



Submission to Commerce Commission

Default Price-Quality Paths from
1 April 2015 for 17 electricity
distributors

Process and Issues Paper

30 April 2014

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2 Executive Summary

Eastland Network appreciates the opportunity to respond to the Commerce Commission's Process and Issues Paper on the 1 April 2015 Default Price-Quality Path reset, dated 21 March 2014.

We support the submissions prepared by the ENA and PwC on the Process and Issues Paper. In addition we make the following comments:

- a) Eastland Network currently supplies around 25,000 connections, and services a supply area of approximately 12,000 km². Our network has experienced little growth for the past decade, and as most of our consumers are domestic users, many of them relatively small users, a large proportion of our revenue is recovered via variable tariffs. This means we have little opportunity for revenue growth within a regulatory period, which places pressure on our ability to recover our costs. A fair price reset, which fully recognises our circumstances is therefore critical to our business, and our ability to continue to meet the demands of our consumers.
- b) We submit that EDB forecasts published in March 2014 should be used to determine the opex allowance during the regulatory period. These forecasts are justified in Asset Management Plans with detailed explanations.
- c) Without prejudice to our view above, we have also considered possible refinements to the current approach for determining opex. In this respect we consider that 2014 data is most relevant for base year opex, however we note that it is important that "low" year data is not locked into forecasts – by way of a base year assumption, and reasonableness checks against AMP opex forecasts are one way of achieving this.
- d) We also consider that capacity growth should be included in any network scale measures for econometric modelling, as this captures the innate growth within networks which is not fully captured within connections or circuit length data.
- e) We submit that EDB forecasts published in March 2014 should be used to determine the capex allowance during the regulatory period. We understand that the Commission may wish to undertake some verification of AMP forecasts and we have included a number of suggestions as to how this could be achieved.
- f) While we understand that the current approach to setting the quality standards does have shortcomings, we believe these are manageable for the next regulatory period. Accordingly we are comfortable retaining the current approach to setting the quality standards for the next regulatory period. We also support consideration of possible refinements to how the reliability targets are set.

- g) Our consultation with our consumers suggests that, overwhelmingly, they are not prepared to pay more for improved quality. Thus before the current approach is abandoned in favour of an incentive scheme, we suggest that consumer views must be considered, and any new proposal tested with them prior to adoption.
- h) We support further consideration as to how EDBs can be further incentivised to undertake further investment in energy efficiency, demand side management and loss reduction, without risking revenue.
- i) We submit that the Commission's approach to spur asset transfers that occur prior to the commencement of the regulatory period undermines the incentives established in its previous reasoning and is inconsistent with its recent decisions.
- j) We submit that spur assets should be incorporated into the calculation of price paths for a regulatory period where the spur asset transfers have been completed, or are forecast to be completed, prior to the start of that regulatory period.
- k) We also submit that the current ACOT mechanisms should continue in respect of spur asset transfers that have been completed, or are forecast to be completed, prior to the start of the regulatory period.
- l) We agree that a mechanism for making adjustments to the price path is required should a spur asset transfer not proceed, or should the final transaction value be different from that forecast. However, we do not consider that an additional recoverable cost item should have wider application as it could result in unintended consequences.
- m) We agree that an adjustment mechanism in quality standards is required in setting quality paths for the impact of the spur asset transactions. We see no issues for using historical spur asset reliability information for this purpose.

We expand on these points throughout the remainder of this submission.

3 Introduction

3.1 Introduction to Eastland Network

Eastland Network Limited owns and operates the electricity distribution network located in the upper East Coast of the North Island. Eastland Network is 100% owned by the Eastland Community Trust with the Gisborne District Council as the capital beneficiary of the trust.

Eastland Network distributes approximately 280 GWh of electricity to approximately 25,000 consumers, of which almost two thirds are located in Gisborne City and Wairoa township. The remaining consumers are widely dispersed across two isolated networks covering approximately 12,000km². This results in an overall consumer density of 7 connections per circuit km, less than the industry average of 13 connections per circuit km and the industry median of 9 connections per circuit km. We have considerable diversity across the network, with rural connection density less than 3 connections per km, and urban connection density approximately 25 connections per kilometre.

Our network has experienced little growth for the past decade, and as most of our consumers are domestic users, many of them relatively small users, a large proportion of our revenue is recovered via variable tariffs. In addition, our network supply area is one of the lowest socio-economic regions in the country, and this is reflected in reduced energy consumption growth due to resistance to retail electricity prices.

This means we have little opportunity for revenue growth within a regulatory period, which places pressure on our ability to recover our costs. A fair price reset, which fully recognises our circumstances is therefore critical to our business, and our ability to continue to meet the demands of our consumers.

3.2 Our Submission

This submission responds to the topics of most interest to Eastland Network, namely:

- Forecasting opex
- Forecasting capex
- Rates of change in prices
- Quality incentives
- Incentives for energy efficiency and demand side management.

In addition, Eastland Network has read and supports the submissions prepared by PwC and the ENA.

4 Forecasting Opex

4.1 Proposed Approach

The Paper suggests that a similar approach to that used in the 2012 DPP reset may be used for resetting price paths from 1 April 2015. In 2012, a base year opex for each EDB was extrapolated out for the remainder of the regulatory period using an econometric model developed by the Commission. The econometric model effectively adjusted for estimated changes in network scale, using network length and the number of connections as the two measures of network scale.

We understand that the Commission is considering possible refinements to this approach, and that the ENA has undertaken some work on potential alternatives.

4.2 Eastland Network's position

We submit that EDB forecasts published in March 2014 should be used to determine the opex allowance during the regulatory period. These forecasts are justified in Asset Management Plans (AMPs) with detailed explanations, including at an asset class level. Thus they reflect consideration of the status and performance of each network, and the appropriate balance between opex and capex for each network. It is our submission that accordingly, these forecasts are the most relevant for the DPP reset because they reflect the knowledge that each EDB has about its own network that it is not possible to recreate with high level forecasting models.

4.3 Refinements to current approach

Without prejudice to our view above, we have also considered possible refinements to the current approach. From Eastland Network's perspective we consider that:

- 2014 data is used for the base year for opex because this is the most relevant benchmark in terms of current network scale, input costs and underlying level of opex activity. We suggest that initially the Commission could use forecast data, to be confirmed or updated by EDBs prior to the draft decision. In our case, we could provide this final data to the Commission by 23 May.
- There will be variance between forecast and actual expenditure, as it is not possible to determine accurately in advance the demand for certain categories of expenditure in a single year such as fault response opex, or asset relocation capex. AMPs include allowances for these uncertainties. It is therefore important that "low" year data is not locked into forecasts – by way of a base year assumption, and reasonableness checks against AMP opex forecasts are one way of achieving this.
- Capacity is an important indicator of scale, and is measured via peak demand or installed capacity – the first is a consumer based measure, the second an asset based measure. We

suggest that at least one of these indicators is added to the forecasting model, while recognising that additional variables increase the complexity of the modelling.

- In our view, total installed capacity should be included in the scale measures in the econometric opex model, given robust and comparable data is available for a reasonable time series. The reason for this is that an important contributor to network scale is the innate growth that occurs overtime due to capacity upgrades within an existing network footprint. These are not captured within the scale measures currently used, and hence understate the drivers of opex growth. The more complex the network is, and the larger the connections, the more maintenance and network support is required. For example larger transformers have a more rigorous maintenance and inspection programme than smaller transformers. This measure will also capture the pockets of growth that exist within a network, that are lost due to the higher level, network wide scale measures currently used.

We also note that the proposed approach does not provide for additional maintenance expenditure which may be required to maintain or improve service quality. Current levels of opex may be insufficient to meet the maintenance requirements during the regulatory period, without compromising quality of service. The current approach only provides additional funds to those networks with growth in ICPs and circuit length. Those with low growth rates are penalised, and as a result maintenance budgets are capped at historical levels.

However, compliance costs continue to increase, independent of network scale. Thus, from our perspective additional compliance activities reduce our maintenance budgets, particularly where, for reasons of low ICP and circuit km growth, these are capped at historical levels. Examples of compliance activities which have increased our in recent years opex, and continue to place upward pressure on opex include:

- Commerce Act regulation
- Health and Safety legislation
- Electricity Authority requirements
- Resource Management Act.

Additional compliance obligations require systems and processes to be developed, introduced and supported within an organisation. In our experience, this forces upgrades and replacements of IT systems and related processes due to obsolescence and an inability to cope with the additional complexity, data and reporting requirements of the business. Eastland Network has significant investment (opex and capex) planned for new systems which will not be captured in these models.

5 Forecasting Capex

5.1 Proposed Approach

The Paper suggests a number of possible approaches to forecasting capex including:

- Adopting an historical level of capex
- Adopting AMP forecasts subject to a cap based on historical levels of capex
- Other modelling approaches, possibly separating out categories of capex, such as renewals, for different top-down or bottom-up modelling techniques.

5.2 Eastland Network's position

We submit that EDB forecasts published in March 2014 should be used to determine the capex allowance during the regulatory period, for the same reasons as for opex. In particular we consider EDB capex forecasts should be used because:

- Detailed forecasts are justified in AMPs, including at an asset class level
- They reflect current network and consumer needs and our knowledge about expected performance and demand during the regulatory period
- They reflect the appropriate balance between opex and capex for each network, which cannot be replicated with the alternatives proposed in the Paper
- It is not possible to recreate these outcomes with high level forecasting models.

We understand that the Commission may wish to undertake some verification of AMP forecasts. In this respect we suggest that:

- The resources that might be applied to developing alternative models should instead be applied to assessing EDB forecasts
- That EDB forecasts which fall within an acceptable range of historical levels of capex are accepted (ie: similar to the forecast cap approach), thus allowing the Commission to focus their efforts on EDBs which fall outside the range. This will make the assessment task manageable
- That EDBs which fall outside the historical range respond with additional explanations to support their AMPs, as required, to assist the Commission understand the drivers for forecast changes in capex outside the cap

- Assuming the forecasts reflect quantifiable drivers (such as demand growth, performance or asset age), then the forecasts ought to be accepted. In the absence of such drivers, the cap on historical expenditure levels could apply.

6 Rates of change in prices

6.1 Proposed Approach

The Paper indicates that Economic Insights have been commissioned to determine the rates of change in prices and opex and capex partial productivity factors that may be applied to opex and capex forecasts.

We note that the ENA has also commissioned an expert to run parallel studies.

6.2 Eastland Network's position

We have little to add on this topic at this point other than to note that we will be attending the Commission's workshop on 2 May, and may have further views at that point, which we will include in a cross submission.

In the interim we make the following observations:

- A true measure of productivity needs to consider a broad range of outputs which are directly relevant to opex and capex. For example a short term changes in volumes are not necessarily an indicator of changes in productivity.
- It is not possible to effectively measure the productivity of long life assets by focussing on short term windows.
- Productivity assessments should consider efficiency and effectiveness. We are concerned that there is too much focus on the former and insufficient on the later. In particular, any productivity improvement recommendations must be tested for reasonableness, and consider the opex and capex forecasting methods which are to be adopted. For example if a cap on forecast capex is to be applied, and the cap materially affects an EDB's capex allowance, it does not seem reasonable to then apply, in addition to that, a productivity improvement factor. In a similar vein, if a network has low growth, then it is disadvantaged (for the reasons included in section 4.3 above) relative to networks which are deemed to have growth (as per the measures nominated for the econometric models). Thus opex productivity improvements are much harder to achieve in practice for networks such as ours, which has low growth.

7 Quality incentives

7.1 Proposed Approach

The Paper suggests a potential move away from the pass/fail SAIDI and SAIFI limit approach to setting the quality standard. As an alternative a potential incentive scheme is suggested, whereby EDBs earn extra revenue for outperforming a quality standard, and are penalised through lost revenue if quality performance is lower than the standard.

The Paper also suggests potential refinements to the way in which quality targets are set, and in addition to the actual quality measures to be used for the purpose of the DPP quality path.

7.2 Eastland Network's position

While Eastland Network understands that the current approach does have shortcomings, we believe these are manageable for the next regulatory period, and importantly, these are now better understood than they were when the DPP quality standards were initially set in 2010.

Accordingly Eastland Network is comfortable retaining the current approach to setting the quality standards for the next regulatory period. We also support consideration of possible refinements to how the reliability targets are set including the following options identified by the ENA:

- Weighting planned outages less than unplanned – to reduce the incentive to defer planned work in a poor SAIDI/SAIFI year
- Extending extreme event days to include related events which start on subsequent days
- Reducing the impact of extreme events on annual totals (by either removing them all together, or replacing them with the average not the boundary value)
- Considering a simpler approach to defining an extreme day (ie: where faults exceed 8 times the average, as used in the UK).

We are cautious about moving to a new regime at this next reset. We consider that before a new regime is implemented it requires careful analysis and an understanding of the likely impacts. As illustrated with the IEEE 2.5 Beta approach to normalising for extreme events, there are unforeseen consequences which arise when applying methods developed in other jurisdictions to New Zealand networks.

Further we question the relevance of further refining the quality standard when it is, in our view not possible to adequately determine:

- What all consumers require by way of service quality, and whether they are prepared to, or are able to pay for, that level of service quality. It is unrealistic to assume that all consumers or even large groups of consumers will respond in the same way to these questions.
- On the basis that we do not supply homogenous consumer groups, how a network can actually deliver different levels of service quality and/or prices to different consumers who are jointly supplied by the same assets, which are operated and maintained as a network or sub-network.

Our consultation with our consumers suggests that, overwhelmingly, they are not prepared to pay more for improved quality. Thus before the current approach is abandoned in favour of an incentive scheme, we suggest that consumer views must be considered, and any new proposal tested with them prior to adoption.

7.3 Refinements to current approach

Without prejudice to our view above, we have also considered the proposal for an incentive scheme. We consider that given the uncertainty about the likely impacts of an incentive scheme on revenue (and hence prices), there should be very little revenue at risk for the purpose of the 1 April 2015 DPP reset.

In this respect we suggest that there should be some tolerance provided around the target to reflect the natural variation in reliability performance, ie: a band or safe harbour, within which the incentive rates would not apply. We note that the current standard deviation approach to setting the reliability limit has this effect, and this could be applied symmetrically to create the band.

We also consider that the maximum amount of revenue at risk should be set as a specified percentage of distribution revenue (ie: exclude recoverable and pass through costs). We understand the ENA is undertaking more analysis in this respect, in addition to considering how other parameters could be set in order to implement an incentive scheme.

8 Incentives for energy efficiency and demand side management

8.1 Proposed Approach

The Paper suggests that the Commission intends to rely on proposals put forward by the industry to address incentives for energy efficiency, demand side management and loss reduction due to the technical nature of the topic.

In this respect we understand the ENA's energy efficiency working group has prepared a number of recommendations, which are summarised in a report to be submitted as part of this consultation.

8.2 Eastland Network's position

We support further consideration as to how EDBs can be further incentivised to undertake these activities, without risking revenue. In addition we note:

- Energy efficiency incentives adversely affect our revenue, given the variable nature of many of our tariffs. In order to reduce this exposure, we would need to revamp our tariff structure, which brings with it a number of transitional challenges.
- Our business is largely a fixed cost business. However the low fixed charge regulations force us to recover a significant portion of our revenue through variable charges. These regulations limit how much we are able to reduce our exposure to variable charges through tariff restructuring. Incentives will need to be significant to offset this risk.
- In practice, demand side management is capacity management, ie: load control. We have actively undertaken demand side management for many years. The Electricity Authority promotes demand side management to consumers, via retailers. It is not clear how a DPP incentive could distinguish between these activities. In addition, we question why the consumer would be prepared to pay for demand side management incentives given it is the consumer who is contributing the reduced demand.

9 Treatment of assets purchased from Transpower

9.1 Background

Eastland and Transpower New Zealand Limited (“Transpower”) are working to conclude the sale and purchase of the transmission spur assets that connect the Eastland network to the core transmission grid (the “spur assets”). The transaction is material for Eastland in respect of the value of the spur assets and their impact on the security of supply to the region. The settlement date for the transaction is planned for 31 March 2015.

The transfer of the spur assets will provide benefits to Eastland customers over the long term through a combination of: a lower overall cost of operating the combined assets; better optimisation of capital expenditure (across transmission, distribution, and embedded generation); and improved reliability. Achieving efficiency gains and reliability improvements is not without risk, hence appropriate incentives need to be maintained for these types of transactions to occur.

Our submission in respect of the treatment of assets purchased from Transpower addresses four key matters:

- Previous consideration of spur assets by the Commission;
- The treatment of the spur asset regulatory asset base (“RAB”), opex and capex;
- Managing transaction certainty;
- Managing step change in reliability.

We submit on each of these matters below. Our comments and agreement in respect of individual aspects of the Commission’s proposal need to be considered together with the other matters addressed in this submission.

9.1.1 Previous consideration of spur asset transfers by the Commission

The Commission considered the acquisition of spur assets when it developed the input methodologies in 2010. The Commission considered that it was in the long-term interests of consumers for electricity distribution businesses (“EDBs”) to be incentivised to acquire assets from Transpower, as customers were likely to benefit from lower overall electricity prices as a result. The incentive to acquire assets from Transpower comprised:

- EDBs being able to continue to pass through the avoided Transpower charges associated with the spur assets for a period of five years (known as avoided cost of transmission or “ACOT”);¹ and,

¹ Refer to paragraphs J2.24 to J.2.26 of the 2010 input methodologies reasons paper.

- EDBs being able to recover a return on, and of, capital and operating costs from the date of the first regulatory reset following the asset transfer.²

The Commission also considered the treatment of spur asset transfers in its determination of Orion’s customised price path (“CPP”). In this determination, the Commission included spur asset RAB, and opex and capex in its calculation of the price path where the spur asset transfer occurred prior to the commencement of the CPP regulatory period.³ Orion was also allowed to recover ACOT from customers for five years.⁴ This approach was consistent with the Commission’s previous input methodology reasoning.

9.2 Proposed Approach to the treatment of RAB, opex, capex and reliability

The current approach proposed by the Commission excludes spur assets in the determination of the price path where the settlement date for a transfer is after the commencement of the regulatory period. Where the settlement date for a transfer is prior to the commencement of the regulatory period, the current proposal uses a different treatment for opex and capex depending on the date of settlement.⁵

9.3 Eastland Network’s position

We are comfortable with the Commission’s reasoning where the settlement date for the transfer is after the commencement of the regulatory period. However, we submit that the Commission’s approach for spur asset transfers that occur prior to the commencement of the regulatory period undermines the incentives established in its previous reasoning and is inconsistent with its recent decisions.

We submit that spur assets should be incorporated into the calculation of price paths for a regulatory period where the spur asset transfers have been completed, or are forecast to be completed, prior to the start of that regulatory period. This requires the Commission to include in its calculation of prices:

- The value of the spur assets in the regulatory asset base (“RAB”) and in the regulatory tax asset base (“RTAB”);
- Spur asset opex and capex over the regulatory period.

² Refer to paragraph J2.27 of the 2010 input methodologies reasons paper.

³ Refer to paragraphs M4 of the Commission’s reasons paper for setting the CPP for Orion. Also refer to Orion’s CPP proposal for the inclusion of opex and capex associated with the spur assets (refer pages 515, 549, 557 as examples of where expenditure in relation to the spur assets was included in their proposal).

⁴ Refer to paragraphs M5 of the Commission’s reasons paper for setting the CPP for Orion.

⁵ Refer to paragraphs C26 to C30 of the process and issues paper

We also submit that the current ACOT mechanisms should continue in respect of spur asset transfers that have been completed, or are forecast to be completed, prior to the start of the regulatory period.

We recognise that the approach outlined above requires the use of forecast opex information (where the EDB's actual spur asset opex data is not yet available). However, we do not consider that relying on forecast opex information presents any difficulties for the Commission in exercising its duties as this information is available in the EDBs' asset management plan or can be obtained through the Commission's information request powers (and has already been obtained). The approach outlined above also requires the use of forecast capex for the spur assets, however, this is no different to the current approach in respect of using forecast capex for a distribution network.

We consider the approach outlined above is appropriate, as it will ensure that the price path provides the necessary financial resources commensurate with the responsibility the distributor has for the spur assets. We also consider that this approach maintains the effectiveness of the incentives that the Commission has previously considered and established (including the recent Orion CPP decision). Maintaining these incentives is important given the risks that EDBs assume when taking over responsibility for the spur assets.

9.4 Managing transaction certainty

The Commission has noted concerns in respect of spur asset transfers not proceeding, or final transaction values being different from those used in setting the price path. The Commission has proposed an additional recoverable cost item as a potential mechanism to manage this uncertainty.⁶

We agree that a mechanism for making adjustments to the price path is required should a spur asset transfer not proceed, or should the final transaction value be different from that forecast. *Prima facie*, we consider that the additional recoverable cost item would be a workable mechanism for managing this uncertainty. However, we do not consider that an additional recoverable cost item should have wider application as it could result in unintended consequences when considered in light of the entire DPP regime.

9.5 Managing step change in reliability

The Commission proposes to include an adjustment mechanism in the quality standards they use in setting quality paths for the impact of the spur asset transactions. The Commission is considering using historic reliability information to make this adjustment.⁷

We agree that an adjustment mechanism is required, and we note that this adjustment becomes increasingly important in the event that a revenue linked reliability incentive mechanism is

⁶ Refer to paragraphs C14 & C15 of the process and issues paper.

⁷ Refer to paragraph C24 of the process and issues paper.

introduced. We do not see any issues with obtaining and using historic spur asset reliability information for this purpose.

9.6 Concluding comments

Achieving certainty in respect of the treatment of the spur asset transfers is a material factor for Eastland, and for this reason we have made this submission in addition to providing our support and endorsement of the submissions from the ENA and PwC (made on behalf of 20 electricity distribution businesses).