Distribution pricing scorecards 2023

Information paper

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ELECTRICITY AUTHORITY
TE MANA HIKO

Executive summary

Distribution pricing plays a key role in ensuring a reliable and affordable electricity supply for all consumers. Distribution pricing is important as it affects how consumers use electricity, how distributors and others manage load and when distributors invest in new or replacement poles and wires. It also affects the timing, level and location of investments in distributed energy resources like solar panels, electric vehicles and batteries.

The Electricity Authority Te Mana Hiko (Authority) would like to improve distribution pricing to benefit all consumers. We use distribution pricing scorecards to assess and evaluate distributors' pricing plans. We expect this will encourage improvements in distribution pricing.

This paper summarises the main findings from the Authority's review of the 29 distributor pricing methodologies and pricing roadmaps for the 2023/24 disclosure year. The Authority's approach is to review each distributor's pricing and score this according to pricing metrics that we consider reflect good pricing practice, and in particular, efficient pricing.

Overall, distribution pricing has improved between 2021 (when we last published pricing scorecards) and 2023. Some distributors have made significant progress, particularly in describing their local circumstances, pricing strategies, and pricing roadmaps.

However, progress for some distributors is not occurring as quickly or comprehensively as we would like. We have identified that there is room for improvement in distributors':

- application of time-of-use (TOU) peak differentials
- pass-through of transmission charges
- demonstrating quantitative analysis linking network circumstances to peak signal strength, consistent with cost-reflective pricing
- provision of quantitative information on calculating the subsidy-free range (the range between incremental and standalone cost).

Response to network congestion

Most distributors are preparing for future network congestion and the upcoming increase in electrification. Distributors are using pricing to address various issues by considering or implementing time-of-use load control, EV/battery and capacity tariffs or flexibility services.

First mover disadvantage

Our expectations as per our Open Letter in 2022[1] set out that first movers when seeking to connect to a distribution network should neither experience an advantage or disadvantage compared to other customers. Based on our assessment, we note that some distributors' policies on capital contributions address some issues related to first mover disadvantage (FMD) and include refund mechanisms, while others are under review and note that FMD will be addressed as part of that review.

[1] Electricity Authority (2022 September) Letter to distributors re pricing. Available at https://www.ea.govt.nz/documents/1878/Letter-to-distributors-re-pricing-September-2022.pdf

Pass-through of transmission charges

We expect transmission charges to be passed through in accordance with our practice note.[2] We found most distributors have applied this guidance in their upcoming 23/24 pricing methodologies, with most passing through the charges as fixed charges. Some work is required though, as some other distributors did not follow the guidance in the practice note. The Authority expects these distributors to change their pricing so that it conforms to our guidance. We will continue to monitor whether this is happening.

Transition from demand charges

We expected distributors to reduce use of charges based on a customer's anytime maximum demand (AMD). These charges can encourage customers to shift their time of network use despite that use having little impact on network costs. We found most distributors are transitioning from AMD charges, however some are using them for commercial customers. We will continue to monitor distributors' use of charges based on a customer's AMD, so that we can be confident that it is reducing over time.

[2] Electricity Authority (2022 October)Distribution Pricing PracticeNote v-2.2. Available at https://www.ea.govt.nz/documents/1875/Distribution-Pricing-Practice-Note-v-2.2-October-2022.pdf

Contents

1. Purpose

1.1 This paper summarises the main findings from the Electricity Authority's review of the 29 distributors' pricing methodologies, pricing schedules and pricing roadmaps for the 2023/24 disclosure year. The Authority uses scorecards as part of our approach to supporting distribution pricing reform. Each distributor's pricing is scored according to various pricing metrics that we consider reflect good pricing practice, and in particular efficient pricing (consistent with the 2019 Distribution pricing principles).

2. Background

Efficient pricing can support an affordable transition for consumers

2.1 Distribution pricing plays a key role in ensuring a reliable and affordable electricity supply for all consumers. We want distributors to implement pricing that promotes the most efficient use of the existing network, that is, pricing that encourages use of already built capacity, while discouraging use that would result in additional capacity being built unnecessarily.

2.2 In 2019 we published a set of pricing principles stating our expectations of distributors' pricing. Our scorecards ensure we have good visibility of each distributor's alignment with these principles and how they are planning for the future of their network in response to potential increased demand, more distributed energy resources and more players interacting with the network.

2.3 Electricity consumption is expected to increase in the next 10-15 years as we transition to a low-emissions economy, putting more demands on the existing network as we decarbonise. Resilient networks will be necessary to respond to the projected increases in electrification. Efficient, targeted network investment is crucial to reducing the potential for higher-than-expected costs for consumers as a result of untargeted investment.

2.4 Efficient price signals are key to the upcoming transition, as they encourage consumers and businesses to respond by reducing their demand or planning their consumption to occur at a time when demand and prices are lower. This reduces pressure on the network and could save consumers substantial amounts of money by allowing distributors to economise on network investment in the coming years.

2.5 Consumers will benefit from efficient distribution pricing through:

a. ensuring efficient network investment

b. relatively lower prices in the long run.

The scorecards are a tool to encourage more efficient pricing

2.6 Distribution pricing scorecards are currently the Authority's main tool to encourage distributors to adopt more efficient pricing, through regular monitoring and discussion of progress, and the publication of the scorecards. The scorecards publicly highlight good practice and opportunities for improvement. They provide transparency on which networks are exemplars in distribution pricing and how other distributors can learn from their experiences.

2.7 The distribution pricing scorecards also provide an evidence base for the Authority to assess progress. The results from the scorecards continue to inform the

Authority's distribution pricing work programme, including our July 2023 "Targeted Reform of Distribution Pricing" Issues Paper.[3]

2.8 The Authority completed scorecard assessments of distributors' pricing methodologies between 2019 and 2021. We chose to pause scorecards in 2022 to allow distributors to digest the guidance published by the Authority in late 2021.

Scorecards were prepared using a range of inputs

2.9 In preparing the scorecards, the Authority reviewed a range of distributors' pricing documents. These included pricing methodologies, pricing schedules (required under the Commerce Commission's Information Disclosure regime), pricing roadmaps and other clarifying documents produced by distributors that were requested by the Authority.

2.10 The assessment process was also informed by meetings between the Authority's staff and distributors.

2.11 This year's assessment also required more targeted evidence-gathering about the efficiency of prices for each distributor.

2.12 After completing the initial assessment, we reviewed scores to ensure consistency between distributors and with previous years' scorecards. We provided draft scorecards to distributors for review and comments. Twelve distributors provided feedback, which we have assessed and considered in the final version.

Pricing was assessed against eight criteria

2.13 The scorecards measure distributors' pricing against specific criteria. Previous scorecards contained six criteria: Circumstances, Pricing Principles, Strategy, Pricing Roadmap, Efficiency and Consumer impact.

2.14 In December 2022, the Authority sent a letter to distributors outlining changes to scorecards for 2023, noting that our 2023 assessment would consider eight criteria. The changes included adding two new criteria (Roadmap Implementation and Focus Areas from the Authority's Open Letter, September 2022, to the six existing criteria. This resulted in the following eight criteria:

a. Circumstances

b. Pricing Principles

c. Strategy

d. Pricing Roadmap

e. Roadmap Implementation

f. Efficiency of Pricing

g. Consumer Impact

h. Focus Areas.

2.15 The changes also included giving double weighting (for scoring purposes) to the Efficiency and Focus Areas categories.

[3] Electricity Authority (July 2023). *Targeted reform of distribution pricing.* Available at https://www.ea.govt.nz/projects/all/distribution-pricing/consultation/targeted-reform-of-distribution-pricing/

3. Overall results

3.1 Table 1 below presents the assessment scores for 2023/24. The average score is 3.9, which is a significant improvement compared to the 2021 average (3.0). Graph 1 below also presents the distributors' rankings.

3.2 Consistent with 2021, Wellington Electricity and Aurora continue to receive the highest overall score. These distributors demonstrated leading practice on several criteria and a consistent improvement compared to 2021.

3.3 The scores for The Power Company, Electricity Invercargill, OtagoNet, Northpower, Horizon, EA Networks and Nelson Electricity also materially improved. These networks are in the top positions in this year's assessment.

3.4 Similarly, Scanpower, Network Waitaki, and WEL Networks have shown significant improvement from previous years as they focus on transitioning to more fixed charges and providing better descriptions of local circumstances relevant to pricing.

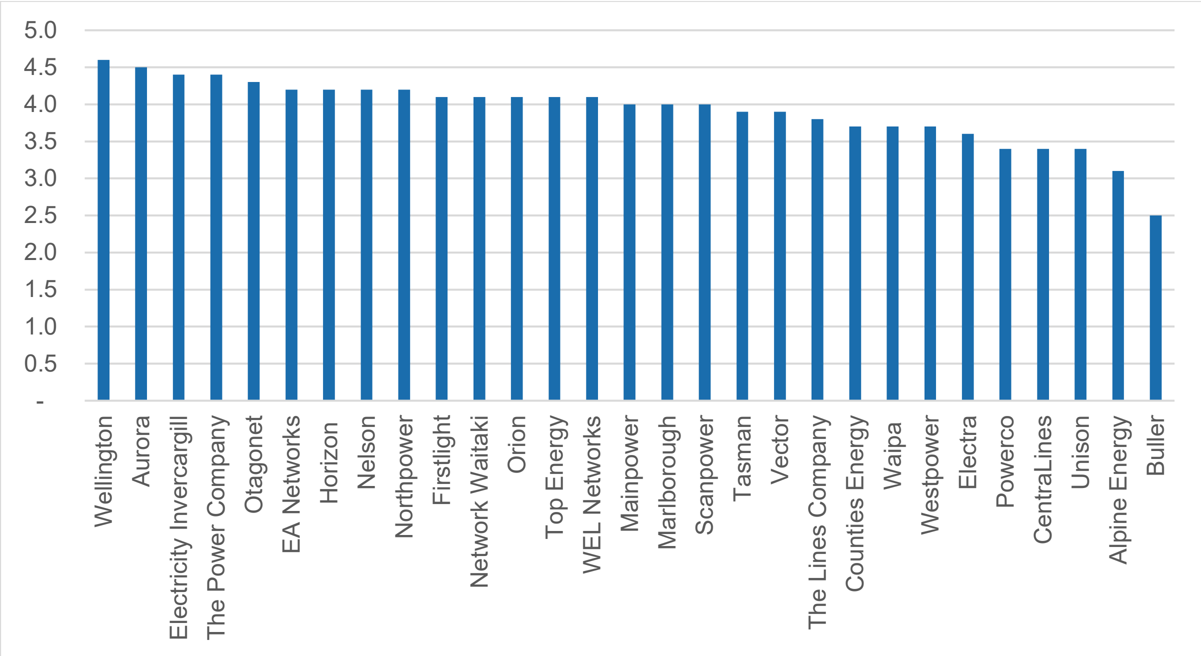
3.5 Almost all distributors have improved their overall score since 2021, except for Buller (which reduced slightly).

Table 1 – 2023/24 Pricing scorecards assessment scores

	Current State		Strategy			Outcomes						
Distributor	**Circumstance (1-5)**	**Principles (1-5)**	**Strategy (1-5)**	**Roadmap (1-5)**	**Roadmap Implementation (1-5)**	**Efficency (1-5)**	**Customer Impact (1-5)**	**Focus Areas (1-5)**	**Overall**	**Rank 2023**	**Ranks 2021**	**Overall score 2021**
Wellington	5	5	4	4	5	4.5	4	5	4.6	**1**	2	3.8
Aurora	5	5	4	5	5	3	5	5	4.5	**2**	1	4.2
Electricity Invercargill	4	4	4	5	5	4	4	5	4.4	**3**	9	3.2
The Power Company	4	4	4	5	5	4	4	5	4.4	**3**	9	3.2
Otagonet	4	4	4	5	5	3.5	4	5	4.3	**5**	9	3.2
EA Networks	4	4	4	4	5	3.5	4	5	4.2	**6**	4	3.5
Horizon	4	4	4	4	5	4	4	4.5	4.2	**6**	6	3.3
Nelson Electricity	4	4	4	4	5	4	3	5	4.2	**6**	24	2.5
Northpower	4	4	4	3	5	4	4	5	4.2	**6**	3	3.7
FirstLight Network	4	3	4	4	4	4	4	5	4.1	**10**	16	2.8
Network Waitaki	4	4	4	3	5	3.5	4	5	4.1	**10**	16	2.8
Orion	4	4	4	4	5	4.5	4	3.5	4.1	**10**	9	3.2
Top Energy	5	4	4	4	5	2.5	4	5	4.1	**10**	6	3.3
WEL Networks	3.5	4	4	4	5	3	4	5	4.1	**10**	27	2.2
Mainpower	3	4	4	4	4	3.5	4	5	4.0	**15**	16	2.8
Marlborough	4	5	4	4	3	3.5	3	5	4.0	**15**	6	3.3
Scanpower	3	3	4	5	4	3.5	4	5	4.0	**15**	29	1.7
Network Tasman	4	4	4	3.5	5	3	4	4	3.9	**18**	9	3.2
Vector	2.5	3	3	5	4	4.5	3	4.5	3.9	**18**	24	2.5
The Lines Company	3	4	4	4	5	3	3.5	4	3.8	**20**	4	3.5
Counties Energy	4	4	4	4	4	2.5	4	4	3.7	**21**	16	2.8
Waipa	4	3	2	3	5	4	4	4	3.7	**21**	26	2.3
Westpower	4	4	4	4	5	2.5	3	4	3.7	**21**	28	2.0
Electra	4	4	4	4	5	2.5	4	3	3.6	**24**	23	2.7
Powerco	3	3	3	3	4	3.5	3	4	3.4	**25**	14	3.2
CentraLines	3	4	3	3	5	3	3.5	3	3.4	**25**	16	2.8
Unison	4	4	3	3	4	3.5	2.5	3	3.4	**25**	16	2.8
Alpine Energy	3	3	2	1	1	3.5	4	5	3.1	**28**	14	3.0
Buller	3	2	3	3	1	2	3	3	2.5	**29**	16	2.8
Average	**3.8**	**3.8**	**3.7**	**3.8**	**4.4**	**3.4**	**3.7**	**4.4**	**3.9**			**3.0**

Average - 2021	**3.5**	**2.9**	**3.4**	**3.1**		**2.2**	**3.4**		**3.0**			

Graph 1 – 2023/24 Scorecards Results: Highest to lowest



4. Results by Criteria

Circumstances

4.1 The average score for circumstances is 3.9 (compared to 3.5 in 2021).

4.2 Aurora, Top Energy and Wellington Electricity all scored 4.5. They provided circumstances relevant to their networks and pricing.

4.3 For distributors to improve their score, they need to include information on network constraints, technology, geography, user profiles, industry trends and show how these factors impact their service cost and pricing approach.

Pricing Principles

4.4 The average score for pricing principles is 3.8, which is a significant improvement compared to 2.9 in 2021.

4.5 The basis of this assessment is a review of each distributor’s self- assessment of how their pricing is aligned with the pricing principles. This self-assessment is required under the Electricity Distribution Information Disclosure Determination, section 2.4.3.[4]

4.6 Aurora, Top Energy and Wellington Electricity's self-assessment provide a thorough discussion of the consistency between their pricing and pricing principles and detailed future state of pricing.

[4] ID 2012, s. 2.4.3: “… (2) Demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles…”

4.7 Distributors need to clearly explain how they interpret the pricing principles and identify how their pricing is consistent or otherwise with these principles. This includes if prices reflect the economic cost of network use and if the relevant prices recover residual revenue through at least distortionary manner.

Strategy

4.8 The average score for strategy was 3.7 (compared to 3.4 in 2021).

4.9 27 out of 29 distributors provided a strategy to reform their pricing to make it more cost reflective.

Pricing Roadmap

4.10 The average score for roadmap was 3.8 (compared to 3.1 in 2021).

4.11 Pricing roadmaps show how distributors will improve their pricing to be more cost-reflective and efficient. In 2023, most distributors updated their roadmaps.

4.12 Our expectation is that roadmaps set out clear timeframes and actions for future years. This year only one distributor received a score of one, compared to 2021, when four distributors received a score of one. (A score of one indicates that the distributor does not have a pricing roadmap.)

4.13 Aurora, Electricity Invercargill, The Power Company, OtagoNet, Scanpower and Vector stood out by providing updated roadmaps showing the multiple actions planned towards fully cost-reflective pricing in the future.

4.14 Distributors can improve their future score by providing a roadmap that details current and expected activities linked to the intended strategy and pricing. The roadmap should emphasize clear and tangible actions, timeframes, and fulfilment, such as research activities, data acquisition, trials, cost modelling, consumer impact and monitoring, as well as planning, communication, and risk management.

Roadmap Implementation

4.15 Roadmap implementation was a new criterion added in December 2022. This criterion measures progress against targets set out in previous roadmaps.

4.16 27 out of 29 distributors completed most of their targeted actions for the year. Two distributors scored poorly. Alpine for not having a roadmap in 2021 to be assessed against and Buller for achieving only 1 /5 actions set out in the previous roadmap.

4.17 19 out of 29 distributors scored 5/5 for completing all the targeted actions for the year.

Efficiency of Pricing

4.18 This criterion measures whether the implemented price structures signal the economic cost of network services, are subsidy-free, do not distort consumer behaviour and/or manage congestion (or the risk of congestion) to optimise the use of the network.

4.19 The average score for efficiency was 3.4. This is a significant improvement compared to the 2021 assessment of 2.2.

4.20 We recognise that the Low Fixed Charge Regulations (LFC regulations) have been a material constraint that has hampered the development of efficient pricing. We have excluded low user pricing plans in the scoring for this criterion. Changes to the level of fixed charges in low-user pricing plans were considered as one of the focus areas. Other factors that may have impacted the extent and speed of price reform are system capability (both at the distributor and retailer level), uncertainty on transmission pricing and concerns around bill shock to consumers. Other barriers or reasons for inaction noted by some distributors included: inadequate smart meter penetration, issues with retailers' ability to deal with half-hourly data and delayed Time-of-Use (TOU) implementation to observe other distributors' outcomes.

4.21 23 out of 29 distributors offer TOU pricing options for residential consumers and assign consumer connections (installation connection points ICPs) to these tariffs. However, 19 out of 23 lack a quantitative analysis linking network circumstances to the strength of their peak price signals, consistent with cost-reflective pricing. Additionally, controlled tariffs are common among distributors who historically offered a price benefit to consumers with ripple controlled hot water cylinders. There was also some inconsistency between the long-run marginal cost (LRMC) implied by the controlled load discount and the TOU differential for some distributors.

4.22 The Authority also notes that 16 out of 29 distributors do not provide quantitative information on calculating the subsidy-free range (the range between incremental and standalone cost) in their pricing methodologies. Orion is an exemplar in presenting the calculation of incremental and standalone costs to demonstrate that costs allocated to each consumer group fall within the subsidy-free range.

4.23 In addition, Wellington Electricity, Orion, and Vector have good practices in terms of efficiency and compliance with Authority guidance.

4.24 Our assessment of distributors’ pricing is based on guidance previously provided by the Authority. Therefore, distributors who score highly on efficiency may not necessarily have efficient pricing in areas where the Authority has not previously provided substantial guidance (such as connection costs or target revenue allocation).

Consumer Impact

4.25 This criterion assesses how the distributor accounts for and manages consumer impacts on pricing structures. The average score for this criterion was 3.7 (compared to 3.4 in 2021).

4.26 Among others, Aurora, Counties Energy, FirstLight, and Electra have clearly identified consumer impacts and their management. The Authority also recognizes Orion and WEL Networks for using deprivation analysis to assess consumer impacts and Alpine's efforts to engage and inform customers about pricing.

Focus Areas

4.27 In September 2022, the Authority sent distributors an Open Letter to help the sector understand what the Electricity Authority would be focused on in assessing 2023/24 pricing methodologies. The five areas of focus were:

a. Distributors’ roadmaps responding to future network congestion.

b. Distributors’ response to any significant first mover disadvantage (FMD).

c. The extent to which distributors are following the Authority's guidance on pass-through of new transmission charges.

d. Whether distributors are increasing their use of fixed charges to match the phase-out path of the low fixed charge tariff regulations.

e. Distributors avoiding, or transitioning away from, recovery of costs that are fixed in nature through use-based charges, such as charges based on a customer's anytime maximum demand (AMD).

First Focus Area: Distributors' roadmaps responding to future network congestion

4.28 In the Open Letter, we reminded distributors that the Distribution Pricing Practice Note (DPPN) focuses on potential pricing responses to congestion. Distributors should reflect their approach to expected congestion in their pricing methodologies, roadmaps, and supporting strategies.

4.29 In our review of distribution businesses' pricing methodologies and roadmaps for the 2023 disclosure year, we have observed that all distributors are preparing for future congestion, with some expecting it sooner than others. The sector is getting ready for electrification, and pricing is being used to support this goal. A number of approaches are being used for this. Some distributors see implementing and reviewing time-of-use tariff differentials and discounts on controllable load as the final step in the reform process. Others are thinking of transitioning to capacity tariffs or locational pricing, or introducing EV or battery tariffs, while others plan to use pricing alongside flexibility services to respond to areas of constraints.

Second Focus Area: First Mover Disadvantage (FMD)

4.30 In the Open Letter, we set out our expectation that distributors' pricing methodology and/or capital contribution policies ensure that first movers and exacerbators, when seeking to connect to their networks (new and expanded connections), are generally neither advantaged nor disadvantaged compared to other customers.

4.31 In our review, we noted that 25 out of 29 distributors have in their pricing roadmaps, methodologies, or capital contribution policies either general or specific considerations regarding FMD. Some of them noted that their capital contribution policies are under review, and FMD will be addressed as part of that review. Sixteen distributors are applying a rebate mechanism (also known as refunds, paybacks, reimbursement, or reapportionments) as subsequent access seekers connect such that the first mover and following users end up paying a share based on their comparative needs. Only four distributors did not comment on the issue, nor do they have a rebate mechanism in place.

Third Focus Area: Pass-through of transmission charges

4.32 In the Open Letter, we expressed a strong expectation that distributors would pass transmission charges through in accordance with the detailed guidance the Authority provided in the updated version of the DPPN.[5]

4.33 24 out of 29 distributors followed the guidance provided by the Authority and applied it in their 2023/2024 pricing schedules and pricing methodologies. Overall,

[5] Electricity Authority (2022 October) Distribution Pricing PracticeNote v-2.2. Appendix C: Transmission charge pass-through, Available at https://www.ea.govt.nz/documents/1875/Distribution-Pricing-Practice-Note-v-2.2-October-2022.pdf

those distributors pass transmission charges through as fixed charges to avoid incentivising users to change their use of the network. Additionally, their pass-through methodologies were transparent and clearly placed in pricing schedules and methodologies.

4.34 Five distributors did not fully follow the guidance provided by the Authority. They based the pass through on energy charges and therefore, created inefficient incentives for consumers to reduce their demand..

Fourth Focus Area: Phase-out of low fixed charge (LFC) tariff regulations

4.35 In the Open Letter, we noted that we expect distributors to increase the proportion of revenue collected from fixed charges annually, in line with the phase-out of low fixed charge tariff regulations.

4.36 All distributors are following the phase-out path for the LFC regulations, ie, increasing the fixed $ per day charge for low users to 45c/day, and reducing cents per kWh consumption charges relative to overall price level increase.

Fifth Focus Area: Transition away from AMD and Demand Charges

4.37 The Authority expects distributors to reduce their use of charges based on a customer's AMD as soon as possible and have a clear roadmap for this change. Such charges strongly incentivise customers to alter their use at specific times despite that use having little impact on network costs.

4.38 21 out of 29 distributors are either avoiding or transitioning away from AMD charges (or similar use-based charges) to recover fixed costs.

4.39 Eight distributors still have significant AMD charges, particularly for commercial customers. Six of them have increased the proportion of revenue collected from these charges. Such charges strongly incentivise customers to alter their use at specific times despite that use having little impact on network costs.

5. Attachments

5.1 Appendix A to this paper sets out the Authority's distribution pricing principles.

Appendix A Distribution pricing principles

The 2019 Distribution pricing principles

a. Prices are to signal the economic costs of service provision, including by:
   i. being subsidy free (equal to or greater than avoidable costs, and less than or equal to standalone costs);
   ii. reflecting the impacts of network use on economic costs;
   iii. reflecting differences in network service provided to (or by) consumers; and
   iv. encouraging efficient network alternatives.

b. Where prices that signal economic costs would under-recover target revenues, the shortfall should be made up by prices that least distort network use.

c. Prices should be responsive to the requirements and circumstances of end users by allowing negotiation to:
   i. reflect the economic value of services; and
   ii. enable price/quality trade-offs.

d. Development of prices should be transparent and have regard to transaction costs, consumer impacts, and uptake incentives.

Glossary of abbreviations and terms

AMD	Anytime maximum demand
Authority	Electricity Authority
DPPN	Distribution pricing practice note
EV	Electric vehicle
FMD	First-mover disadvantage
ICP	Individual connection point
LFC	Low fixed charge
LRMC	Long run marginal cost
TOU	Time-of-use-pricing
TPM	Transmission pricing methodology