



**Submission to the Electricity Commission on its Consultation paper on a
model approach to Distribution Pricing Methodology**

Submitted by

Wellington Electricity Lines Limited

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Introduction

Wellington Electricity Lines Limited (Wellington Electricity) welcomes the opportunity to provide feedback to the Electricity Commission (the Commission) on its consultation on a model approach to distribution pricing methodology. Wellington Electricity's answers to the Commission's discussion questions follow. In order to constructively engage with the Commission we have gone into some detail in our replies to the Commission's questions. However, our view is that the Commission's model approach is just one example of a method that could be consistent with the appropriate principles, but there are many others that could be just as suitable. We suggest that the Commission's guidelines emphasise that the Commission's model is one example only and if Electricity Distribution Businesses (EDBs) can suitably justify an alternative principle meeting model then that too would be valid.

For any questions related to this submission, please contact:

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Key Guiding Objectives

Wellington Electricity considers that the Commission should adopt these key guiding principles for model pricing:

- **A principles based approach should be adopted in favour of one that is based on a prescriptive model.**
 - Having a principles based approach will give EDBs more flexibility to accommodate factors unique to their networks, allow the adoption of emerging technologies and will allow EDBs to effectively manage their respective networks with the highest degree of efficiency and flexibility possible.
 - A principles based approach will provide sufficient consistency across networks to allow electricity retailers to efficiently operate across the country.
- **EDBs must have pricing principles that allow sufficient flexibility such that tariff structures meet the needs of their networks and customers.**
- **A pragmatic approach to pricing methodologies over the competing interest of economic principles is critical.**
 - Government policy and legislation drive significant levels of conflicting objectives, for example uniform rural and urban pricing increases are in direct opposition to cross-subsidy minimisation. These conflicts require a pragmatic approach to resolve.
 - Simplicity, ease of implementation, low cost and ease of comprehension are key aspects to any pricing methodology, however, these will often result in a coarser application of economic principles.
- **The Commission must integrate its development of model distribution pricing with the Commerce Commission's development of the input methodology on distribution pricing.**

Consultation questions

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| <p><i>Q1. Do you agree with the content of these proposed guiding principles? Are there alternative or additional guiding principles that should be considered?</i></p> | <p>We note that not all principles guide prices in the same direction. Where the principles are in conflict they should be ranked according to importance.</p> <p>With regard to Principle (a)(i), the terms efficiency and fairness are used without regard to how each is measured and to whom a price is fair. While these are good objectives, consideration should be given to how it is measured and how it is used to support a pricing methodology.</p> <p>We note that the principle of cross-subsidisation in a(i) is already a feature of distribution pricing. For example:</p> <ul style="list-style-type: none"> ○ the Electricity Governance Government Policy Statement (GPS) which requires EDBs to keep any changes to rural line charges in line with changes to urban line charges. ○ Section of 62 of the Electricity Act 1992 which requires EDBs to maintain connections to uneconomic pre - 1 April 1993 customers. ○ The Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 which requires EDBs to limit fixed charges to 15 cents per day to domestic customers. <p>While we support the avoidance of cross subsidies, we question if it can be a guiding principle or practically implemented when it is not supported from a government policy and legislative perspective.</p> <p>With respect to a(ii), we support these principles.</p> <p>With regards to principle a(iii), the principle of costs to consumers should refer to retailers. The competitive retail market will see the subsequent savings in transaction costs to end consumers over time.</p> <p>In respect of (b) we find that the stated principle is more of a framework in which the pricing</p> |

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| | <p>principles apply. It is not a principle against which prices are developed</p> <p>Further, Wellington Electricity supports the principles of consultation and transparency as important enablers, however, ultimately the EDB must have the sovereign power over its pricing methodology.</p> <p>In respect of c(i), efficiency needs to be driven by the needs of customers and EDBs also need to earn an adequate rate of return on their assets.</p> <p>There are also safety issues to consider such as the need for a developing a Public Safety Management System which has KPI and reporting responsibilities requiring additional distribution services and associated costs to demonstrate EDBs' duty of care – the drive for efficiency cannot rule these out. We would also like to see more thought given to how EDBs can be incentivised to operate more efficiently – merely mandating efficiency is not sufficient.</p> <p>In respect of c(ii), we are supportive of this principle, however, the Commission needs to ensure it manages efficient investment signals versus incentives that are not applied in a fair and equitable way. We would not for example want to see distributed generators' distribution lines being cross-subsidised by distributors.</p> <p>Distributed Generation (DG) should be of a base load nature and give EDBs certainty that there will be generation available at times of constraint. Indeed any technology innovation needs to operate in a manner that explicitly enables EDBs to defer capital expenditure and allows savings to be generated. If the DG or technology innovation does not operate and customers are unwilling to curtail their load introduced due to failure of their distributed generation, then distributors' networks must be properly specified to cope with this outcome. A less reliable DG or technology innovation might at certain times reduce demand on a GXP, and the operators of the DG or technology innovation may then advocate for reduced line charges, but what happens when the DG or technology innovation does not operate – the distribution network is still needed as a backup. Also a less than fully developed DG or technology innovation might in fact drive</p> |

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| | <p>costs into the network to support it. We consider that there always needs to be a distribution infrastructure of an appropriate size and quality to meet the needs of users. With DG, the distribution network is required to act as a transmission system which requires a level of security and a shift away from a traditional distribution network approach.</p> <p>We support c(iii).</p> <p>With regards to principle c(iv), we consider that distribution losses and constraints are already addressed in the efficient investment and energy efficiency principles. Restatement of distribution losses and constraints is not necessary. Minimisation of principles is preferred to ensure simplicity of the model.</p> <p>We support c(v) – EDBs’ Asset Management Plans already largely cover the price – quality trade-offs inherent in networks. It is therefore not necessary to cover this in a pricing methodology.</p> <p>We are supportive of c(vi), however, incorporating the previously noted principles into distribution prices will inherently create complexity in distribution pricing.</p> |
| <p>Q2. Do you agree that the RDM should be the preferred approach?</p> | <p>We consider that both WDM and RDM meet regulatory objectives and pricing principles consistent with legislative requirements. We would only consider endorsing the Commission’s preferred approach of RDM when metering solutions and associated data collection processes are working effectively (such as through the full deployment of AMI) and ensure accurate metering.</p> |
| <p>Q3. Do you agree with the proposed approach to the allocation of costs (as set out in figure 4 and table 2)? Please provide specific comments on:</p> | <p>As a general comment we consider that the allocation of load management costs to such a granular level will lead to an overly complex methodology and may not be suitable for all EDBs.</p> <p>We do not support separate zoning for interconnected geographic zones because it creates undue complexity. Attributing costs to geographic zones is complex and it is often not to easy to</p> |

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| <ul style="list-style-type: none"> - <i>load dependent costs</i> - <i>load independent costs, including:</i> - <i>Geographic zones</i> - <i>Asset groups</i> - <i>load group classifications</i> - <i>AMD and CPD to allocate the network asset group costs to load groups</i> - <i>transmission costs</i> | <p>identify where there is a strong degree of network interconnection. This allocation methodology will complicate pricing structures resulting in them not being easily understood and will impact on EDBs ability to meet GPS requirements.</p> <p>We support the use of Asset Groups on the basis that EDBs are able to determine the extent and types of groups depending on the nature of their networks. In order to maintain simplicity and comprehension we would encourage a small number of asset groups.</p> <p>We support the use of load groups on the basis that EDBs will determine appropriate groups dependent on the nature of their networks.</p> <p>We support the use of AMD and CPD to allocate network asset group costs to load groups.</p> <p>We are of the view that the allocations as currently specified maybe at too fine a granularity to allow for changing network load characteristics. The “upto 15kVA” load group might for example prove to be too low a threshold given the proliferation of households with power hungry appliances like big screen TVs and the “16kVA upto 70kVA” too broad. Each time a discrepancy like this arises the allocation methodology will have to change.</p> <p>We support transmission costs being allocated to load groups based on mirroring (to the extent practical given an EDBs pricing methodology) the manner in which Transpower charges EDBs. We note, however, that some flexibility is required given the inability of current metering technology to accurately determine load contribution to transmission peaks.</p> <p>Load independent costs tend to be relatively small compared to load dependent costs. We support the flexibility for EDBs to allocate costs on a causation basis. However, again being cognisant of the need for simplicity, comprehension, ease and cost of application, we consider that it may be more efficient for independent load costs to be allocated on an ICP basis.</p> |
| <p>Q4. Do you agree with the proposed approach to allocating the net benefits of</p> | <p>The ability to defer network augmentation via load management or DG has the potential to be an important tool for a network planner. We support the Commission’s proposed approach of a</p> |

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| <i>deferred network augmentation?</i> | <p>network support contract based on the avoided cost of the investment with a proportion of the net savings incurred by the distributor in implementing the deferral allocated to the counter party to the network support contract. It should be clear that the contract will pass through any penalties incurred due to non-performance of the embedded generator. We also consider that the deferral of network investment must be clearly attributable to the third party project and not as an allocation of their costs across other connected parties.</p> <p>We consider that before any support contract is entered into between an EDB and a third party, for load management for example, then that load management has to be reliable and of a suitable quality that will ensure significant savings for the EDB. Some pricing methodologies based on recovery of asset costs which are demand independent offer no benefits as they simply reallocate costs.</p> <p>We would also make the point that deferring upgrades is only of real benefit in the short term. With background load growth, then if network augmentations are continually deferred without further customer development of DG or load management there eventually comes a time when a significant investment in infrastructure is needed; the size and scope of which could prove a shock to customers.</p> <p>Another point we would like to make is that forecasts for future demand often take a reasonable length of time to adjust to rapid changes in new technologies. New technologies such as for example smart appliances running on Home Area Networks (HAN) and controlled by advanced meters could reduce peak demand, however, these concepts have not been commercialised and the consumer price barrier would make early adoption at a domestic level minimal unless incentivised. Comparisons to historic forecasts tend to show a level of price elasticity with customer behaviour being difficult to influence to engender change away from existing service offerings or contemporary energy provision. Hence we perceive there would be a reasonable delay in seeing the adoption and promulgation of new technologies which reduce demand. Conversely, new technologies (e.g. electric vehicles) could mean there is an even greater future demand than is currently forecast. Thus entering into support contracts as the Commission</p> |

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| | <p>proposes for DG or load management based on forecast demand could be fraught with difficulties.</p> <p>The allocation of deferred network augmentation should have material thresholds set so that a practical application of the principle can be made. This will avoid a plethora of claims for future deferment that will occur as a result of new technologies such as AMI metering.</p> |
| <p><i>Q5. Do you agree with the proposed approach to signalling critical peak periods and shoulder periods via distribution prices?</i></p> | <p>We support EDBs providing pricing signals to ensure efficient use of distribution services, however, we are concerned that the need to provide very high price differentials and the need for electricity retailers to transparently pass through these signals is extremely limited.</p> <p>Accordingly we consider it should be at the discretion of EDB as to specifically how pricing signals are provided by distributors and should be reflective of the characteristics of the network and capability for the pricing to be signalled to consumers.</p> <p>Consideration should also be given to how to measure “cost-effective” for the establishment of critical peak pricing. Some sort of cost – benefit analysis from the Commission may be in order here to establish exactly what “cost-effective” means in this case.</p> <p>Section 10.5 should also allow EDBs to define alternate peak price periods to reflect the unique characteristics of each network business.</p> |
| <p><i>Q6. Do you agree with the approach to structuring distribution prices?</i></p> | <p>Consistent with our response to Question 5, we consider that the structuring of prices should be at the discretion of EDBs to reflect the nature of their networks, the capability of the respective EDB to provide sufficiently large pricing signals and the extent to which electricity retailers pass these signals transparently through to customers.</p> |
| <p><i>Q7. Do you agree with the model structure? Are there reasonably practicable alternatives?</i></p> | <p>We are largely supportive of the PAWG structure for half-hourly metered consumers. It provides an example of one possible methodology consistent with the proposed principles.</p> |

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| | <p>We note that for non-half-hourly metered consumers the PAWG structure requires the aggregation of typical load profiles. In effect, and of course in a more coarse fashion, this is akin to WDM pricing.</p> <p>We would only consider supporting RDM (i.e. (a), what the Commission proposes in addition to the PAWG model price structure) after AMI is installed across the whole network and it is proven that it provides open access to timely and accurate data. Until this happens EDBs should be free to use whatever methodology (be it WDM or RDM) they consider appropriate to meet the unique requirements of their respective networks. We consider that both WDM and RDM meet regulatory objectives and pricing principles consistent with legislative requirements.</p> <p>We do not support the Commission's (b) proposal that is in addition to the PAWG model price structure. This will increase complexity and is unlikely to be effective. For many load groups the financial benefits from automatic demand response are outweighed by the commercial risk or the inelastic demand profile of customers. A Commission study on this matter through a pilot of consumer behaviour to price changes could assist in determining the extent to which behaviours can be altered.</p> <p>We are happy with the Commission's (c) proposal that is in addition to the PAWG model price structure.</p> <p>We note that the distribution pricing methodology proposes that controlled load pricing options be made available to each load group. Further in Section 9.7 the Commission talks about the benefits of distribution network augmentation via load management. Steps should be taken to avoid the possibility of double counting where customers improperly gain benefits from being on both a controlled load pricing option and a network support contract. Moreover, as mentioned previously, there should be a significant amount of benefit for the EDB in terms of deferred capital expenditure before any network support contract is considered.</p> |

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| <p><i>Q8. Do you agree that the proposed model approach meets the guiding principles appropriately?</i></p> | <p>Where the Commission suggests that a distribution pricing methodology should encourage the efficient and fair allocation of costs, avoiding cross-subsidisation and unfair discrimination, we would point out that that as mentioned in our comments for Question 1, cross-subsidisation is already a feature of the Electricity Act 1992, the Electricity Governance GPS and the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations and this guiding principle is contrary to these.</p> <p>We agree that a pricing methodology should be stable and predictable in respect of revenue for the distributor and charges to consumers.</p> <p>We agree that a pricing methodology should be practicable to implement without placing significant transaction costs on consumers and distributors.</p> <p>We agree that the distribution pricing methodology (and the rationale for it) should be widely publicised and follow consultation with interested parties. The revised distribution pricing methodology should be transparent, with the results predictable and readily verifiable. However, as noted previously, we consider that distributors should have the final say on the methodology to use for their respective networks. Consultation is an important enabler, but it must not override the ability of distributors to operate their networks in a flexible and efficient manner. We would also advocate a need for distributors to be able to enforce the pricing methodology in order to avoid deadlock situations where parties have been in negotiation but have been unable to reach an agreement.</p> |
| <p><i>Q9. Do you agree this is an effective and practicable approach to monitoring uptake? Are there alternatives that are more effective and practicable to implement?</i></p> | <p>It appears to us that the proposal for additional compliance reporting and statements of variances from the model approach duplicates to a large extent reports which EDBs already do for the Commerce Commission. Wellington Electricity is of the view that the Commerce Commission's disclosure requirements are largely sufficient and once Input Methodologies are determined will be enhanced further. More thought should be given to clearly defining the respective roles of the two Commissions. Wellington Electricity is not against reporting if it is straight forward and not an undue burden, but we query if such reporting is not a duplication of</p> |

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| | similar reporting EDBs already do. |