

**Submission on Preliminary Version of the Financial
Model for Electricity Default Price-Quality Paths
from 2015: Technical Consultation**

From the Electricity Networks Association

7 February 2014

Electricity distribution businesses supporting this submission

The electricity distribution businesses listed below support this submission.

Alpine Energy Ltd
Aurora Energy Ltd
Buller Electricity Ltd
Centralines Ltd
Counties Power Ltd
Eastland Network Ltd
Electra Ltd
EA Networks Ltd
Electricity Invercargill Ltd
Horizon Energy Distribution Ltd
Mainpower NZ Ltd
Marlborough Lines Ltd
Nelson Electricity Ltd
Network Tasman Ltd
Network Waitaki Ltd
Northpower Ltd
Orion New Zealand Ltd
OtagoNet Joint Venture
Powerco Ltd
Scanpower Ltd
The Lines Company Ltd
The Power Company Ltd
Top Energy Ltd
Unison Networks Ltd
Vector Ltd
Waipa Networks Ltd
WEL Networks Ltd
Wellington Electricity Lines Ltd
Westpower Ltd.

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1. Introduction

1. The Electricity Networks Association (ENA) appreciates the opportunity to submit on the Commerce Commission's (the Commission's) preliminary version of the financial model for resetting electricity default price-quality paths (the Preliminary Model)¹, and the accompanying technical consultation paper (the Consultation Paper).²
2. This submission is structured as follows:
 - Section 2 provides a summary of our submission.
 - Section 3 provides comments on the timing of the release of the Preliminary Model and the process for resetting the default price-quality path (DPP) for electricity distribution businesses (EDBs).
 - Section 4 provides comments on the overall content and structure of the Preliminary Model, including changes from the 2012 DPP Reset Model. In this section we also comment on the specific issues which the Consultation Paper asks respondents to consider.
 - Section 5 provides further comments on the detailed methods within the calculation sheets of the Preliminary Model.
3. The ENA's contact person for this submission is:

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¹ Commerce Commission (29 November 2013), *Electricity Distribution Business, Price-Quality Regulation 2015-2020, DPP Reset Financial Model, preliminary version* [spreadsheet model]

² Commerce Commission (29 November 2013), *Preliminary version of the financial model for electricity default price-quality paths from 2015: Technical consultation*

2. Summary

4. In summary:
 - 4.1. The ENA appreciates the early release of the Preliminary Model, accompanying documentation and the opportunity to discuss the Model with Commission staff at the recent workshop.
 - 4.2. We acknowledge that positive refinements have been made to the model, and commend the Commission's efforts in this regard.
 - 4.3. If further refinements are made to the model before the Draft Decision is published, we request a further copy of the model is released to interested parties. This could also include follow up to the issues raised in response to this consultation.
 - 4.4. The Preliminary Model does not include forecasting logic for a number of variables that contribute to allowable revenue. We anticipate participating to consultation on forecasting methods as the DPP reset process continues, and we note that our forecasting workgroup is due to report back its initial findings on this topic.
 - 4.5. The Preliminary Model also excludes calculations of the impact of unrecovered claw-back from the current regulatory period. We submit that this should be added to the model to assist those EDBs affected to anticipate the likely price path that will apply to them following the reset.
 - 4.6. We have previously requested that the DPP model include Return on Investment (ROI) logic. This will provide a useful modelling cross check using formula and logic which are well understood by interested parties. It will also provide the appropriate annual ROI benchmarks for each non-exempt EDB against which disclosed ROIs may be compared during the next regulatory period.
 - 4.7. We submit that the base year is specified, for the purpose of applying the DPP IMs, using the most recent data possible. We acknowledge that this may involve collecting FY14 data from non-exempt EDBs prior to the August disclosure deadline. This imposes additional cost on non-exempt EDBs and we suggest that the Commission considers how it may make any information requests as reasonable and efficient as possible. It is appropriate to use the most recent data available for the discrete (ie: single year) base year inputs (for example RAB). The closer the base year is to the start of the regulatory period, the more up-to-date values are used, which reduces reliance on forecasting methods.

- 4.8. In addition, we submit that historical data derived from a base period (comprising more than one year) may be appropriate for the purpose of deriving forecasts for the variables which are not specified in the DPP IMs (eg: opex).
- 4.9. It would greatly improve regulatory certainty and better enable regulated suppliers to respond to the efficiency incentives provided by the regulatory regime, if the base year was specified well in advance of the next reset.
- 4.10. We do not believe the Preliminary Model currently includes sufficient flexibility to switch between FY13 and FY14 base year data, as was suggested at the workshop. We have included preliminary thoughts about the additional modelling that may be required to introduce this flexibility.
- 4.11. The Preliminary Model does not include calculations of real price changes, or functionality to cap price steps between regulatory periods. We suggest price step information is useful, however there are data limitations that need to be considered. Accordingly we suggest that price step information is limited to a comparison of FY15 MAR (from the 2012 reset model) and FY16 MAR (from the 2015 reset model) after adjusting for any claw-back amounts relevant to either year.
- 4.12. The Preliminary Model includes an ‘additional allowance in April 1 2015 PV terms’ which we understand may be provided if the benefits to consumers of reducing the probability of a CPP proposal (due to the allowance) outweigh the costs to consumers of higher prices. We support the consideration of such an allowance by the Commission as part of the DPP reset process and anticipate further consultation on this matter as the DPP reset process continues.
- 4.13. In the body of this submission we have also included suggested minor refinements to the modelling in respect of:
- a) EDB selection
 - b) timing adjustments in the BBAR formula
 - c) assets commissioned.

3. The process for resetting Default Price-Quality Paths

Financial model release

5. ENA members greatly appreciate the early release of the Preliminary Model and accompanying Consultation Paper, and the opportunity to discuss the model with the Commission at the December 2013 workshop. It is helpful for our members to understand the approach that the Commission intends to use in calculating the DPP price path if prices are to be reset based on current and projected profitability. In particular, the specification of the changes made from the version of the model used to reset the DPP in 2012 greatly assists in our understanding of the model.

Changes to the model

6. At the workshop on the Preliminary Model, Commission staff stated that small modelling errors had been identified since the Preliminary Model was released (for example in the tax effect adjustments in the deferred tax calculations in the TAX sheet), and that these were to be corrected. We would appreciate the publication of the process to be followed in correcting any known errors. This could also include follow up to any issues raised in this consultation.
7. The Consultation Paper states that it is not intended that another version of the financial model will be released prior to the publication of the Draft Decision. In our view this is appropriate if the financial model used for the Draft Decision is materially the same as the Preliminary Model. However, if significant revisions and/or additions to the methods and logic used in the Preliminary Model are made, we submit that any changes should be notified to interested parties prior to the release of the Draft Decision, and a further version of the model released at that time.

4. Model overview and structure

Content and purpose

8. The Preliminary Model calculates building blocks allowable revenue (BBAR) and maximum allowable revenue (MAR) for a selected non-exempt EDB, for each year in the FY16-20 period, based on a number of inputs.
9. These calculations comprise key parts of the process for determining price paths based on current and projected profitability. However they do not comprise the entire process. In particular, the Preliminary Model does not address the following:

- 9.1. The methods for forecasting expenditure, asset disposals, quantity growth and other regulated income. We anticipate contributing to further consultation on these methods as the DPP reset progresses.
 - 9.2. The carry-over of claw-back for those non-exempt EDBs which were subject to alternative X factors during the previous DPP Period. The 2012 DPP Reset Decision stated that the Commission would consult on the appropriate rate of recovery at the next reset. While that consultation can be undertaken separately, we submit that the Preliminary Model should include the functionality for the recovery of claw-back in the next regulatory period. This will improve certainty for those businesses affected as to the potential price cap that could apply to them in the next regulatory period.
10. In our earlier response to the April 2013 consultation seeking feedback on the process for resetting the DPP for EDBs,³ we requested that the DPP price path model include ROI logic. This would comprise the effective annual ROI generated by the price path for each EDB, using the Information Disclosure (ID) ROI formula, populated with the relevant building blocks used to determine MAR. In our view, the benefits of this additional logic include:
- 10.1. A cross check of the building block logic applied in the model, using formula and logic understood by interested parties.⁴
 - 10.2. Provision of the appropriate baseline ROI for each non exempt EDB, against which future ID disclosures can be monitored. This is necessary as the price path does not provide for returns equivalent to the DPP WACC in each year, due to the smoothing effects of the price path.

Structure of the model

11. We note that some presentational changes have been made to the Model which make it easier to navigate and understand.
12. The Preliminary Model also now calculates MAR for one EDB at a time. This is different to the 2012 DPP Reset Model, which calculated MAR for all EDBs simultaneously. The user now types the EDB name into cell C4 of the 'EDB data' sheet in order to calculate MAR for that EDB.

³ ENA letter to the Commission (24 May 2013), *Feedback on process for setting default price-quality paths*

⁴ While it is acknowledged that the ROI in any one year will vary from the DPP WACC assumption, any variance should not be significant, and overs/unders should broadly offset during the regulatory period.

13. In this respect we suggest that the requirement to type the name may lead to errors.⁵ A more user-friendly approach could be to include a ‘drop-down menu’ in the cell to allow selection of each non-exempt EDB’s name.

Base year assumptions

14. The DPP IMs require base year input data for a number of variables relevant to MAR. The base year is specified as a year which precedes the next regulatory period, ie: it is to include actual historical (as opposed to forecast) data. The DPP IM base year requirements include:
- 14.1. opening and closing RAB values
 - 14.2. total depreciation
 - 14.3. total revaluation
 - 14.4. values of commissioned assets and disposed assets
 - 14.5. closing tax losses
 - 14.6. opening unamortised initial differences in asset values
 - 14.7. opening deferred tax
 - 14.8. tax depreciation
 - 14.9. opening regulatory tax asset values.
15. In addition, other historical data relevant to a base year or years may be used for the purpose of generating forecasts of variables used in the derivation of MAR. These might include expenditure, other income or disposals.
16. The Consultation Paper states that the base year has not yet been determined. At the workshop, Commission staff indicated FY13 or FY14 were possible base years.

⁵ For example, in the Preliminary Model, some of the names in row 20 of the ‘Inputs’ sheet have a ‘space’ after the EDB name. When typing the name into cell C4 of ‘EDB data’, if the ‘space’ is not included, the formulae will not look up the correct EDB.

Selecting the base year

17. The Consultation Paper asks for views on options that should be considered for the base year, including views on the merits of these options and the factors that the Commission should consider.
18. In general, our view is that it is appropriate to use the most recent data available for the discrete (ie: single year) base year inputs (for example RAB). The closer the base year is to the start of the DPP Period, the more up-to-date the input values are. Use of the most recent data available also reduces reliance on forecasting methods.
19. The complexity arises in the availability of data. FY14 data is not disclosed until August, which is after the Draft Decision is expected to be published. One solution is to use FY13 base year data for the Draft Decision and update with FY14 data for the Final Decision. However, using different base years for the Draft and Final Decisions reduces the predictability of the outcome.
20. Another solution is to request FY14 estimates from non-exempt EDBs prior to August, for the purpose of the modelling which supports the Draft Decision. We understand this option is currently being considered by the Commission. We encourage the Commission to consider how this process can be determined to make it as cost effective for non exempt EDBs as possible, including limiting audit and certification requirements to final data - where interim estimates may be required earlier. Assuming the information requirements and preparation timetables are reasonable, we support an approach which uses the best information possible for the Draft Decision. In our view this would be achieved with this option.
21. Finally, we suggest that historical data derived from a base period (comprising more than one year) may be appropriate for generating forecasts for the variables which are not specified in the DPP IMs (eg: opex, other income). The ENA's forecasting work group is currently completing its initial examination of approaches to forecasting expenditure for the DPP reset, and is due to report back shortly. We look forward to further consultation on forecasting approaches as the DPP reset process continues.

Modelling the base year

22. At the workshop it was stated that the Preliminary Model has been built to allow the use of either of FY13 or FY14 as the base year. However, in our view the Preliminary Model does not yet provide for this flexibility.
23. The model is currently built for a base year of FY13. Adjusting the model for a base year of FY14 would require a number of changes to the logic of the model. We have included some preliminary thoughts below on the modelling required to convert from a FY13 to a FY14 base year.

24. We suggest that possible approaches to switching from a FY13 base year to a FY14 base year include:
 - 24.1. changing the formulae so that the base year logic applies to FY14 instead of FY13
 - 24.2. changing the labels of the years.
25. The former requires substantial amendments to a number of different formulae across multiple sheets, particularly the 'RAB' and 'TAX' sheets.
26. In our view the latter is not possible without a number of changes to the underlying logic, because we do not believe the model is robust to labelling changes. For example:
 - 26.1. The 'RAB' and 'TAX' sheets include different logic in the FY13 year than the subsequent seven years (consistent with the IM distinctions for 'base year' values).
 - 26.2. The 'REV' and 'MAR' sheets include columns for FY16-20 (the DPP period). Some of the input values in these sheets are sourced from the 'RAB' and 'TAX' sheets, through formulae which are linked to specific cells (eg 'RAB!G114').
 - 26.3. If the labels on the columns in the 'RAB' and 'TAX' sheets are adjusted so that first column is FY14, the 'REV' and 'MAR' sheets will no longer look-up the correct values – they will pick up FY17-21 data instead of FY16-20.
27. Thus we believe that the labels on the years cannot be changed without changing the look-up formulae which read off the 'RAB' and 'TAX' sheets.
28. In addition, the 'Inputs' and 'EDB data' sheets are specified such that the forecast series start at FY13 (the labels are fixed). If the labels are changed in the 'RAB' and 'TAX' sheets, the labels for the forecast values in the 'Inputs' and 'EDB data' sheets will need to be changed.
29. Finally, in respect of the base year, the ENA submits that it would greatly improve regulatory certainty and better enable regulated suppliers to respond to the efficiency incentives provided by the regulatory regime, if the base year was specified well in advance of the next reset.

Reset price changes

30. The Preliminary Model does not include calculations of the reset price changes that are implied by the FY16 MAR values. It also does not include functionality to cap allowable revenue in the next regulatory period with reference to pre-

reset revenue. The 2012 DPP Reset Model included functionality for both of these calculations.

31. We note that the Consultation Paper asks for views on how price changes could best be modelled. We note that if price change calculations were to be included, they would likely require data for FY15. However, the 'MAR' sheet in the Preliminary Model does not have a column for FY15 data. Additional logic would be required to accommodate FY15 data for this purpose.
32. The Consultation Paper asks for views on which price changes would be most useful to calculate and communicate to interested parties, and what information EDBs could provide in order to calculate these price changes.
33. We submit that the inclusion of price change calculations is helpful to interested parties, including EDBs. However, FY15 revenue data will not be available at the time the Determination is published.
34. Accordingly we suggest that price changes implied by the model could simply reflect a comparison of FY15 MAR from the 2012 DPP reset model and FY16 MAR from the 2015 DPP reset model.
35. The FY15 MAR should be adjusted by the value of claw-back claimed in FY15, which is known, and can be provided by EDBs to the Commission. The FY16 MAR should also be adjusted for any value of residual claw-back which applies to those EDBs with alternative X factors from the prior regulatory period. We have suggested above that the price path model should include calculations of the residual claw-back amounts, where relevant.
36. This price step proposal would exclude the impact of changes in recoverable and pass through costs as these will not be known prior to the Determination being issued. As these costs are directly passed on, and for the most part are outside the control of EDBs, we suggest they are of less relevance to parties interested in the Determination.

Changes from 2012 reset model

Additional allowance

37. The Preliminary Model includes an 'additional allowance in April 1 2015 PV terms'. The Consultation Paper states that the additional allowance may be provided if the benefits to consumers of reducing the probability of a CPP proposal (due to the allowance) outweigh the costs to consumers of higher prices. We support the consideration of such an allowance by the Commission as part of the DPP reset process and anticipate further consultation on this matter as the DPP reset process continues.

Consistency with IMs

38. The Consultation Paper also notes other minor changes to the methods used, such as the inclusion of a base year value for opening deferred tax (since this is no longer zero). We support the amendments to the methodology to ensure it is consistent with the DPP IMs.

5. The calculation sheets

39. As stated above, the calculation sheets in the Preliminary Model calculate BBAR and MAR for a selected EDB, for each year in the FY16-20 period, based on a number of inputs. The calculations for deriving BBAR and MAR are largely the same as those used in the 2012 DPP Reset Decision.
40. We support the general approach to calculating BBAR and MAR, as we did in the 2012 DPP reset process. We note that large components of the methodologies are specified in the DPP IMs.
41. However, we have identified the following modelling inconsistencies which should be addressed:

Commissioned assets

42. The treatment of assets commissioned in the base year is inconsistent with the DPP IMs. Under the DPP IMs, assets commissioned in the base year are defined as 'existing assets'.⁶ However, the Preliminary Model treats them as 'additional assets'.
43. Under the DPP asset valuation IM 'existing assets' are depreciated using a remaining life derived from depreciation in the base year. 'Additional assets' are depreciated over 45 years (see below).
44. As the Preliminary Model includes assets commissioned in the base year with 'additional assets', it depreciates them over 45 years. This is incorrect.
45. 'Existing assets' is defined as:
- 45.1. "assets of an EDB for which an aggregate closing RAB value for existing assets is calculated for the base year" (IM 1.1.4)

⁶ The DPP IMs define 'existing assets' as "*assets of an EDB for which an aggregate closing RAB value for existing assets is calculated for the base year*" (clause 1.1.4). Since assets commissioned in the base year have a closing RAB value, they are 'existing assets'.

- 45.2. ‘Aggregate closing RAB value for existing assets’ is defined in the base year as:
- 45.3. “the sum of each ‘closing RAB value’ for all assets calculated in accordance with Part 2 for that disclosure year” (IM 1.1.4).
46. Since assets commissioned in the base year have a closing RAB value for the base year calculated for information disclosure (ie in accordance with Part 2), they are included within the ‘aggregate closing RAB value for existing assets’ for the base year, and hence are included within ‘existing assets’.
47. To be consistent with the DPP IMs, the Preliminary Model should:
- 47.1. include the value of commissioned assets for FY13 in the roll-forward of existing assets in the ‘RAB’ sheet
- 47.2. exclude assets commissioned in FY13 from the roll-forward of additional assets in the ‘RAB’ sheet.
48. We note that this error was also present in the 2012 DPP Reset Model.

BBAR formula used

49. The BBAR formula used is slightly different to that specified in the CPP IM. In particular, the timing adjustment applied to the term credit spread differential allowance (TCSD) is different. While we acknowledge that the BBAR formula used for DPPs is not specified as an IM, we submit that it is good regulatory practice for the BBAR to be calculated using the same formula across the different forms of regulation.
50. The BBAR formula specified in the CPP IMs includes the following term:
- $$TCSD \times TF \div [TF_{rev} - t \times TF]$$
51. The corresponding term in the BBAR formula used in the Preliminary Model (row 49 or the ‘BBAR’ sheet, after incorporating nested formulae) is:
- $$TCSD \times (1 - t \times TF) \div [TF_{rev} - t \times TF]$$
52. We suggest both formulae are reviewed to determine which is the most consistent with the timing factor and tax logic applied elsewhere in BBAR, and amendments are made accordingly to ensure the formula are consistent for the DPP and CPP price paths.