumes to be transported without a net lift in costs.

Market participation – metering

We are concerned that many customers in our network areas will miss out on new pricing plans (including the best pricing plans for them) through lack of access to advanced metering. Retailer deployment in Northland has largely ceased or slowed considerably, with current penetration of advanced meters in the Top Energy network at 62% and Northpower network at 76% (although not all of these may be "communicating advanced meters" because of communications issues).

Our observations are that many rural customers, or those in areas where there are poor communications, or where there are problems accessing metering boards, are missing out on the benefits of advanced metering. Lack of access to new pricing plans will further exacerbate the affordability problem and is likely to impact those who are most vulnerable.

Healthy Homes

Healthy homes are again an issue where those who can afford to improve their homes will reduce their energy bills. We have supported local initiatives through sponsorship for many years and we therefore support targeted action around healthy homes (insulated, warm, dry homes) to improve health outcomes and manage energy bills in conjunction with targeted transfer payments.

Summary of feedback on Part three

10. *Please summarise your key points on Part three.*
• There are opportunities to improve customer voice across the industry as well as access to clear and transparent information on consumers' electricity pricing options, while also maintaining local consumer representation and input to ensure all voices are heard. • Distribution companies are well placed to support consumers in a changing energy market and engage with them in relation to moderating future network expenditure and utilising the benefits of new technologies. Trust owned EDBs are ideally placed to support this transition, given very direct drivers to deliver community value, aligned governance structures and high consumer trust. • Policy settings in the distribution sector should be biased towards ensuring effective enablement of future energy markets, in enabling greater volumes of energy to be transported on current infrastructure; these are critical enablers to putting downward pressure on $/kW prices. • Distribution pricing reform is a critical enabler, by rebalancing how fixed network costs are shared and will be important to achieving fairer outcomes for those who have access to new technologies and those who do not. This includes the removal of the Low Fixed Cost Regulations and ensuring that Retailers mirror resulting pricing structures to consumers. • Equitable and cost-effective access to the benefits of new technologies such as advanced metering will benefit both networks and consumers in managing costs. • Targeted Government distributions or assistance are best placed to improve outcomes for vulnerable customers (e.g. energy payments, home insulation schemes).

Solutions to issues and concerns raised in Part three

11. *Please* briefly describe any potential solutions to the issues and concerns raised in Part three.
In addition to the solutions proposed by the ENA, TPM and PWC submissions, we suggest the following solutions should be considered: **Retail pricing transparency and simplification** • Require retailers to publish residential price plans and make the prices available to all residential consumers. This prevents the two-tiered market, with some consumers being offered better rates to stay, when they attempt to change retailer, that aren't available to others. It also enables new retailers to compete on a level playing field. • Require all retailers to offer a standard retail price plan so customers can clearly compare price options between different retailers. • Restrict win backs for 60 days after a residential consumer switches retailer. • Removal of prompt payment discounts with commensurate reduction in base tariffs.

Improving customer voice

Explore the establishment of a consumer body or panel to provide independent small consumer perspectives, including in relation to:

- Effective and informed consumer perspectives on regulatory changes.
- Input into rules around use and access to consumer data, quality of supply, service expectations.

Part four: Industry

Generation

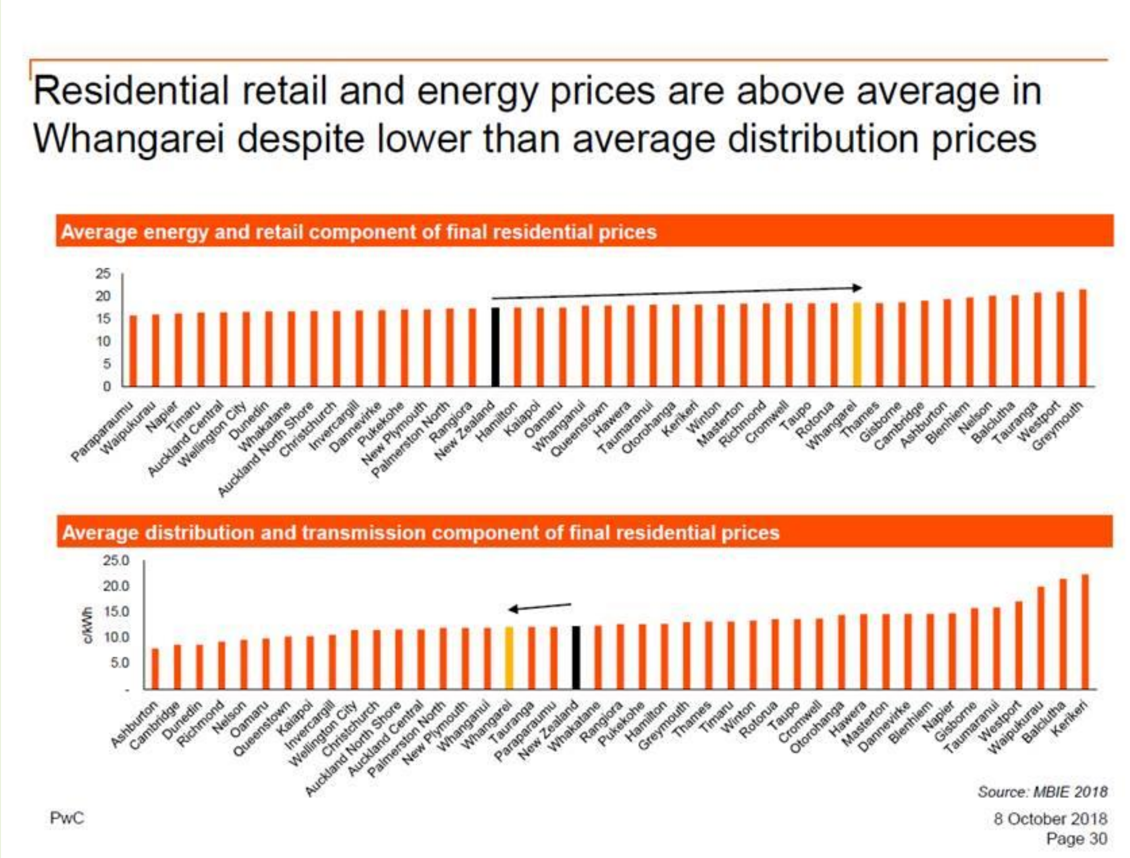
12. *What are your views on the assessment of generation sector performance?*
In general, we agree that the generation sector is delivering desired outcomes of reliability, low and falling emissions and market prices consistent with the long run marginal cost of new generation. This has also contributed to the avoidance of a “dry year” crisis.

13. *What are your views of the assessment of barriers to competition in the generation sector?*
Not answered

14. *What are your views on whether current arrangements will ensure sufficient new generation to meet demand?*
Not answered

Retailing

15. *What are your views on the assessment of retail sector performance?*
We broadly agree with the assessment of the retail sector performance. Comprehensive analysis and response to this question has been provided in the ENA Submission. **Competition in Retail Markets** In relation to the comments in the PWC Submission, that the weak incentives for retailers to pass on reductions in line charges needs to be considered, because of the uneven status of retail competition across the electricity consumer base. In Northland, while there are in excess of 20 retailers trading, there appears to be a lack of price competition strong enough to drive material switching. • For example, this is demonstrated by Northpower’s lines charges being below average, but retail prices remaining above average. This is illustrated by recent analysis undertaken by PWC in the diagram below.



- In a 2018 survey of 400 Northpower consumers, over 70% of those surveyed **had not** switched retailers in the last two years.
- In a 2018 survey of 300 Top Energy consumers, only 14% of consumers **had** changed power companies within the last year.

Retail Pricing

We have concerns that while distributors will reform pricing to be more cost reflective, many retailers are not in a position to support these new structures or reflect these costs in their pricing structures to consumers.

For example, recent retailer consultation by Northpower and Top Energy in July 2018 around a residential time of use trial for network pricing, highlighted that many retailers are not ready to introduce new pricing structures. Reasons included lack of supporting billing systems, inability to provide data in required formats for billing purposes and inability to confirm a date when they will be ready. In addition, the lack of advanced meter penetration means that up to 40% of consumers cannot participate in new innovative pricing structures and share in the benefits.

These issues will need to be addressed in the future.

16. *What are your views on the assessment of barriers to competition in retailing?*
To give context to PWC's submission on this question, we have not seen any evidence of barriers to entry to our networks, as evidenced by the following: 24 retailers now trade across the two networks and since 2016: • 12 new retailers have joined Top Energy's network. • 11 new retailers have joined Northpower's network. Both networks rarely receive requests to change our standard UofSA and no retailers have refused to sign up on such terms. A default UofSA has been on the EA workplan since 2013, creating uncertainty for both retailers and EDBs. Northpower, Top Energy, Counties Power and Electra all worked together on the EA's 2012 model and created and adapted a standard version to reduce costs to retailers. While new retailers have signed this UofSA, the pending uncertainty around the default UofSA has been off-putting for existing retailers to migrate to the new terms or invest time in reviewing them. While there does not appear to be a market failing justifying mandated UofSA terms, if a case is made out for standardising UofSA, we recommend these are developed through strong cross-industry consultation and input (e.g. working groups), to ensure they are practicable and forward looking (including for example, appropriate provisions around access and use of data). There could also be a role for consumer representation in the development of these terms, particularly around use of consumer data.

Vertical integration

17. *What are your views on the assessment of vertical integration and the contract market?*
The work undertaken by the EA to set up the futures contract market has been very strong. We would support increased liquidity and access initiatives. Allowing prudentials to be netted across markets e.g. contracts market and market reconciliation, could assist in this.

18. *What are your views on the assessment of generators' and retailers' profits?*
Not answered

Transmission

19. *What are your views on the process, timing and fairness aspects of the transmission pricing methodology?*
We are a member of the Northern Transmission Pricing Group, which contains our primary submission in relation to this question. However, for Northland consumers the TPM process illustrated the difficulties that consumers have in engaging with complex and highly technical economic arguments, even when these proposals would severely impact them through increased pricing. Northpower and Top Energy were one of the few organisations in our region who could afford to actively advocate for Northland consumers, particularly given the lack of large business or established consumer groups in our region. Northland has lagged behind other regions for transmission infrastructure investment and has subsidised past transmission investments under postage stamp cost allocations. The retroactive nature of the proposed TPM rules, meant that Northland would not only have to meet the cost of recent upgrades that mainly benefitted Auckland but also the costs of future upgrades for its region. Ultimately this is an unfair outcome for Northland consumers.

Distribution

20. *What are your views on the assessment of distributors' profits?*
We refer to PWC's analysis in the Distribution Group Submission on the adjusted ROI (profits after the deduction of consumer discounts) as providing an appropriate assessment and note both our networks fall under the relevant DPP WACC. Both organisations, at a governance level, are focused on ensuring a commercial rate of return from the assets deployed while reducing the overall cost of delivered electricity to consumers, reflecting the incentives of a consumer owned trust to maximise consumer value. In support of this objective, we have invested in strategically aligned businesses that will, over the long term, reduce the overall cost of electricity to our consumers. Additionally, the strong cash flows and balance sheet associated with the businesses we operate, will enable our networks to meet future investments that may be required in new technologies (e.g. DSO capabilities). Both Northpower and Top Energy have proven an ability to grow value for their consumer owners, via the development of adjacent businesses which bring both commercial and economic value to their local communities. This is evidenced by recent examples for both businesses as follows: • Northpower's investment in the UFB network across its region provides long term utility returns for consumers. In addition, Northpower operates a

significant electricity lines contracting business across the North Island, which employs over a 1000 people.

- Top Energy owns the Ngawha geothermal power plant which produces 25MW and is currently undergoing significant expansion. Consented to increase to 75MW in two 25MW increments, the first stage is expected to be commissioned in late 2020.

These investments provide benefits to consumers including cost sharing, reduced distribution costs and facilitating uptake of new technologies for consumers.

21. *What are your views on the assessment of barriers to greater efficiency for distributors?*

Price Structures
In support of the PWC Distribution Group Submission and the ENA Submission, we note that:

- Our pricing reform is proceeding for implementation by 2020 as previously published in our Pricing Methodology and in the Pricing Roadmap.
- We are undertaking a joint Northland trial for time of use residential pricing from 1 April 2019. This will help us understand consumer behaviours and ensure processes are in place for full implementation in the future.
- Top Energy and Northpower have made a commitment between companies to align our pricing tariffs and associated community consultation work wherever possible, with several work streams already in train.
- We stress that collective industry support for implementation of such pricing is essential. It is concerning that early indications from consultation with retailers indicate that many retailers are unlikely to be in a position to implement such pricing structures.

Efficiency Pressures & Business Size
Business size does not necessarily translate to greater or lesser efficiencies. For EDBs, as evidenced by the TDB Report, the primary driver of cost is density and amalgamations or JV models will not change that.

Of note is that OtagoNet JV (part of the PowerNet model) displays the highest distribution charges in Figure 36 of the Report, highlighting that care is required and lower prices should not be assumed, simply by changing operating models or changing business size. Also relevant is the difference in price between Unison and its managed Centralines business, which has the third highest price.

The TDB Report indicated that there may be some small gains (in the region of $30 per ICP p.a.) for amalgamating EDBs to 50,000 or 100,000 ICPs. This does not allow for the substantial costs of transition. Top Energy and Northpower consider that we can deliver these efficiencies, and more, through current actions underway to manage non-asset operating costs. This includes:

- Developing complementary businesses to enable cost sharing between our regulated and competitive businesses, enabling access to IT and corporate support functions of material scale.

- Cooperation and joint collaboration across our businesses to deliver cost savings over the longer term (as further outlined in our confidential section of our submission).

Further, where there are outliers in performance (e.g. costs or profits), the Commission already has the ability to investigate causes and highlight issues.

Metering Data

We support the Panel's views on meter data, and strongly endorse the comments made by the PWC Distribution Group submission. In addition, we note:

- Consideration should be given to requiring minimum technical standards for advanced meters, to ensure efficient collection of relevant information for network, retailer and customer requirements. Currently, there are some limitations with the network data that is able to be collected from some advanced meters.
- In order to ensure that as many consumers as possible benefit from advanced metering, those who want an advanced meter should be able to receive one and communications issues need to be resolved (particularly in areas of poor mobile coverage, where other alternatives are required).
- The costs for access need to be appropriate, with consumers ultimately not paying twice (or more) for this functionality. Access is not always cost-effective – as both Northpower and Top Energy have received costs from providers for access to metering data for network services equating to $25 to $27 per ICP per annum (this is equal to half Top Energy's faults budget per year).

Governance

The report states that some stakeholders are concerned about EDB governance. In our view, such concerns should be addressed in relation to specific instances rather than a sweeping generalisation across all EDBs.

Our shareholder trusts have been instrumental in ensuring that experienced and highly skilled individuals are appointed to our Boards to provide quality governance and depth of capability to support the companies across their business areas. The breadth and diversity of our businesses and the governance opportunities which they provide ensure that appropriate governance skills are attracted and retained.

Our Boards have been actively focused on ensuring robust decision making, exiting activities that are not core or profitable, ensuring appropriate network investments and that the companies are positioning to support emerging energy markets.

Example of this governance in action are outlined below.

Top Energy	Current directors include professional directors that have held CEO/CFO/GM roles in major entities within and outside the sector including Powerco, Opunake Hydro, Mercury, Sky City, Fisher & Paykel, Methanex. Decisions have been made to focus on core business as an asset manager and therefore divest an external contracting business in Fiji as well as a call centre business.

	Approved a significant network development plan that commenced in 2010 and has largely been completed. The development and recent expansion of Ngawha was put through a robust major transaction process, reviewed by independent third parties.
Northpower	Current directors include experienced executives, CEOs and professional directors, who have a broad range of local and international experience, including Mercury, Contact, Worksafe, NZIER, Fonterra. Decisions have been made in the last few years to refocus on core areas of network ownership (both electricity and fibre) and supporting other EDBS with contracting services and exiting overseas contracting services. Overseen and supported an uplift in network investment in the 2018 AMP to ensure continued performance and resilience of the network.

Five yearly ownership reviews provide an indication of the effectiveness of governance and the structure of the respective EDB. For our companies, the community has endorsed the continuation of the Trust model.

- The last review for Top Energy was completed in 2016 and 95.4% of respondents supported Trust ownership and included supportive comments and encouragement on the Company's performance.
- Northpower's last ownership review was completed mid-2017, with only 2 out of 88 submissions seeking any change.

22. *What are your views on the assessment of the allocation of distribution costs?*

Business vs Residential
On Northpower and Top Energy networks business customers (excluding the largest commercial and industrial sites) currently pay the same or higher per kWh rate as residential consumers and pay more overall due to consuming higher volumes of electricity.

- In Northpower – in FY18 an average business paid 13c/kWh and an average residential consumer paid 12c/kWh (calculated as total revenue/total consumption, incorporating differing daily connection rates).
- In Top Energy – in FY18 an average business paid 20c/kWh and an average residential consumer paid 19c/kWh (calculated as total revenue/total consumption, incorporating differing daily connection rates).

Urban Rural Costs
We support a review of the continuance of supply obligations where there are cheaper alternatives to providing electricity distribution services. We acknowledge, however, that strong consumer input would be important in any review of these obligations.

The purpose of any such review should not be to enable EDBs to turn their backs on customers with a high cost to serve, rather it should be to support a structured and reasonable conversation on the best long-term solution for remote customers and ensure a solution can be agreed and implemented with certainty.

The Panel's discussion in this section also highlights the importance of EDB's retaining the ability to invest in new technologies so that these can be used as a cost-effective means to replace ageing, remote assets that are uneconomic.

23. *What are your views on the assessment of challenges facing electricity distribution?*

- **A need to engage customers** - Energy markets will need to evolve and change, and EDBs must be able to engage customers to traverse critical changes in EDB services that will be required. Fronting up, making the complex simple, and working with customers to recognise their interests will be vital to preserve and build trust.

- **Real time oversight** - As energy markets evolve, and energy flows become more volatile, it is essential that EDBs are proactive in identifying capacity pinch points, and areas of overvoltage. Failing to establish effective oversight at the LV level has the potential for expensive intervention under urgency. Control issues historically managed at the Transpower level, will increasingly become a distribution issue.

- **Effective network control** – More dynamic energy markets need new capabilities for control. A clear technology roadmap to position for the future has been set by Northpower and Top Energy. GE PowerOn is being implemented by Top Energy as our ADMS to enable the management of the network into the future, including two-way energy flows. Northpower is also finalising negotiations for a similar investment. Common CRM solutions are also being implemented to provide an improved customer interface.

- **Enabling markets** – New energy markets create the potential for local trading and clearing of these energy markets. Such an approach requires solutions at the technology, network management, and commercial levels. Who by and how these are achieved (e.g. via DSO constructs) is an important issue to be resolved, as it is likely to be at the heart of effective future markets.

- **Collaboration with other networks** - Standardised approaches help drive efficiency and build confidence of customers. We believe that there is value in diversity of ideas during periods of change, provided that there is a willingness to pick the 'best idea in the room' and work towards standardisation, once the answer becomes clear. Within that framework, collaboration is well advanced between Northpower and Top Energy from a regional perspective, but also includes discussions with others including WEL, Aurora, Orion, Counties Power, PowerCo, Mainpower and Electricity Ashburton.

- **System resiliency** - As networks and network issues become more complex, there is likely to be a need for sharing and standardisation of enabling systems and infrastructure. New Zealand EDBs have a strong history of sharing field service expertise in light of natural events, and it is likely that greater sharing over time at a system level will increasingly become necessary. Common systems allow for greater sharing of resources and expertise and also provide opportunities for system disaster recovery and business continuity.

Summary of feedback on Part four

24. *Please summarise your key points on Part four.*

- TPM needs to be resolved with policy direction given on the focus of future allocation methodology rather than retrospective changes, in line with good regulatory practice.

- Distributors' profits are appropriate, current regulation and local trust ownership ensure this. We are confident with the quality of governance and breadth of capability to manage the transition to future energy markets.

- There is a need for distributors to progressively modernise their networks to support the needs of future energy markets. The associated technical and market uncertainty makes this a material challenge, and one that requires strong and unified focus. There is strength in a collaborative approach within this context.

- Within the context of evolving energy markets, seeking to unlock efficiencies with amalgamations (or structure changes) would likely be a misstep. Deliverable savings do not appear material, and it would distract EDBs during a critical period of change. Trust companies are strongly focused on delivering value to their consumer owners and this is driving collaboration. This collaborative approach is well placed to prepare networks for the future and unlock cost efficiency.

- Greater efficiency can be achieved for distribution companies through better access to smart meter data and considering new technologies as part of the network replacement programme. To achieve this efficiency, the ability to invest in new technologies, rather than being specifically excluded from these markets, is required.

- We support the commentary in the PWC Distribution Group Submission that internationally there is some uncertainty over the distribution business models that will emerge due to industry changes. Further research and industry collaboration will help to identify the most appropriate solution for the sector and highlight any potential issues in advance. Care must be taken not to intervene too quickly, which may create unintended consequences. These industry changes may make distributors look at optimal structures without any other intervention being required.

- In our view the key issues that need resolution in order to lead to better customer outcomes are:
    - Reform of Low Fixed Charges Regulations.
    - Ensuring opportunity of access to advanced metering, communications coverage and distributor access to consumption and network data.
    - Implementation of new coordinated pricing structures by distributors and retailers.
    - Clarity on EA's TPM and distribution pricing principles.

Solutions to issues and concerns raised in Part four

25. Please briefly describe any potential solutions to the issues and concerns raised in Part four.

In addition to the solutions posed by the ENA, TPM and PWC submissions, we suggest the following solutions should be considered:

Pricing

Retailers should be required to offer and promote pricing options which align with EDB new pricing structures from 1 April 2020.

Undertake further investigation into the two-tier market and consider the following options:

- Requiring retailers to review consumer tariff plans at least every 12 months to ensure consumers are on the best plan the retailer is offering e.g. standard or low user (if this is to continue) and engage the consumers with an opt-in offer.
- Requiring retailers to offer a basic lowest cost standardised offer to all customers, directly comparable across retailers.
- Removal of prompt payment discounts in conjunction with lower tariffs.

Efficiency

The Commerce Commission should continue with the light-handed regulatory approach to highlight EDB performance through the dashboards on key metrics. Any concerns around the performance of exempt EDBs could be addressed by relaxing the intervention test for regulating exempt EDBs.

Metering Data

We consider solutions that should be looked at include:

- Prescribing minimum technical standards, to ensure efficient collection of relevant information for network, retailer and customer requirements.

- Requiring metering data (including real time data) to be provided on an open access basis with regulated terms and costs to ensure consumers are not ultimately paying twice for this functionality.
- Mechanisms so all consumers who wish to benefit from advanced metering are able to do so, ensuring no equity issues arise due to meter capability and overcoming communications and technical limitations.

Allocation of Distribution Costs

Creation of an industry working group through the ENA, to define pricing methodology for cost allocation between consumer and commercial groups, to achieve consistency across NZ. The results could be reviewed by a regulator.

Part five: Technology and regulation

Technology

26. *What are your views on the assessment of the impact of technology on consumers and the electricity industry?*

We agree that new technology will have an impact on the electricity industry, it already has and is impacting both residential and commercial consumers.

It is increasingly important that access to any data is improved as highlighted in Part Four.

For distributors to have access to adopt these new technologies on their networks is also critical, to ensure networks adapt and evolve for the consumers they serve. There are also two places where new technologies can play a part:

- **i.** Behind the meter – predominately customer driven, less critical from a distributor's perspective to own, although awareness of any existence is critical to minimise network implications and agreements with consumers to manage, may enable the deferral of expensive investment decisions.
- **ii.** On the distribution network – critical for a distributor to be able to own and manage. This enables smart investments to be made, particularly for uneconomic assets at end of life replacement stage or to defer expensive reinforcement in growth areas.

27. *What are you views on the assessment of the impact of technology on pricing mechanisms and the fairness of prices?*

We support the change in price structures. Top Energy and Northpower have pricing strategies in place for pricing reform by 2020.

- In accordance with our Pricing Roadmaps, a joint Northland trial by both Northpower and Top Energy for TOU residential pricing is being undertaken from 1 April 2019. This will help understand consumer behaviours and ensure processes are in place for full implementation in the future.
- Care needs to be taken to minimise unintended consequences and requires support from all stakeholders (retailers, consumers, regulators).
- We agree that solar panels can provide the equivalent benefit of a Low Fixed Charge to those who do not require the lower tariff benefit from a social perspective, and the Low Fixed Charge is therefore not achieving the original policy objectives.
- Pricing structures such as TOU will assist in ensuring that consumers that invest in new technologies, are still contributing fairly to their utilisation of network assets.

28. *What are your views on how emerging technology will affect security of supply, resilience and prices?*

The Top Energy network has had significant investment over the last 10 years and Northpower network assets are in good condition. New technology trigger points have been developed as part of the asset management strategy to provide confidence in the ability to be prepared for change and incorporate new technology as it arises. As a result of the investment and asset management strategy, we are confident that both networks are well positioned to adapt as new technology rolls out.

If managed appropriately within an asset management strategy, emerging technologies should not have an adverse effect on security of supply, resilience or prices. The opportunity is that new technology will improve and enhance these areas.

We agree with the statement that the Low Fixed Charges Regulations were not intended to provide a lower cost for those that could invest in solar panels to reduce their usage. This is one of the unintended consequences of the regulations and how it has caused inefficient pricing structures.

Regulation

29. *What are your views on the assessment of the place of environmental sustainability and fairness in the regulatory system?*

Not answered

30. *What are your views on the assessment of low fixed charge tariff regulations?*

As covered in the ENA and PWC Distributor Group Submissions, we strongly support removal of the Low Fixed Charges Regulations. The introduction of efficient pricing structures as planned by the Industry and with Government support with targeted benefits for those most vulnerable, would be a significant improvement and prevent unintended consequences.

31. *What are your views on the assessment of gaps or overlaps between the regulators?*

A single energy sector regulator is preferred, especially in terms of pricing regulation. This would remove the cross-over of responsibilities between the EA/Commerce Commission, particularly in relation to the impact of new technologies on networks, participation by EDBs in new technologies, network access terms and transmission and distribution pricing.

It would also provide a single framework to assist the industry to adapt in the changing environment. This would also produce a more simplified workplan rather than inundating the industry with multiple technical consultations at the same time.

As energy markets emerge, there will be a need for regulators to be in a position to weigh the relative merits of distributor investments and market enablement. The current split regulatory arrangements make such tradeoffs difficult to address within reasonable timeframes, and while regulation must always be considered in its response, such a situation may result in unacceptable uncertainty during a period of transition.

This may also make it easier for consumers to engage more, as it will simplify the responsibilities and make it less overwhelming.

32. *What are your views on the assessment of whether the regulatory framework and regulators' workplans enable new technologies and business models to emerge?*

Not answered

33. *What are your views on the assessment of other matters for the regulatory framework?*

Consumer Voice

- We agree that a specific consumers' voice through a national panel or advocate may improve effectiveness across the industry, as suggested in Part Three.
- Many distributors, being consumer owned, are also a voice for consumers and maintaining this local voice is also important (for example, Northpower and Top Energy's advocacy on behalf of consumers during the TPM process).

Price Quality Regulation

- We support continuing incremental improvement of the current price quality regime and that changes be limited to address proven issues. We support continuing the development of performance reporting for all distributors.

- To address stakeholder concerns around future performance of exempt EDBs, consideration could be given to amending the intervention test to trigger price and quality regulation.

Regulatory costs

- Having one energy sector regulator may reduce regulatory costs, particularly avoiding duplication of effort across agencies in considering the impact of new technologies on networks, participation by EDBs in new technologies, network access terms and transmission and distribution pricing.

Summary of feedback on Part five

34. *Please summarise your key points on Part five*.
• We agree that technology will have an impact on the industry. We are confident of our ability through asset management plans and historical network investment, to obtain benefits from this new technology, to incorporate it within our existing networks, rather than being an issue that negatively impacts security of supply, resilience and prices. As companies of considerable joint scale, we believe we have the financial capacity to traverse these industry changes effectively. • It is in consumers' interests for distributors to retain the ability to adopt new technologies on their networks, to enable networks to adapt and evolve for the consumers they serve, in the most cost-efficient manner. • Effective regulation is required to ensure that distributors are able to invest in this technology (especially on the network) and also access appropriate data, so that consumers can benefit as a whole. As energy markets develop, there will be a need for regulatory views to be undertaken on the tradeoffs between EDB costs and market enablement; we believe 'on balance' that a single energy regulator may be better placed to make these judgements. • Removal of the Low Fixed Charges Regulations is required as a matter of urgency.

Solutions to issues and concerns raised in Part five

35. *Please briefly describe any potential solutions to the issues and concerns raised in Part five.*
In addition to the solutions posed by the ENA, TPM and PWC submissions, we suggest the following solutions should be considered: • Regulatory frameworks that ensure distributors retain the ability to invest in new technology on the network, to support customer uptake of new technologies and enable the most efficient network investment decisions. • An open access regime for meter data, with minimum data requirements, that ensures data is easily accessible and cost effective to ensure that consumers are able to get the benefits of such technology across the whole industry (penetration across all consumer groups) and only pay for it once. This may require a regulated market. • A move to one energy sector regulator.

Additional information

36. *Please briefly provide any additional information or comment you would like to include in your submission.*
Not answered