

TasNetworks Distribution Network Service Provider Pricing Proposal Review for Period 4, 2015/16

29 April 2015 v1.0



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Document Control

Version Number	Date	Author	Changes
0.1	28/04/2015	Craig Lee	Initial draft
0.2	29/04/2015	Craig Lee	Updated after changes
1.0	29/04/2015	Craig Lee	Final version

1 Executive Summary

1.1 Purpose

This review is based on the contract with TasNetworks to undertake the following:

1. Review the TasNetworks Pricing Proposal submission for the regulatory control year from 1 July 2015 to 30 June 2016, to ensure compliance with Chapter 6 of the *National Electricity Rules*.
2. Review the 2015-16 TasNetworks tariff model to ensure it correctly calculates and presents the revenues in accordance with the final Australian Energy Regulator (AER) determination.
3. Review the five Distribution Tariff Models (one standard control, four alternative controls) to ensure:
 - a. Forecasted revenue for the tariffs is less than the relevant allowance determination;
 - b. All calculations are consistent, accurate and align with the relevant methodology; and
 - c. The formulae utilised in the calculations are logical and consistent.
4. Review the Distribution Cost of Supply (DCoS) Model and the DCoS to Tariff Model to ensure:
 - a. Consistency with the AER Determination;
 - b. All calculations are consistent, accurate and align with the relevant methodology; and
 - c. The formulae utilised in the calculations are logical and consistent.
5. Review the Energy Consumption Forecast Model to ensure (did not go last year).
 - a. All calculations are consistent and accurate with the sources of data; and
 - b. The formulae utilised in the calculations are logical and consistent.

Note that due to the nature of the review and the time available, it is not possible to state that there are no issues or errors in the provided TasNetworks documentation, but that the review is based on the above purpose and all issues and errors advised have been resolved or are listed as outstanding in this report.

1.2 Scope

TasNetworks must provide the Australian Energy Regulator (the Regulator) with a DNSP Pricing Proposal. Based on section 6.18.2(b) of the *National Electricity Rules* Version 65, the pricing proposal must:

- (1) set out the tariff classes that are to apply for the relevant regulatory year; and
- (2) set out the proposed tariffs for each tariff class; and
- (3) set out, for each proposed tariff, the charging parameters and the elements of service to which each charging parameter relates; and
- (4) set out, for each tariff class related to standard control services, the expected weighted average revenue for the relevant regulatory year and also for the current regulatory year; and
- (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the regulatory year and the basis on which it could occur; and

(6) set out how designated pricing proposal charges are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous regulatory year; and

(6A) set out how jurisdictional scheme amounts for each approved jurisdictional scheme are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those amounts; and

(6B) describe how each approved jurisdictional scheme that has been amended since the last jurisdictional scheme approval date meets the jurisdictional scheme eligibility criteria; and

(7) demonstrate compliance with the Rules and any applicable distribution determination; and

(8) describe the nature and extent of change from the previous regulatory year and demonstrate that the changes comply with the Rules and any applicable distribution determination.

In addition to the DNSP Pricing Proposal, TasNetworks must provide proposed prices for:

- Standard Metering Services
- Metering
- Public Lighting Services
- Fee Based Services
- Unit Costs of Inputs for Quoted Services.

These services are regulated as Alternative Control Services where the price caps are part of the AER Determination.

This review covers the calculation of the Maximum Annual Revenue for Period 4 for Standard Control Services, along with supporting spreadsheet models developed by TasNetworks and used to develop the DNSP Pricing Proposal. This review also covers prices subject to Alternative Control Services.

The review is based on the documents and spreadsheet models developed by TasNetworks and provided by Chantal Hopwood and Andy Dare that are used to prepare the DNSP Pricing Proposal.

1.3 Intended Audience

This document is intended to be read by TasNetworks.

1.4 Review Outcome

Based on the documentation provided, the extent of the review confirms that:

- The models correctly calculate the Period 4 Aggregate Annual Revenue as required by the Determination, subject to the issues raised in section 2.10;
- Where values are derived from the Determination, they are correctly transcribed;
- Based on the tariff model and forecast consumption, the TasNetworks forecast revenue for Network tariffs is less than the Period 4 Annual Revenue Requirement of \$280.87M, plus under recovery of \$17.89M, as determined by the Regulator;
- The Network Tariffs demonstrate compliance with the calculation for each tariff revenue to lie between the avoidable cost and standalone cost;
- The prices subject to Alternative Control Services are calculated as required by the Determination;

- The Network Tariff models are consistent with that requested by the Regulator in the Determination and the calculations performed are consistent with the methodology. The calculations are accurate with regard to the sources of data and logical formulae used;
- The values in the spreadsheet models have been correctly transcribed to the relevant pricing proposal Word documents.

2 Review Details

2.1 Documents Provided for Review

The documents initially provided for review do not include the March 2015 CPI increase. Final versions of documents will be provided when this value is released by the Australian Bureau of Statistics on 22 April 2015.

The review was initiated based on draft versions of documents provided 2 April 2015:

- Fee Based Services Modelv1
- Metering Tariff Modelv1
- Public Lighting Prices
- Quoted Services Modelv1.

Additional documents provided 2 April 2015:

- ACH Pricing Calc_2015-16
- Bluestone Pricing Calc_2015-16
- Bradken Industries Pricing Calc_2015-16
- Cadbury Pricing Calc_2015-16
- Consumption Model CDOv1
- DCoS to Tariff Groups
- ESI Levy Summary
- ESI Levy (Word document)
- Henty Gold Pricing Calc_2015-16
- ITC Assets - Constraint 15-16 KWh x 14-15\$
- ITC Assetsv1
- McCains Pricing Calc_2015-16
- Network Tariff Prices 2015-16
- Tariff Model.

Additional documents provided 9 April 2015:

- 2013-14 Under recovery calc for 2015-16
- Final - 2015-16 Tariff approval model - TasNetworks Distribution
- STPIS Calc.

Additional and updated documents provided 9 April 2015:

- CNCD
- ITC Assetsv1.

Additional and updated documents provided 17 April 2015:

- Consumption forecast for 2015-16 pricing proposal – updated
- Tariff Model
- Tariff Modelv1.

Additional and updated documents provided 22 April 2015:

- 2015-16 Fee Based Services Application and Price Guidev2 (Word document)
- 2015-16 Metering Services Application and Price Guidev2 (Word document)
- 2015-16 Public Lighting Services Application and Price Guidev2 (Word document)
- 2015-16 Quoted Servicesv2 (Word document)
- Fee Based Services Modelv1
- Metering Tariff Modelv1
- Public Lighting Prices
- Quoted Services Modelv1.

Additional and updated documents provided 23 April 2015:

- 2015-16 Fee Based Services Application and Price Guidev2 (Word document)
- 2015-16 Quoted Servicesv2 (Word document)
- Annual PricingProposal finalv3 (Edited for 2015) (Word document)
- Final - 2015-16 Tariff approval model - TasNetworks Distribution
- ITC Assets - Constraint 15-16 KWh x 14-15\$
- ITC Assetsv1
- Network Tariff Application and Price Guide 2015-16 (Word document)
- Network Tariff Prices 2015-16
- Tariff Model.

Updated document provided 27 April 2015:

- Public Lighting Prices.

Updated documents provided 28 April 2015:

- 2015-16 Public Lighting Services Application and Price Guidev2 (Word document)
- Final - 2015-16 Tariff approval model - TasNetworks Distribution
- Network Tariff Application and Price Guide 2015-16 (Word document)
- Tariff Model
- 2015-16 Public Lighting Services Application and Price Guidev3 (Word document).

Updated documents provided 29 April 2015:

- Tariff Model
- Network Tariff Application and Price Guide 2015-16
- Annual PricingProposal finalv3 (Edited for 2015) (Word document)
- Final - 2015-16 Tariff approval model - TasNetworks Distribution (Word document).

Note that documents are Excel spreadsheets unless otherwise noted.

2.2 Regulator Documents

The following AER documents were used in the review:

- Final Distribution Determination, Aurora Energy Pty Ltd, 2012-13 to 2016-17 – comprising Constituent Decisions, Appendixes and Attachments, April 2012;
- Aurora - PTRM - final decision.xls;
- Final - 2015-16 Tariff approval model - TasNetworks Distribution.xlsx
- Email from AER confirming that model should be updated from 365 to 366 days as 2016 is a leap year.

2.3 External Source Documents

The following external documents were used in this review:

- Australian Bureau of Statistics website, for Consumer Price Index values, March 2015 index value is 106.8;
- Aurora Network Indicative Estimated Charges 2014-15.xls, from Transend (emailed to Aurora);
- Electricity Supply Industry Act 1995 Order, confirming State Government ESISC charges (ESI Levy.docx) and calculation (ESI Levy Summary.xlsx);
- NEMC, confirming National Electricity Market Charge (TasNetworks letter with Ministerial Order and Debtors Invoice for 201415.pdf).

2.4 Internal Source Documents

The following Aurora source documents were provided for use in this review:

- ATMD_DCoS Model Input CDO
- CNCD
- Connection asset costs
- NMI Tariff Count September 2014
- Connection Asset Unit Costs – Revenue Apportionment (Connection asset costs.xls).

2.5 Approach

The general approach for reviewing each spreadsheet involved reviewing each spreadsheet for numerical or calculation errors, checking for internal consistency and comparing the approach with the Determination. Additionally:

- Each spreadsheet was analysed using an Excel add-in tool that reviews every cell in each worksheet and provides the names and cell ranges that potentially contain errors. Samples of these cells are manually reviewed and any issues noted. All calculation errors found and reported have been corrected.
- Values in the spreadsheets were compared with the Determination;
- Where values from one spreadsheet are used as inputs in another, these were checked and compared;
- Where values are based on internal reports or extracts, these were checked and compared;
- Values were compared against external source documents listed above.

Errors and issues identified were reported and updated versions of the spreadsheets were supplied and confirmed as corrected.

All spreadsheets provided for review were initially draft versions using an estimated value of 1.52% for the March 2015 CPI (some spreadsheets used 0.00%). The actual value of 1.33% was released by the ABS on 22 April 2015 and final versions of documents using the actual value provided. Review of the final versions only involved confirmation that the value was used throughout the spreadsheets.

The Word documents for each of the pricing proposals were proof read and checked that the values in the spreadsheets were correctly transcribed.

2.6 Distribution Cost of Supply Models

The review of the Distribution Cost of Supply (DCoS) Model and the DCoS to Tariff Model was based on the checking of the data within the spreadsheets and validation of the source data.

Based on the review approach, the model provided is:

- consistent with the AER Determination (as it is based on the previous DCoS model);
- calculations are consistent, accurate and align with the relevant methodology; and
- formulae utilised in the calculations are logical and consistent.

2.7 Annual Revenue Requirement Model

The Period 4 MAR Calculation review compared the forecast values published by the Australian Regulator in Table 1.13 of the Determination Constituent Decisions.

For Period 4 of the Determination there are adjustments and for ESISC, NEMC, plus under / over recovery from Period 3. Again, the transitional adjustment is not required for Period 4.

Period 4 is the first period that includes a value for STPIS as this was previously banked. The value of STPIS for Period 4 was -0.904% had be calculated and previously agreed with AER.

Based on the review approach, the model provided demonstrates:

- consistent with the AER Determination;
- calculations are consistent, accurate and align with the relevant methodology; and
- formulae utilised in the calculations are logical and consistent.

The Period 4 MAR has been calculated based on the Determination and correctly transcribed to the Word document.

2.8 TasNetworks Proposals, TasNetworks Annual Tariff Approval Model and Distribution Tariff Models

For the Standard Control Services proposal, Network tariffs are documents as per TasNetworks' Tariff Strategy.

The Network Tariffs demonstrate compliance with the calculation for each tariff revenue to lie between the avoidable cost and standalone cost.

The Period 4 side constraint has been calculated based on the Determination to be 8.84%. The increase in tariff revenue for each tariff is less than the amount allowed under the side constraint applicable for Period 4.

As required, the Tariff Model includes an analysis of the impact on typical customers for network tariffs.

The model calculates the forecast revenue based on the forecast total consumption for each tariff. For Period 4, the forecast revenue based on this model is \$298.56M and so is less than the adjusted maximum Period 4 value of \$298.76M.

As required, the model also contains and under and overs account for DUOS and TUOS.

Based on the review approach, for the model provided:

- correctly calculates and presents the revenues in accordance with the AER Determination;
- forecasted revenue for the tariffs is less than the relevant allowance determination;
- calculations are consistent, accurate and align with the relevant methodology; and
- formulae utilised in the calculations are logical and consistent.

The values in the models have been transcribed into the Word documents.

Alternative Control Services models have been developed for:

- Standard Metering Services (based on Table 1.14)
- Public Lighting Services (based on Table 1.15)
- Private Contract Public Lighting Services (based on Table 1.16)
- Fee Based Services (based on Table 1.17)
- Unit Costs of Inputs for Quoted Services (based on Table 1.19).

These models are based on the referenced tables within the Determination Constituent Decisions. The adjustment factors in these models is for CPI and X factors as per the Determination.

The values in the models have been transcribed into the Word documents.

2.9 Energy Consumption Forecast Model

This spreadsheet model was provided part way through the review. For 2015-16, Consumption forecast is based on a statistical model using past values of actual consumption.

The review of the Model was based on the checking of the data within the spreadsheets. Based on the review approach, for the model provided:

- calculations are consistent and accurate with the sources of data; and
- the formulae utilised in the calculations are logical and consistent.

2.10 Issues

There are no outstanding issues.

2.11 Exclusions

This review was based on the approach described in Section 2.5. As such, the focus has been more on ensuring the calculations and formulae have been accurately applied in accordance with the Determination. It was not possible, nor intended, that this review should validate TasNetworks' Network Tariff Strategy or all underlying source data used in the calculations.