



**Cross-Submission on the IM Review: Draft  
Decision Papers**

**Unison Networks Limited**

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## 1. INTRODUCTION AND SUMMARY

### 1.1 Introduction

1. Unison welcomes the opportunity to provide a cross-submission to the Commerce Commission on the *IM Review – Draft Decision Papers*. Unison responds to the following submissions:

- Energy Retailers' Association of New Zealand (ERANZ)
- Contact, and
- Trustpower (including expert reports).

### 1.2 Summary

2. Unison's cross-submission focuses on specific issues that have been raised by ERANZ, Contact and Trustpower in response to the Topic Paper 3: *The Future Impact of Emerging Technologies in the Energy Sector*. The two main areas Unison focuses on are (a) scope of the regulated service for electricity distribution (e.g. competition), and (b) discussion around the review of distributed generation pricing principles. Unison has considered these issues in the context of the purpose of Part 4 of the Commerce Act, the role of the Commerce Commission, and the wider policy and government responsibilities.

3. Unison reiterates our previous submission point in support of the Commission's view that it is inappropriate for the Commission to make IM changes to effectively prevent EDBs from directly utilising new emerging technologies to provide network services<sup>1</sup>. The effect of regulating (or even regulating too soon) may stifle innovation, particularly as it is unclear what the longer-term impact of emerging technologies will be on the electricity industry. Therefore Unison continues to recommend that the Commission retain its current position and not ring-fence EDB investment in emerging technology at the present, uncertain time. Unison considers that these issues are best dealt with at the wider policy level, outside of the Part 4 regime.

4. Unison has also contributed to and supports the ENA's cross-submission on the IM review.

### 1.3 Submission Contact

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<sup>1</sup> Unison (4 August 2016). *Submission on the Input Methodology Review*. Paragraph 16, page 6.

## 2. RESPONSE TO ERANZ – EMERGING TECHNOLOGY

### 2.1 Competition and Scope of Regulated Service

6. The Energy Retailers' Association of New Zealand's (ERANZ's) submission describes emerging technologies, in particular battery storage, as representing a potentially competitive market in New Zealand. Specifically:

*“Storage of energy is not a natural monopoly exercise – competition must be encouraged so that choice and advances in technology are enhanced. If nothing is done, and lines companies are able to shape this market now through the ability to apply inefficient cross-subsidies across customers who have no choice, then other entrants will be dis-incentivised, leading to forestalled competition in emerging technologies to the long-term detriment of consumers.”<sup>2</sup>*

7. ERANZ further state that:

*“The New Zealand electricity market is designed so that there is clear separation between the competitive and non-competitive parts of the sector. There are sound reasons for this division, which should inform the Commission’s approach to controlling monopoly involvement in contestable markets.”<sup>3</sup>*

8. Unison does not consider it is appropriate at this time to treat emerging technology such as battery storage as a separate competitive service from the regulated electricity distribution market. At present, it is unclear what impact battery storage may have on the industry. The innovation that EDBs are able to achieve at present (e.g. such as enhancing the level of service and supply) is arguably a better outcome for consumers. Unison also considers that issues relating to competitive markets are not clearly within the jurisdiction of the Commission, and should not be considered as part of the IMs review. Emerging competition issues should be considered and guided by broader government policy, e.g. through the Ministry of Business, Innovation and Employment (MBIE). The Commission also reiterates this point in their *Emerging Technologies* paper:

*“Some stakeholders (mainly electricity retailers) expressed significant concern with electricity distributors entering unregulated energy markets. Their key concern is that EDBs’ status as a regulated monopoly provider and the rules applied to them, especially the cost allocation IM, may give them an undue competitive advantage in, or otherwise distort, competitive energy markets (either existing or new).*

*“In our judgement, matters of industry structure are more appropriately handled by policy makers. The current cost allocation IM is intended to ensure that consumers of regulated services benefit over time from any efficiency gains achieved by EDBs supplying regulated and unregulated services together. We consider the current cost allocation IM is largely fit for*

<sup>2</sup> ERANZ (4 August 2016). *ERANZ Submission to the Commerce Commission on Input Methodologies for Emerging Technology*. Pages 3-4.

<sup>3</sup> ERANZ (4 August 2016). *ERANZ Submission to the Commerce Commission on Input Methodologies for Emerging Technology*. Page 10.

*purpose, though we have proposed changes to tighten some aspects of this IM and to gather further information which will be used in informing future monitoring and analysis.”<sup>4</sup>*

9. Finally, ERANZ also note in their submission that the New Zealand electricity market is designed so that there is clear separation between the competitive and non-competitive parts:

*“The New Zealand electricity market is designed so that there is clear separation between the competitive and non-competitive parts of the sector. There are sound reasons for this division, which should inform the Commission’s approach to controlling monopoly involvement in contestable markets.”<sup>5</sup>*

10. Unison submits that ERANZ is over-stating the position in terms of the separation between distribution and generation/retail. The Electricity Industry Act 2010 allows for a degree of cross involvement between the competitive and non-competitive parts of the sector up to certain limits. For example, the arms-length rules under the Electricity Industry Act 2010 allow distribution companies to engage in generation or retail up to certain levels before the separation rules are engaged:

**Clause 72(b) of the Electricity Industry Act**

*“corporate separation and arm’s-length rules, if a person is involved both in a distributor and in either or both of—*

- (i) a generator that generates more than 50 MW of generation connected to the distributor’s network:*
- (ii) a retailer that retails more than 75 GWh per year to customers connected to the distributor’s network”.*

11. Cross-involvement up to certain limits recognises that a limited involvement in a market is unlikely to disrupt the competitive process and distributors making an entry into those businesses with an objective of achieving an economic scale must do so on the basis that it must be self-sustaining. We remain strongly of the view that any consideration of prescribing distributor’s involvement in new technology markets is a policy matter, best dealt with in the context of the Electricity Industry Act and its existing rules.

## 2.2 ERANZ Alternative Proposal

12. ERANZ, in their submission, reiterates their alternative proposal that certain assets (e.g. those arguably in the competitive market such as battery storage), should be ring-fenced and entered into the RAB at zero value.

*“ERANZ’s position remains that the regulatory treatment of emerging technologies is a fundamental challenge to the regulatory regime. The current IMs review needs to ensure that*

<sup>4</sup> Commerce Commission (16 June 2016). *Input methodologies review draft decisions. Topic Paper 3: The future impact of emerging technologies in the energy sector.* Paragraph X12, pages 5-6.

<sup>5</sup> ERANZ (4 August 2016). *ERANZ Submission to the Commerce Commission on Input Methodologies for Emerging Technology.* Page 10.

*the extant IMs or any proposed amendments to the IMs do not harm the potential for the provision of services under competitive market conditions.*<sup>6</sup>

*“As we have identified earlier in our submission, a key risk of allowing EDBs to use and earn regulated revenue for emerging technology is that it incentivises early adoption of nascent technologies through cross-subsidisation. In a workably competitive market, firms each face the full cost of their decisions, thereby inducing the efficient allocation of resources as firm’s balance risk and return. However, if EDBs are able to earn regulated revenue on emerging technology, then risk transfers to the consumer. This effectively allows EDBs to de-risk their investment decisions, which could credibly lead to regulatory lock-out of competitors and lock-in of sub-optimal technology. To address this, we submit that the IMs should preclude EDBs from earning regulated returns on assets capable of providing contestable services.”*<sup>7</sup>

13. Unison disagrees with ERANZ’s proposal to amend the IMs to exclude EDBs from earning regulated returns on assets capable of providing contestable services. Our main concern with this proposal is where should the line be drawn on ‘contestable’ services? For example, ripple relay systems (which are located behind the meter) and other services such as contracting services are also arguably ‘contestable’, but it would not be appropriate to ring-fence these assets. Unison notes that the Commission in its *Emerging Technologies* paper, stated that there is potential for significant change arising from the future impact of emerging technologies, however, it does not consider that major changes to the IMs are needed at this time. The Commission does not want the IMs or the regulatory regime to discourage suppliers or others from using new technology and business models for the benefit of consumers. The Commission further states that there is no need to ring-fence EDB investments in emerging technologies, and that this could not be progressed under Part 4. Further, industry structure is more appropriately dealt with by policy makers<sup>8</sup>.
14. Unison agrees with the Commission’s points above, that there is not currently a need to ring-fence EDB investments in emerging technologies. To reiterate our previous submission:

*“Unison supports the Commission’s view that it would be inappropriate for the Commission to set cost and asset allocation requirements to effectively prevent EDBs from directly utilising new technologies to provide network services. This is a policy issue better addressed under the Electricity Industry Act. While we recognise retailers’ concerns about being able to access “value-streams” associated with network investment deferrals or avoiding investment, Unison submits that this is best addressed through changes in network pricing structures, which more effectively signal the value of network alternatives where there is value in reducing or shifting demand. Unison submits that retailers would be better to invest effort in navigating the difficult challenge of network pricing reform, than seeking to simply lock EDBs out of using alternatives to traditional network investment, especially when such markets are nascent.”*<sup>9</sup>

<sup>6</sup> ERANZ (4 August 2016). *ERANZ Submission to the Commerce Commission on Input Methodologies for Emerging Technology*. Page 15.

<sup>7</sup> ERANZ (4 August 2016). *ERANZ Submission to the Commerce Commission on Input Methodologies for Emerging Technology*. Page 33.

<sup>8</sup> Commerce Commission (16 June 2016). *Input methodologies review draft decisions. Topic Paper 3: The future impact of emerging technologies in the energy sector*. Paragraph X12, pages 4-5.

<sup>9</sup> Unison (4 August 2016). *Submission on the Input Methodology Review*. Paragraph 16, pages 6-7.

### 3. RESPONSE TO CONTACT ENERGY – EMERGING TECHNOLOGY

#### 3.1 Regulatory Treatment of Revenues and Costs from Emerging Technology

15. Contact's submission provides feedback to the Commission on three of the IM topic papers; however, Unison's cross-submission focuses solely on Contact's *Emerging Technology* submission points. Like ERANZ, Contact has expressed strong concerns with the regulatory treatment of emerging technologies and the impact on competition:

*"Contact believes the draft finding on cost allocation are not in best interests of consumers. We have three key concerns with the draft finding:*

- Consumers of regulated electricity lines services will be disadvantaged by higher lines charges;*
- Consumers of emerging technology products and services will be disadvantaged as a result of less competition, and less product and service innovation; and*
- There is likely to be significant negative impacts on other competitive markets (including spot and ancillary services markets as highlighted by the Electricity Authority (Authority))."<sup>10</sup>*

*"Contact supports EDBs obtaining the benefits of emerging technologies by contracting for network services from third parties, funded through regulated operational expenditure (opex) (for example, a third party aggregator of battery storage may provide a peak demand service to EDBs). Contact also supports EDBs investing and competing in emerging technology markets through ring-fenced affiliates. The purpose of ring-fencing is to create market-like conditions which ensure EDB related businesses operate at arms-length. Contact acknowledges ring-fencing involves administrative costs, and believes these will be greatly outweighed by the long-term benefits to consumers derived from competitive markets."<sup>11</sup>*

16. Unison disagrees with Contact that EDBs investing and 'competing' in emerging technology should do so through ring-fenced (or third party) affiliates. As noted in our response to ERANZ above, it is still not clear the exact impact and direction that emerging technologies such as batteries will have on the industry. Unison maintains that to regulate too soon is likely to stifle innovation, rather than, as Contact argues, a lack of regulation will result in "...less product and service innovation".
17. Contact does, however, submit that there is a role for Government (Ministers) and the Ministry of Business, Innovation and Employment to address structure issues. Unison agrees with this point, and we reiterate our position that it is indeed the role of central Government (e.g. MBIE) to make decisions around structural issues in the electricity sector. It is therefore not appropriate for the Commission to consider and address these issues within the Part 4 IM

<sup>10</sup> Contact (4 August 2016). *Input Methodology Review*. Page 2.

<sup>11</sup> Contact (4 August 2016). *Input Methodology Review*. Pages 2-3.

review. Until such time as there is a clear policy directive, Unison submits that there should be no regulatory ring-fencing of emerging technology assets such as battery storage.

#### 4. RESPONSE TO TRUSTPOWER – EMERGING TECHNOLOGY

##### 4.1 Treatment of emerging technologies under Part 4 regime

18. Trustpower's submission on the *Emerging Technology* paper argues that distributed generation (DG), and participation in the demand response (DR) scheme, perform the same network support functions as batteries<sup>12</sup>. Trustpower notes that DG and DR are competitive markets, and therefore battery storage should be treated in the same manner as a competitive market product/service. Trustpower further argues that there are information asymmetries and access to revenue streams that give network companies a competitive advantage in the development of emerging technology<sup>13</sup>. Finally, Trustpower submits that the current Part 4 incentives are insufficient to encourage EDBs to contract with third party providers of network support services (e.g. such as DG).
19. Unison disagrees with Trustpower's assertion that emerging technologies such as battery storage should be treated in the same way as DG and DR. DG, in particular, is an established market, where as battery storage is still an emerging market and is unproven. Until such a time as the emerging technology impacts on the electricity industry become apparent, Unison opposes any further regulatory intervention by the Commission, such as ring-fencing. Trustpower's points about asymmetry in information and access to revenue streams may hold truth, however, we disagree that this gives EDBs a competitive advantage. Using battery storage in the context of electrical distribution services is likely to be more efficiently delivered by EDBs, at least in the short-medium term. It encourages EDBs to use innovation in the services delivered to its customers, which will ultimately benefit the long-term interests of consumers.

##### 4.2 Distributed Generation Pricing Principles (DGPPs)

20. Trustpower's submission also discusses distributed generation in the context of the Electricity Authority's DGPP review. As noted above, Trustpower believes that incentives under the current Part 4 regime are insufficient for EDBs (and Transpower) to contract with existing third-party providers of network support services. Trustpower references expert advice provided from Allan Carvell and HoustonKemp to add weight to this assertion. Alan Carvell makes the following observations on the DGPP review:

*"Removal of schedule 6.4 from the Code renders ACOT payments from EDBs to DG owners unsustainable. ACOT payments will cease to meet the definition of 'recoverable costs' under the price-quality control regime meaning that EDBs will be actively discouraged from continuing to make such payments."*<sup>14</sup>

<sup>12</sup> Trustpower (4 August 2016). *Submission on the Input Methodologies Review Draft Decisions*. Paragraph 3.1.1, page 2.

<sup>13</sup> Trustpower (4 August 2016). *Submission on the Input Methodologies Review Draft Decisions*. Paragraph page 3.

<sup>14</sup> Carvell, Allan (24 July 2016). *Electricity Authority Review of Distributed Generation Pricing Principles: Incentives Report*. Page 3.

*“While Transpower may have some incentives to negotiate for the procurement of transmission alternative services in relation to new DG investment proposals, there may be much weaker incentives to fully value the benefit of transmission savings in relation to historical DG investments.”<sup>15</sup>*

21. Unison partly agrees with Carvell’s first statement, that removing schedule 6.4, the DGPPs, will effectively mean EDBs will be discouraged from making ACOT payments as these payments will no longer be recoverable. However, Unison is also concerned that EDBs may still be required to make these payments to DG owners due to contractual arrangements. In our submission to the Authority, we recommended that the Authority provide clear guidance in the Code that ACOT payments would no longer be paid by distributors, only Transpower.
22. Regarding Carvell’s second statement above, Unison considers that having Transpower assess ACOT payments to DG owners (as opposed to distributors) is likely to be the most efficient approach. Transpower has fuller information to accurately assess whether the use of individual DG is a more efficient transmission alternative. The current ‘subsidy’ approach of ACOT payments by EDBs is inefficient as distributors do not have the full information Transpower does.
23. Trustpower’s second expert report by HoustonKemp, makes the following observation about the implications of removing the DGPPs in their entirety:

*“The removal of the DGPPs in this context represents a ‘backwards step’ in the provision of arrangements to facilitate efficient investment in distributed generation. The EA has failed to adequately investigate the rationale behind the introduction of the DGPPs, and as a consequence has not adequately considered the implications of the removal of the DGPPs on the efficient level of distributed generation investment”.*<sup>16</sup>

24. Unison agrees in part with this assertion, that the original rationale for the DGPPs has been overlooked and that the implications of removing the DGPPs in their entirety may have unintended consequences. In Unison’s submission to the Authority on the DGPP review, we noted the following issues as potential unintended consequences of removing the DGPPs:
  - *Competitive neutrality potentially would be removed if some distributors moved towards recovering common costs from distributed generation. Having different charging methodology for grid-connected generators as opposed to distributed generators will unfairly disadvantage distributed generators (this issue was discussed earlier in Unison’s submission).*
  - *The original intent of the DGPPs seems to have been overlooked – that the connection of DG (especially SSDG) should be simple, predictable and provide regulatory stability. The purpose of Part 6 of the Code is “...to enable connection and continued connection of distributed generation if connection is consistent with connection and operation standards”<sup>4</sup>. Unison questions how the current proposal fits with this Code purpose. We also query whether the purpose of Part 6 may also need to be reviewed to consider*

<sup>15</sup> Ibid.

<sup>16</sup> HoustonKemp (26 July 2016). *Assessment of the Electricity Authority’s proposal to remove the distributed generation pricing principles*. Page 6.

*efficient connection as well as simply to enable the connection and continued connection of DG.*

- *The distribution pricing guidelines (as currently drafted) would not adequately address the pricing of distributed generation connections.*
- *In many cases, distributors would still be left having to pay ACOT to DG owners after the Code change takes place, but without any way to pass these costs on under the Commerce Commission's regime. This is due to the contracts that are in place between distributors and DG owners being based on regulation (Code) and the TPM.<sup>17</sup>*

25. HoustonKemp also observes that the Authority's proposal under the DGPP review would allow DG owners to be charged a contribution to common costs, hence creating an inequity with grid-connected generation:

*"Under the current TPM, generators connected to the transmission network are not required to contribute to the common costs of the transmission or distribution network. These generators are only required to pay the incremental costs associated with connecting to the network. In developing the DGPPs, the Ministry of Economic Development recognised the importance of ensuring that the charges paid by distributed generators were substantially similar to those paid by generators connected to the transmission network. The Ministry went on to state that in order for distributed generation to be competitive against transmission-connected generators, owners of distributed generation should pay any reasonable incremental costs arising from their connection to the distribution network, but not a full use-of-system fee.*

*"In other words, a key principle underpinning the development of the DGPPs was to promote investment in distributed generation through maintaining consistency in the charging arrangements between distributed generation and generators connected to the transmission network. By placing distribution and transmission-connected generation on an equal footing, decisions around the type of generation investment will be more aligned with the relative benefits of each generation option. Under the current TPM, removing the DGPPs would lead to a disparity in charging arrangements as between distributed generation and transmission-connected generation. In other words, distributed generators would be required to contribute to the common costs of the network, while transmission-connected generators would not."<sup>18</sup>*

26. Unison concurs with HoustonKemp's observations. In Unison's submission to the Authority on the DGPP review, we note that there would be an inequity between grid-connected generation and DG should the DGPPs be removed (under the current TPM). Unison recommended the Authority allow: *"DG owners continue to only pay "...connection charges...that must not exceed the incremental costs of providing connection services to the distributed generation". However, if there is a significant change over time in the ability of*

<sup>17</sup> Unison (26 July 2016). *Submission on Review of Distributed Generation Pricing Principles*. Page 3.

<sup>18</sup> HoustonKemp (26 July 2016). *Assessment of the Electricity Authority's proposal to remove the distributed generation pricing principles*. Pages 27-29.

*Transpower/distributors to be able to recover costs through load, then the common cost contribution could be reviewed at that stage.*<sup>19</sup>

27. HoustonKemp further notes the uncertain implications of the DGPP review, particularly within the context of a shifting regulatory context (with both the TPM and distribution pricing currently being reviewed):

*“Indeed, the EA has sought to amend the DGPPs without fully understanding the arrangements that will apply to transmission-connected generators (given the current uncertainty around how the area-of-benefit charge will be set). This suggests that the EA has not, and further, cannot, assess the implications of its proposal to remove the DGPPs in terms of its impact on the competitiveness of distributed generation (vis-à-vis transmission connected generators). It follows that the EA has not considered all of the implications of its proposal, and moreover, will not be in a position to properly do so until the TPM arrangements are specified in greater detail (including the approach Transpower intends to take in implementing those arrangements) and until the EA has completed its review of the distribution pricing methodology.”*<sup>20</sup>

28. Unison shares a number of HoustonKemp’s concerns expressed above. Unison made the following further recommendations to the Authority as part of the DGPP review:

*“The Authority not progress with removing the DGPPs in their entirety at this stage due to unintended consequences of this regulatory change*

*“An alternative proposal is instead introduced that solely addresses the issue of ACOT payments, e.g. Alternative 1, which excludes transmission costs or charges from the definition of ‘incremental cost’ in the DGPPs. In conjunction with this, Unison also recommends:*

- i. *The Authority make it explicit in Part 17 of the Code (Transitional Provisions) that Transpower will be the sole party to determine and make ACOT payments from the date of the proposal’s implementation.*
- ii. *The purpose of Part 6 of the Code should be reviewed.*
- iii. *The DGPP and the distribution pricing principles should be reviewed concurrently, once the distribution pricing direction has been determined*<sup>21</sup>.

<sup>19</sup> Unison (26 July 2016). *Submission on Review of Distributed Generation Pricing Principles*. Page 2.

<sup>20</sup> HoustonKemp (26 July 2016). *Assessment of the Electricity Authority’s proposal to remove the distributed generation pricing principles*. Page 30.

<sup>21</sup> Unison (26 July 2016). *Submission on Review of Distributed Generation Pricing Principles*. Page 5.