

23 October 2018

Secretariat, Ministry of Business, Innovation and Employment
15 Stout Street
PO Box 1473
Wellington 6140
by email: energymarkets@mbie.govt.nz

Dear Panel,

Re: Electricity Price Review

Auckland Airport owns and operates an electricity distribution network. It is a "secondary network" which connects to the Transmission Grid via Vector's distribution network and conveys electricity to connected customers, including airport facilities (nationally significant infrastructure and a lifeline utility¹) and commercial tenants. We are classified as a distributor under the Electricity Industry Act 2010, and are also a large consumer of electricity. In this submission, we primarily make comments in our role as an electricity distributor.

Auckland Airport welcomes the Electricity Price Review ("**Review**"). A well-functioning electricity sector is of critical social and economic importance. We appreciate the opportunity to participate in the discussion on opportunities for improvement to the operation and regulation of the sector. In that context, we:

- support the objective of the Review, which is to work toward achieving an appropriate balance in the electricity industry – between ensuring that the sector is operating fairly and efficiently in the short-term, while still maintaining an environment for confident and sufficient investment for consumers' benefit over the long-term;
- endorse the Expert Advisory Panel's ("**Panel**") statement that consumers are at the heart of the sector; and
- acknowledge the Panel's statement that nothing has been found that suggests distributors have been making excessive profits.²

The key themes we will talk to in this submission are:

- Care should be taken to distinguish between secondary networks such as Auckland Airport's distribution network and primary or traditional distributors. Distributors' modes of operating, profits and incentives vary widely. Regulatory settings that fail to distinguish adequately between types of distributors creates a high risk of unintended consequences and adverse outcomes for consumers. We are particularly sensitive to any regulatory changes that might unintentionally impact our ability to ensure security of the electricity supply to our core aeronautical functions.
- We can see some risk that regulatory changes will unwittingly restrict innovation to the detriment of consumers and the sector more generally. We note that:

¹ Civil Defence Emergency Management Act 2002, Sched. 1.

² Ministry of Business Innovation and Enterprise, *First Report into the state of the electricity sector*, 30 August 2018 ("**Review Paper**"), at 5.

- As a result of advances in technology, the boundaries between industry participants are increasingly becoming less clear cut. We encourage the Panel to recognise that regulation should provide flexibility for small scale distributors (and other participants) to operate across a broader spectrum of markets and services where this may be to the benefit of consumers. In our view, regulation should help to support our ability to invest in new technology, including the potential for distributed generation, which could create the ability to more efficiently serve the Auckland Airport community and reduce the load on transmission and distribution networks. We do not think existing settings optimally allow this.
- Further, we invite the Panel to expand its interpretation of 'technology' beyond electric vehicles and solar panels to innovative technical solutions that transform the way electricity is provided in an environmentally friendly way. The development of fuel cell technology is a prominent example.
- We are comfortable with proposals for distribution pricing to be more cost-reflective. To support this, we consider there needs to be open access to meter and consumption data (no individual industry participant should "own" it). This will be essential for efficient network planning and evidence-led investment in new technology. If the market does not develop solutions itself, then regulatory intervention may be required.
- Any adjustment to regulation should promote predictability and certainty, be proportionate, and be directed toward sector-specific circumstances. Among other things, this requires clear and efficient processes to develop forward-looking regulation. The Transmission Pricing Methodology is a prominent example of a process that does not meet these criteria.

More detailed discussion of these topics is included below, with responses to specific questions included in the appendix to this submission.

Kind regards



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ELECTRICITY PRICE REVIEW

SUBMISSION FORM

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Auckland International Airport Limited – Submission on the Electricity Pricing Review

Introduction

1. Auckland Airport owns and operates New Zealand's largest airport – a critical part of New Zealand's transport infrastructure that connects New Zealanders to the world and provides important connections between our cities and regions. Security of electricity supply and other supporting infrastructure is essential to the efficient functioning and growth of the airport (a lifeline utility) and to more than 800 businesses that operate on and around the airport precinct. For this reason, Auckland Airport owns and operates a wide variety of utilities infrastructure – including an embedded electricity distribution network as well as fuel, gas, water, wastewater, stormwater, roads, and telecommunications networks.
2. Auckland Airport's electricity network does not serve any residential customers. Our electricity customers are the range of businesses that operate within our terminals and the surrounding airport precinct – as well as the core aeronautical functions provided by the airport company. Given the importance of these core functions, Auckland Airport has strong incentives to ensure that the services it supplies, including the supply of electricity distribution services, is of the highest quality and priced efficiently.
3. Auckland Airport's distribution network is modern, with 100% underground lines. As with other embedded networks, customers on our network choose their electricity retailer, who in turn enter use of system agreements with Auckland Airport.

Differentiating distributors

4. Auckland Airport is are classified as an electricity distributor under the Electricity Industry Act 2010, as a recent amendment to the Electricity Industry Act clarifies that the electricity legislation (Act, Code and Regulations) applies to secondary network providers like Auckland Airport as if those providers were distributors.³ Our network does not meet the thresholds for regulation under Part 4 of the Commerce Act.⁴
5. We think it is important for the Panel to be aware of secondary networks such as ours. The drivers and incentives for quality and efficiency in our electricity network are very different to the 29 distributors that are the focus of the Panel's work. If the issues are framed and considered by reference to the traditional distributors only, there is potential for the Review to produce unintended and/or adverse outcomes for secondary networks.
6. We are keen to avoid outcomes that constrain the ability of small networks to pursue outcomes in the interests of consumers, and the electricity sector more broadly. We are also keen to avoid outcomes that might constrain our ability to have a network that supports resilience and service continuity of our core airport functions. This is a key part of the reason why we have decided to make this submission.
7. We note that the Panel is seeking to address questions of affordability and price for residential consumers. Although our distribution network is not part of the affordability problem that the Panel is seeking to address, we believe that we (and secondary networks like ours) have the potential to be part of the affordability solution through technological and business model innovation over time.

³ Electricity Industry Act 2002, s 131A.

⁴ Electricity Industry Act, s 5. Commerce Act 1986, s 54C.



There is good reason to distinguish Auckland Airport's network

8. Auckland Airport does not have any residential customers on its electricity network. This means that:
- a. We are not at risk of cross-subsidisation between commercial and residential customers.⁵ The Panel is concerned that, within networks, businesses are paying less than a proportionate share of costs, and residential customers are paying more.
 - b. A primary concern for the Review is vulnerable customers and households. Any changes that are implemented to address these concerns will not be targeted at Auckland Airport (and our commercial tenants), but may have unintended consequences for us depending on the drafting or mechanisms used to introduce changes.
 - c. Because our customers are commercial entities, they tend to have strong countervailing power. The consequence of this is that we have little or no ability to distort competition over our network. Our small network size also means we have little or no ability to adversely impact competition in non-distribution markets more broadly.
9. Our natural incentives regarding the operation of our electricity network are different to traditional distributors. Auckland Airport is an important contributor to New Zealand's economy – it is strategic infrastructure for tourism and trade. It therefore has a corresponding focus on the quality and resilience of its electricity network. In particular:
- a. Our network has generally higher than average quality standards (SAIDI and SAIFI) and levels of redundancy/resilience than traditional networks that are not supporting such critical infrastructure assets.
 - b. We are driven to operate efficiently and invest well in our electricity assets, as any deficiencies will have a material impact on our broader business.
- We are at risk of being caught by unintended consequences of regulatory changes aimed at distributors who serve residential customers.*
10. Auckland Airport believes that we have an important role to play in innovating to better serve our customers, and reduce the environmental impact of our activities.
11. As a result of technological advances, differences between generators, distributors and retailers will continue to blur. As the Panel itself acknowledges:⁶
- Evaluating how these competitive and non-competitive areas interact among themselves and with other areas might be more straightforward if generation, distribution and retailing were watertight compartments. But they are not. Most generators are also retailers, and distributors are becoming increasingly involved in some competitive areas (such as services related to small-scale solar generation).
12. A key outcome of Auckland Airport being treated as a distributor under the Electricity Industry Act is that Auckland Airport's network is subject to the rules that separate distribution from

⁵ Compared with usage, business on affected networks are paying on average less than a proportionate share of distribution costs, and residential consumers are paying more. Review Paper, at 60.

⁶ Review Paper, at 12.



generation and retail.⁷ This means, for example, that we need to seek exemptions from the Electricity Authority for some directors to serve on our board, if they are also on the board of a retailer serving customers on our network.⁸

13. We are concerned that we could be unduly hindered in developing or contributing to sustainable energy solutions for the airport, local community/region and the broader electricity sector in the future.
14. We note, for example, that if the Electricity Authority's proposal to expand separation requirements were applied without regard to the differing nature of distributors, Auckland Airport would be restricted in its ability to innovate in a way that stretches outside of its 'watertight compartment'.⁹ Such a restriction may inadvertently harm consumers.
15. Such a restriction may also hinder Auckland Airport's ability to develop sustainable solutions for the environment. Sustainability measures are not new to Auckland Airport and are, in fact, part of our daily decision making. For the past three years we have partnered with Energy Efficiency and Conservation Authority ("EECA") to reduce our impact on the climate, and decrease costs for our airline customers. The reduction in per-passenger energy use reduced our carbon footprint by 22.6% over the past 5 years. New technology will allow us to do more in the future, provided that regulatory settings provide the right flexibility for continued innovation.

Regulation should be technology neutral

16. We agree that the electricity sector stands on the threshold of change, and that distributors will need to invest in new technology and infrastructure, to handle demand fluctuations.¹⁰ Indeed, distributors are very well-placed to continue to lead innovation in the sector, and we note that the Panel has not addressed the potential for innovation by distributors in the same way it has considered potential innovation by other participants.
17. We also invite the Panel to expand its consideration of potential new technologies – beyond electric vehicles, solar panels and batteries – to innovative technology solutions that could transform the way electricity is provided. This requires the Panel to avoid any technology bias in favour of current high profile new products, and instead consider the whole ecosystem of technology and energy.
18. We note, for example, as part of Auckland Airport's partnership with EECA, we provided new power units to allow aircraft to use electricity, rather than hydrocarbon-powered generators when on stands. While this is not a measure that drives headlines, it is important for the development of an evolving sector.
19. We agree that new technology, and the electrification of the economy, offers big opportunities.¹¹ We cannot predict what future technologies will look like, or how this will change the sector as a whole.
20. But, in our view, regulation should not provide for specific technology solutions now, when all parties are unaware of what technology may develop in the future. We encourage regulatory

⁷ Electricity Industry Act, Part 3.

⁸ Electricity Industry Act, s 77.

⁹ Review Paper, at 61.

¹⁰ Review Paper, at 64.

¹¹ Review Paper, at 6.



settings to take a technology-neutral perspective wherever possible to provide the greatest flexibility for future innovation.

We encourage the Panel to consider aligning the regulation of distributors under the Electricity Industry Act with regulation under Part 4 of the Commerce Act.

21. We consider that a key way to encourage innovation and investment in new technology is to remove the restrictions on small distributors participating in other activities over their networks. With the right regulatory settings, we believe that Auckland Airport and other secondary networks may be able to explore innovative and sustainable new business models in the future. For example, the small size of the network and small customer base could be conducive to the development of "microgrids" or other models where the network is far more self-sufficient in terms of energy supply.
22. An effective way to enable this exploration and innovation could be to use the distinction already present in the Commerce Act. That is, distributors that do not meet the threshold for regulation under Part 4 should be treated uniquely under the Electricity Industry Act. They should not be subject to the (existing and any future) separation requirements, but could still be regulated as distributors under the Code.
23. This would allow secondary networks such as Auckland Airport to more easily expand into innovative and sustainable solutions, which may otherwise be restricted. It may incentivise investment into distributed generation and supply of energy to consumers, reducing their costs.
24. This, in turn, would be a better outcome for consumers as a whole, as it has the potential to reduce the load on transmission and other distribution networks, especially if "microgrids" became more prevalent throughout New Zealand.

Cost-reflective pricing and data access

The Panel has indicated some areas where distributors could change their practices to benefit consumers. An example of this is introducing a new price structure to send clearer signals to consumers on the cost of service, and to reduce network costs in the longer term. The Panel has suggested that current distribution pricing structures may be outdated, and has indicated areas for improvement, including its view that affordability "should generally improve if prices reflect the cost of providing electricity at different times of the day and year, rather than being flat."¹²

25. We note that Auckland Airport is likely to have a flatter cost to provide electricity compared to other distributors with pronounced peaks. Our consumers will not be returning home at 6pm to turn on lights, warm the house and have a shower.¹³ As a 24-hour airport with commercial tenants, usage of our network is very different to networks with residential peaks. However, we are happy to explore initiatives for distribution pricing to more accurately reflect costs, and are comfortable exploring the possibility of including time-of-use pricing and demand and capacity based charging.¹⁴
26. We consider that, managed appropriately, changes to price structures could produce mutually beneficial outcome for all parties and participants in the sector. However, poorly managed, this

¹² Review Paper, at 4.

¹³ Review Paper, at 55.

¹⁴ Review Paper, at 56.



approach risks creating winners and losers, and possibly hurting the most vulnerable.¹⁵ We therefore agree with the Panel that careful and informed management is critical to mitigating this risk.

27. In our view, it will be difficult to achieve 'careful management' of cost-reflective pricing without changes to the way that meter and consumption data is controlled and shared. Currently, this information is difficult to access given the way commercial arrangements have been entered by retailers.
28. We consider that metering data should be readily available on reasonable commercial terms, to allow us to properly manage our network.¹⁶ We support the idea of an open-access regime for meter data with standardised terms and conditions for all parties.
29. Access to real-time usage data would allow us to understand loads, peak flows and constraints, and would help us to:
 - a. ensure that pricing structures are more cost-reflective and efficient;
 - b. mitigate the risk of creating winners and losers across our commercial customers, and allow us to participate in finding more equitable solutions across the industry; and
 - c. make informed and evidence-led decisions about future planning and investment in network and infrastructure development, which would in turn help us to reduce our long-term maintenance obligations, and associated costs to our consumers.
30. If the industry is unable to find workable solutions to provide for equitable data access, then regulatory intervention may be required.

Regulatory framework

Regulatory structures

31. We are broadly comfortable with the current electricity regulatory framework and the division of regulatory roles between the Commerce Commission, the Electricity Authority, and the Minister. The respective roles of each regulator are well understood by industry participants.
32. Although there is no immediate need from our perspective, we are comfortable with ongoing consideration of whether a single regulator is appropriate for the energy industry, particularly as the nature of the industry continues to change with new technology – provided that any changes are designed to promote quality, proportionate, cost-effective and fit-for-purpose regulation.

Social and environmental objectives

33. The Panel has asked whether the electricity regulatory framework should include environmental and fairness objectives. Auckland Airport generally supports regulatory decisions that include a balanced and fair consideration of the relevant context and the long-term implications for New Zealanders.

¹⁵ Review Paper, at 6.

¹⁶ Review Paper, at 58.



34. However, in this particular context we agree with the Productivity Commission that an economy-wide approach to environmental sustainability objectives is likely to be more appropriate than a sector-specific regulatory approach. We also note the Panel's view that the electricity regulatory framework currently gives effect to principles of fairness in a variety of ways without this needing to be an explicit legislative objective. This appears to recognise that relevant social agencies will play a primary role in promoting fairness and social outcomes, as these agencies have the best access and controls to the most relevant information, skillsets and expertise.

Proportionate regulation can be effective

Smaller, community-owned distributors are currently subject to information disclosure regulation under Part 4 of the Commerce Act because they do not have incentives to make excessive profits. Following comments from some stakeholders, the Panel has questioned whether it would be beneficial to include these distributors in the price control regime under Part 4 to address efficiency and service quality matters.

35. Although the issue does not directly impact on Auckland Airport's electricity network, we have substantial experience with the information disclosure regime under Part 4. In practice, information disclosure requires regulated businesses to provide a great deal of detail about their business across a range of financial and non-financial performance measures – including efficiency and service quality metrics. This information is then monitored on a regular basis by the Commerce Commission. Our experience is that information disclosure regulation is a cost-effective and proportionate regulatory tool to promote a wide variety of behaviours that are consistent with long-term consumer outcomes – including efficiency and service quality matters. Any change to the form of regulation for distributors subject to information disclosure only must be based on clear and compelling evidence that the existing regime is ineffective and that the benefits of a different type of regulation materially outweigh the costs involved.

Flexible regulation

36. Regulation should be flexible to allow regulators and industry participants to quickly adapt to changing context and circumstances, and to encourage and allow the right type of behaviour by participants.

We question the statement by the Panel that today's framework "has sufficient flexibility to adapt to a changing environment because regulators can develop rules without changing primary legislation."¹⁷

37. It is true that the regulators have extensive powers to create and change rules via tertiary legislation. However, the 'rules' that are discussed by the Panel are made pursuant to primary legislation. It is the primary legislation that classifies Auckland Airport as a 'distributor', and subjects us to the same treatment as the 29 main distributors.
38. As discussed above, we believe it is important to consider whether the primary legislation provides sufficient flexibility for the rules to facilitate innovation, including by smaller distributors.

Any new regulation should be forward looking

39. Regulation should be prospective, and transparent. Any changes should not have retrospective effect. This is critical for business certainty and predictability.

¹⁷ Review Paper, at 72.



40. The Panel has raised some retrospectivity issues that arose out of the Transmission Pricing Methodology Review (TPM Review), noting that it is “unaware of any other country undertaking retrospective reallocation of past grid investments. Indeed, some say retrospective reallocation is the principal obstacle to progress on a new TPM.”¹⁸
41. This is a good example of the dangers in seeking to impose retrospective regulation in any sector – and of the type of obstacle that regulatory changes in other areas of the electricity sector should seek to avoid.

Conclusion

42. Auckland Airport appreciates and thanks the Panel for the opportunity to be involved within the Electricity Pricing Review, and supports the Panel's objectives.
43. We are happy to assist the Panel, should they have any further queries on issues raised in this submission. We also look forward to further engagement during this process and with our fellow sector participants in order to drive long-term value for our customers and communities.

¹⁸ Review Paper, at 50.



Appendix – Answers to Specific Queries

Part three: Consumers and prices

Consumer interests

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

Our consumers are commercial tenants. Reliable supply and fair and affordable prices are important to them.

2. What are your views on whether consumers have an effective voice in the electricity sector?

We are an unusual distributor in that we have close and regular contact with our consumers, in our capacity as landlord. We consider that this gives them an effective voice.

3. What are your views on whether consumers trust the electricity sector to look after their interests?

N/A

Prices

4. What are your views on the assessment of the make-up of recent price changes?

N/A

5. What are your views on the assessment of how electricity prices compare internationally?

We are comfortable with how New Zealand's electricity prices compare internationally. As indicated in Figure 9, New Zealand's residential electricity prices were in the lower half of OECD countries in 2016.

However, we also recognise that there are opportunities to do better and support this Review's fundamental purpose.

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

We agree that it is difficult to predict the increase or change in distribution of electricity demand. We support changes where equitable, appropriate and consistent with incentives to invest and innovate. We note that the consumption profile of our customers differs from other, more traditional 'distributors'.

Affordability

7. What are your views on the assessment of the size of the affordability problem?

N/A

8. What are your views of the assessment of the causes of the affordability problem?

N/A



9. *What are your views of the assessment of the outlook for the affordability problem?*

N/A

Summary of feedback on Part three

10. *Please summarise your key points on Part three.*

As set out in our Submission (above).

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.*

As set out in our Submission (above).

Part four: Industry

Generation

12. *What are your views on the assessment of generation sector performance?*

N/A

13. *What are your views of the assessment of barriers to competition in the generation sector?*

N/A

14. *What are your views on whether current arrangements will ensure sufficient new generation to meet demand?*

N/A

Retailing

15. *What are your views on the assessment of retail sector performance?*

N/A

16. *What are your views on the assessment of barriers to competition in retailing?*

N/A

Vertical integration

17. *What are your views on the assessment of vertical integration and the contract market?*

N/A

18. *What are your views on the assessment of generators' and retailers' profits?*

N/A



Transmission

19. What are your views on the process, timing and fairness aspects of the transmission pricing methodology?

We agree that the Transmission Pricing Methodology Review has been drawn out and is time and resource intensive.

Our primary concern is the prospect of retrospective inclusion of assets. Where something affects the whole sector, it is important that it is prospective.

We remain convinced that the Authority's decision to apply the new TPM retroactively is inconsistent with generally recognised principles of good regulatory practice, is inconsistent with the goal providing an environment of certainty for future investment decisions and will have a number of unintended negative consequences.

A new TPM should be able to stand on its own, and its true impact transparent in demonstration of how it achieves the Authority's remit.

Distribution

20. What are your views on the assessment of distributors' profits?

We agree that distributors are not making excess profits. We agree that distributors' profits vary widely, as do costs. We consider it would be inappropriate to assess all distributors with the same brush. As an embedded network that provides electricity for core aeronautical functions, Auckland Airport has strong incentives to operate our network efficiently.

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

We agree that meter data should be more readily available across the sector. We support the suggestion that an open-access regime for meter data with standardised terms and conditions for all parties is an appropriate solution.

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

Our customers are all commercial – none are residential. Any readjustments of shared network costs between residential and other customers is therefore not applicable to our network.

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

N/A

Summary of feedback on Part four

24. Please summarise your key points on Part four.

As set out in our Submission (above).



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.

As set out in our Submission (above).

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 consider that the Panel should take a broad approach to the definition of technology, and take into account innovative solutions that do not have the same profile as electric vehicles or solar panels.

Network operators (incl transmission and distribution) have demonstrated leadership in the field of improvement and innovation; trialing grid-level storage options, artificial-intelligence (A.I.) advances in network management, the use of robotics, drones and non-visual spectral analysis in asset management.

Any change in regulation should enable the development of technology and innovation by all parties (within a level playing field), not constrain it.

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

N/A

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

Resilience and security of supply is of significant importance to Auckland Airport's network, because of the critical infrastructure we operate. We see emerging technology as an opportunity to support this, rather than take away from it.

Regulation

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

We agree that policy incentives on environmental regulation and social change should be sector specific.

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

N/A

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

We are comfortable with the current system, but are also open to a single regulator for energy. Regardless of its form, the regulatory framework should involve cost-effective, flexible, proportionate and fit-for-purpose regulation focused on long-term value for consumers.



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

We agree that rules (and legislation) may need to be amended to enable and incentivise new technologies. The strict distinction between parties in the electricity supply chain can restrict innovation that may not sit within these clear-cut boundaries. We do not yet know what this innovation looks like. We need to ensure regulation is enabling.

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

N/A

Summary of feedback on Part five

34. *Please summarise your key points on Part five.*

Please refer to our Submission.

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.*

Please refer to our Submission.

Additional information

36. *Please briefly provide any additional information or comment you would like to include in your submission.*

N/A

