



AusNet Electricity Services Pty Ltd

Reset Regulatory Information Notice

Basis of Preparation – Historical Information



Basis of Preparation

Overview

This Basis of Preparation document supports the preparation and reporting of the historic information reported in the AusNet Electricity Services Pty Ltd ("AusNet Electricity Services") report entitled 'Victorian DNSP 2016-20 – Reset RIN templates' ("the Report").

The ultimate Australian parent of AusNet Electricity Services is AusNet Services (Distribution) Ltd which is part of a listed stapled group trading as AusNet Services. AusNet Services comprises the Stapled Group of AusNet Services (Distribution) Ltd and its subsidiaries, AusNet Services (Transmission) Ltd and its subsidiaries, and AusNet Services Finance Trust. The Stapled Group is also referred to as the AusNet Services Group.

The Report has been prepared in accordance with the 'Regulatory Information Notice issued under Division 4 of Part 3 of the National Electricity (Victoria) Law ("RIN") issued by the AER on 30 January 2015 and other authoritative pronouncements of the AER.

AusNet Electricity Services' 2014 regulatory year is the period 1 January to 31 December ("Regulatory Year"). Data included in the Report has been provided for the historic Regulatory Years as specified in the Report. All financial data included in the Report is presented in Australian dollars. Non-financial data is stated as per the measures specified in the Report.

The AusNet Services' Group owns and operates 3 regulated networks – an electricity distribution network, a gas distribution network, and an electricity transmission network. Employees of the AusNet Services Group work across the 3 regulated networks and there are shared costs and overhead and other corporate costs that cannot be directly allocated to a particular network. These costs are proportioned amongst AusNet Services' 3 regulated networks, as well as unregulated businesses, based on a quarterly Activity Based Costing survey process completed by all cost centre managers and in accordance with AusNet Services' Cost Allocation Methodology.

Materiality has been applied throughout the Report and Basis of Preparation. Materiality is defined as information that if omitted, misstated or not disclosed has the potential, individually or collectively to influence the economic decisions of users.

In conformity with AER requirements, the preparation of the Report requires the use of certain critical management estimates. For the purpose of preparing the Report, 'estimated information' is defined as information presented in the Report whose presentation is not materially dependent on information recorded in accounting records or other records used in the normal course of business, and whose presentation for the purpose of the RIN is contingent on judgments and assumptions for which there are valid alternatives, which could lead to a materially different presentation in the Report.

Where estimated information has been presented, the circumstances and the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is AusNet Electricity Services' best estimate has also been set out below. By definition, estimates seldom equal the related actual results and estimates have only been made for the purpose of disclosing the information requested. Considerations of the cost and efficiency of preparation as well as the reliability and accuracy of data available have been taken into account in determining the best methodology to determine the estimates.

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‘Actual Information’ is defined as information materially dependent on information recorded in historical accounting records or other records used in the normal course of business, and whose presentation is not contingent on judgments and assumptions for which there are valid alternatives, which could lead to a materially different presentation. Any information or allocation which has been calculated via the ABC survey process is considered actual information, as this is in accordance with the AER-approved CAM.

The preparation methodologies and information sources adopted in the preparation of the Reports are set out below. This Basis of Preparation is not applicable to the forecast period (2015 – 2020 Regulatory Years) as presented in the Reports.

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2.4 Augex Model

Augmentation has the meaning prescribed in the National Electricity Rules, and also includes work relating to improving the quality of the network, for example, to meet regulatory obligations. Augmentation expenditure does not include gifted assets.

Augmentation in the AusNet Services' network is conducted as described within the 'Distribution Annual Planning Report'. This document is available on the AusNet Services' website.

Maximum Demand:

- All maximum demand data presented in Template 2.4 is consistent with the maximum demand data used for planning of augmentation in the AusNet Services' network.
- Maximum demand data reported is obtained from AusNet Services' SCADA database (both MVA and MW).
- The location of the data provides the maximum loading of the circuit element.
- Abnormal operating conditions have been excluded by reviews performed by appropriate subject matter experts.
- The weather correction was calculated by using AusNet Electricity Services' forecasting model, as follows:
 - AusNet Services creates sigmoidal correlations between temperature and demand for each network element (Feeder and Zone Sub) in its forecasting methodology. In weather normalising historic demands AusNet Services uses these correlations and adjusts actual demand to reflect POE50 and POE10 temperatures. This is done by calculating POE50 and POE10 temperatures based on recent history and then calculating the adjustment required for each element based on the temperature differential between the actual temperature and POE50 and POE10 temperatures. AusNet Services has provided data for POE50 weather normalisation but is able to provide normalisation for any temperature such as POE10, POE90 or POE100.

Table 2.4.1 – Augex Model Inputs – Asset Status – Subtransmission lines

Preparation Methodology:

The source of the subtransmission lines data for the AusNet Network is the internal strategy document AMS 20-24 'Subtransmission Line and Station Data'.

For each subtransmission line, the 'Primary type of area supplied by line' was based on the dominant feeder category supplied by the terminating substation.

Line voltages are consistent across the whole of AusNet Services' subtransmission network (66kV).

For both 2014 and 2010, Route line lengths and Line ratings are sourced from the AMS 20-24 (current and previous versions). The relevant extract is as follows:

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“Line Length

The length of a line is measured in kilometres. It is measured from the substation/terminal station rack structure to the substation rack structure.

Line rating (Thermal)

The line ratings are given for summer ... and have been provided in amperes (A) and megavolt-amperes (MVA). The line is rated at an ambient temperature of 35°C for summer... The apparent power is calculated from the current using the base/nominal voltage (e.g. 66kV).”

The Thermal line rating is the rating used for planning the AusNet Services' network.

Line rating N-1 emergency: The N-1 emergency ratings are not applied to subtransmission lines. The thermal rating is the only rating applicable to AusNet Services.

Average per annum growth rate in annual line maximum demand (50% PoE) from 2014 to 2020 is forecast information – therefore beyond scope of this Basis of Preparation.

Network Segment ID is a reference value created for the Template only.

AusNet Services forecast only at Zone Substation and HV feeder level, therefore weather correction of subtransmission lines was undertaken using the terminating substation P50 correction factor applied to the line maximum demand.

Where maximum demand amounts are reported as '0' in Table 2.4.1, this is because the network element was not commissioned by the table's prescribed dates.

Estimated Information:

Weather correction of maximum demand data involves estimation based on forecast model methodology as described above (within the Maximum Demand section).

Table 2.4.2 – Augex Model Inputs – Asset Status – High voltage feeders

Preparation Methodology:

High voltage feeder ID, Feeder type, Voltage level, Originating substation, and Route line length for 2010 and 2014 was extracted from the AusNet Electricity Services' Annual Non-Financial Information templates submitted as part of the Annual Regulatory Accounts. This data was sourced from paper and GIS system information held by Network Strategy and Planning (Region Planners).

Maximum demand was populated using the methodology as described in “Maximum demand” as above. The maximum demand values reported are the same values used in planning the AusNet Services' augmentation network. It is measured at the feeder exit.

The Ratings are extracted from information provided by AusNet Services' internal Regional Network Planners. The Thermal and Operational ratings of AusNet Electricity Services' feeders are the same. The line rating is determined to be the limiting conductor rating in the trunk section of the feeder.

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Average per annum growth rate in annual high voltage feeder maximum demand (50% PoE) from 2014 to 2020 is forecast information – therefore beyond scope of this Basis of Preparation.

Network Segment ID is a reference value created for the Template only.

Where amounts are reported as '0' in Table 2.4.2, this is because the network element was not commissioned or represents the actual loading (i.e. a spare feeder), by the table's prescribed dates.

Estimated Information:

Weather correction of maximum demand data involves estimation based on forecast model as described above.

Table 2.4.3 – Augex Model Inputs – Asset Status – Subtransmission substations, subtransmission switching stations and zone substations

Preparation Methodology:

All zone substations and the switching station were extracted from the Asset Management System, and the internal policy AMS 20-24 'Subtransmission Line and Station Data' (current and previous versions).

For each substation, the 'Primary type of area supplied by substation' was based on the dominant feeder category supplied by the substation.

Substation voltage, Number of transformers as at 31 December 2010 and 2014 respectively, and Substation Ratings (including all sub-categories) for Table 2.4.3 were obtained from the internal policy document AMS 20-101 'Zone-Substation Transformer Cyclic Rating'.

Maximum demand was populated using the methodology as described in "Maximum demand" above.

Average per annum growth rate in annual line maximum demand (50% PoE) from 2014 to 2020 is forecasted information – therefore beyond scope of this Basis of Preparation.

Network Segment ID is a reference value created for the Template only.

Where amounts are reported as '0' in Table 2.4.3, this is because the network element was not commissioned by the table's prescribed dates. However, the N-1 emergency rating is reported as '0' because AusNet Services does not use these in planning augmentation, and only uses the substation normal cyclic.

TX normal cyclic is determined to be the same as a substation cyclic and therefore the substation cyclic values have been used.

Estimated Information:

Weather correction of maximum demand data involves estimation based on forecast model as described above.

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Table 2.4.4 – Augex Model Inputs – Asset Status – Distribution substations

Preparation Methodology:

Information in relation to 'Asset Status – Distribution substations' was sourced from the Asset Management System using plant utilisation reports. Total capacity of transformers has been calculated by extracting only "the transformer capacity involved in the final level of transformation, stepping down the voltage used in the distribution lines to the level used by the customer."

The Distribution substation category ID was sourced from the Asset Management System. The asset data contained in the Asset Management System includes category and the transformer capacity information. This was segmented into standard transformer sizing internally used by AusNet Electricity Services. This is to enable improved categorisations into the Table's prescribed cyclic rating bands.

Average per annum growth rate in annual substation maximum demand (50% PoE) from 2014 to 2020 is forecasted information – therefore beyond scope of this Basis of Preparation.

Network Segment ID is a reference value created for the Template only.

Estimated Information:

No estimation required.

Table 2.4.5 – Augex Model Inputs – Network segment data

Preparation Methodology:

The network segments within Table 2.4.5 do not connect to other network segments.

The main reason the segments were reported is because they are consistent with the operations of AusNet Services' network; and provides a clear overview of discrete operational and plant segments. Network segment data was prepared using available data for each network segment as follows:

Unit Cost

Sub transmissions Lines, Zone Substations and Distribution Feeders – project cost data for relevant projects from 2009 to 2014 was collated with capacity added by each project to produce \$/MVA for these network segments. This was sourced from the Financial System and internal planning reports.

Distribution substations (including Kiosk and Pole Top) – unit cost data from current procurement and field services contracts for specific capacity substations was combined to produce a weighted average \$/MVA for these network segments. For Kiosk 26-63 kVA an estimate was made as no recent procurement data was available.

All costs have been escalated into real December 2015 dollars. As real project data has been utilised, this is considered the most appropriate basis to estimate the average unit costs for each network segment.

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Capacity factor

Zone Substations – capacity factor is based on the ratio between the number of transformers in the zone substation and the number that would be added if augmentation was required.

Sub transmissions Lines

66 kV Radial – Augmentation of a radial 66kV line typically involves adding a second line of similar rating; therefore capacity factor is equal to 1.

66 kV two lines - The capacity factor was calculated using an average of the actual historic capacity factor for projects completed on two line networks.

66 kV three lines - The capacity factor was calculated using an average of the actual historic capacity factor for projects completed on three line networks.

Distribution Feeders – The capacity factor considers two options which are adding a new feeder and upgrading the existing feeder. For a new feeder the capacity factor is equal to 1. Where a feeder can be upgraded the typical upgrade scenarios for the most common conductor types have been considered and the ratio of the increase in rating compared to standard rating has been used to develop a capacity factor. A weighted ratio of the capacity factors for each of these options has been calculated for Urban, Short Rural and Long Rural feeders.

Distribution substations – The capacity factor has been determined as the ratio of the current substation to the next standard size substation required for the upgrade. This ratio has then been weighted based on the actual number of substations in the network.

Utilisation Threshold

Utilisation thresholds are based on the actual point at which AusNet Services would augment the network segment. This is based on average historical thresholds of completed projects for each network segment. AusNet Services uses probabilistic planning to determine the augmentation needs of the network segment, as described within the 'Distribution Annual Planning Report'. This document is available on the AusNet Services' website.

Standard Deviations

Subtransmission lines radial – Standard deviations are based on average historical thresholds of completed projects.

2 subtransmission lines - A standard deviation for 2 subtransmission lines network has been based on the assumption that once loading reaches 70% (140% under N - 1) AusNet Services would be 95% confident of completing augmentation.

3 or more subtransmission lines: A standard deviation for 3 or more subtransmission lines network has been based on the assumption that once loading reaches 70% (140% under N - 1) AusNet Services would be 95% confident of completing augmentation.

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Zone Substations

- 1 transformer substations: Standard deviations are based on average historical thresholds of completed projects.
- 2 transformer substations: A standard deviation for 2 transformer substations has been based on the assumption that once loading reaches 140%, AusNet Services would be 95% confident of completing augmentation.
- 3 transformer substations: A standard deviation for 3 transformer substations has been based on the assumption that once loading reaches 140% under N - 1 AusNet Services would be 95% confident of completing augmentation.

Distribution Feeders – A standard deviation for distribution feeders has been based on the assumption that once loading reaches 100% AusNet Services would be 95% confident of completing augmentation.

Distribution substations - A standard deviation for distribution substations has been based on the assumption that once loading reaches 120% AusNet Services would be 95% confident of completing augmentation.

Network Segment ID is a reference value created for the Template only.

Estimated Information:

Estimation of unit costs and capacity factors has been carried out as described above. These rates and factors are not generated or used for internal planning purposes and therefore have been estimated specifically for the purpose of populating this RIN template.

Table 2.4.6 – Capex and net capacity added by segment group

Preparation Methodology:

For NSP-initiated & capacity-related augmentation, the capex amounts for each AER DNSP segment group were sourced from the Augex Templates within AusNet Electricity Services' Category Analysis submission.

In order to complete the Category Analysis templates, a Fixed Asset Register report was generated and the percentage of total Augex costs allocated into the 'Augmentation Capex' categories was calculated. An 'as incurred' project report was generated from the Financial System using the augmentation project work codes. This report provided direct costs only. The calculated Augmentation Capex percentages were applied to the 'as incurred' report to derive an estimate of Total Augex Expenditure on an 'as incurred' basis in the required categories.

For High voltage feeders and Distribution substations, the Category Analysis submission did not require the values to be split into urban, short rural and long rural. To complete Table 2.4.6, feeder data (as reported in AusNet Electricity Services' 2014 Annual Non-Financial Information templates submitted as part of the Annual Regulatory Accounts) was used to pro-rata the costs across the prescribed categories. The amounts for AER DNSP segment group were escalated into real December 2015 dollars using the following CPI adjustment methodology:

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“CPI for a particular calendar year means:

a) the Consumer Price Index: All Groups Index for the Eight State Capitals as published by the Australian Bureau of Statistics for the September Quarter immediately preceding the start of the relevant calendar year

divided by

b) the Consumer Price Index: All Groups Index for the Eight State Capitals as published by the Australian Bureau of Statistics for the September Quarter immediately preceding the September Quarter referred to in paragraph (a).

minus one.”

AusNet Electricity Services does not have customer-initiated and capacity related augmentation.

For ‘capex - in total for all purposes’, this is the sum of ‘For customer-initiated and capacity-related augmentation’ and ‘For NSP-initiated and capacity-related augmentation’.

Net capacity added is forecasted information therefore beyond scope of this Basis of Preparation.

Estimated Information:

Information reported in Table 2.4.6 is considered estimated information due to the calculations performed to derive the ‘as incurred’ Augex category allocations. These calculations were performed based on percentages of ‘project close’ augmentation data disclosed in the historical Category Analysis templates, which are also considered estimated information.

This data is required to be estimated as system reports generated on an ‘as incurred’ basis do not provide sufficient augmentation works identifiers to classify the costs into the required categories.

In addition the Category Analysis submission did not require the values for High voltage feeders and Distribution substations to be split into urban, short rural and long rural. The values reported are a pro rata allocation based on 2014 feeder reports.

Data provided is considered management's best estimate based on the information available.

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2.13 Provisions

Provisions are recognised when AusNet Electricity Services has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount of the provision can be measured reliably. Provisions are not recognised for future operating losses.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the relevant reporting date, taking into account the risks and uncertainties surrounding the obligations. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

For all Regulatory Years, financial provisions information for Standard Control Services has been reported in accordance with the requirements of the CAM and the Annual Regulatory Accounts that were in effect for the relevant Regulatory Year. Provisions were not required to be reported in the 2014 Annual Regulatory Accounts – instead they were required to be reported only in the 2014 Economic Benchmarking Reports.

Provisions have been separately presented based on the nature of the provision and allocated between an Operating Expenditure (“Opex”) component and a Capital Expenditure (“Capex”) component based on the classification of the underlying cost associated with the provision.

Financial information on provisions reconciles to the reported amounts for provisions in the Annual Regulatory Accounts for each Regulatory Year (where the information was required to be reported). The amounts reported in the 2009 – 2014 Economic Benchmarking Reports were disclosed inclusive of AMI amounts. Amounts reported for the below tables are for Standard Control Services only.

All amounts are shown in nominal dollars.

Table 2.13.1 – Changes in Total Provisions incl. RPM

Preparation Methodology:

Provision – Doubtful Debts, Provision - Uninsured Losses, Provision – Environmental, Provision - Customer Rebates, Provision – Miscellaneous, Provision - Corporate Restructuring, and Provision - License/Regulatory Fees

Data was extracted from the financial system and allocated into Standard Control Services based on appropriate drivers (such as the % of total SCS operating and maintenance expenditure per the applicable Annual Regulatory Accounts). Information disclosed in relation to the above provisions is considered ‘actual information’.

Within Provision – Environment, the ‘other’ movement of \$293,554 in the 2010 and 2013 Regulatory Years relates to a reclassification of Standard Control Services to AMI.

In AusNet Services’ 2006-13 Economic Benchmarking submission, the opening balance for Provision - Miscellaneous of \$956,970 in the 2011 Regulatory Year did not agree to the closing balance of (\$100,000) in the 2010 Regulatory Year due to a change in the classification for unpaid cross-boundary

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network charges from Excluded Services (now known as Alternative Control Services) to Standard Control Services as determined by the AER and reported as such in the Annual Regulatory Accounts. For the current Reset RIN submission, due to the Table 2.13.1 restrictions, this amount of \$1,056,970 has been adjusted in the 2010 'Other' component – in the Economic Benchmarking reports previously provided to the AER, this was instead directly adjusted to the 2011 opening balance.

Provision - Superannuation and Provision - Employee Entitlements

The amounts reported in the Provision - Employee Entitlements table relate to liabilities for wages and salaries, including non-monetary benefits and annual leave recognised in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled.

Data was extracted from the financial system and allocated into Standard Control Services based on Headcount drivers sourced from the Activity Based Costing surveys.

The total 'Amounts used during the period' and 'Unused amounts reversed during the period' disclosed are considered 'actual information' as the data was extracted from the financial system.

All other information disclosed under Provision - Superannuation and Provision - Employee Entitlements is considered 'estimated information' due to the preparation approach outlined in the 'Estimated Information' section below. To derive the estimates, information was sourced from the financial system and supplemented with internal allocation models based on Activity Based Costing surveys.

In AusNet Services' 2006-13 Economic Benchmarking submission, the opening balance of Provision – Superannuation for the 2013 Regulatory Year did not tie to the 2012 closing balance due to the amendments to AASB 119 *Employee Benefits*. For the current Reset RIN submission, due to the Table 2.13.1 restrictions, this has been adjusted in the 2012 'Other' component (impact of (\$1,305,390)) – in the Economic Benchmarking reports previously provided to the AER, this was instead directly adjusted to the 2013 opening balance.

During the 2014 Regulatory Year (on 31 March 2014), the Management Services Agreement between AusNet Services and SPI Management Services Pty Ltd ("SPIMS") was terminated. Upon termination of this agreement, a number of SPIMS employees have been transferred into AusNet Electricity Services, and the corresponding employee entitlement provisions existing at 31 March 2014 were also transferred across to AusNet Electricity Services. The 'Other' component amount within the Provision - Employee Entitlements and Provision – Superannuation tables includes this transfer of employee liabilities.

Estimated Information:

In relation to Provision - Employee Entitlements and Provision - Superannuation, the split between the Opex component and the Capex component was estimated. This was required as this data is not separately captured in the financial system. To determine the proportion of these provisions that should be classified as Capex, AusNet Electricity Services has used the results from the AusNet Services Group quarterly capitalised overhead model which calculates the proportion of labour costs to be capitalised. The quarterly capitalised overhead model uses results from the quarterly Activity Based Costing surveys

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which provide the percentage split of management effort between all of AusNet Services regulated and unregulated networks as well as between Opex and Capex.

Table 2.13.2 – Allocation of Movement in Total Provisions incl RPM

Preparation Methodology:

Movement in provisions allocated to Opex

For each provision type as disclosed in Table 2.13.1, the sum of the net 'Opex' movements have been grouped and disclosed against each respective provision.

Movement in provisions allocated to Capex

The net Capex movements in Provision – Superannuation and Provision - Employee Entitlements have been allocated across the AusNet Services' Distribution Roll Forward Model asset classes based on the weighting of each asset class' net Capex for each Regulatory Year.

The Capex movements in Provision - Customer Rebates have been allocated directly to Distribution system assets, given it relates only to this class of asset.

Movement in provisions allocated to other

For each provision type as disclosed in Table 2.13.1, the sum of the net 'other' movements have been grouped and disclosed against each respective provision.

Estimated Information:

The split between the net Opex component and the net Capex component was estimated based on the assumptions as per Table 2.13.1.

Additionally, the net Capex movements have been allocated across the weighting of each asset class per the AusNet Services' 2011-15 Distribution Roll Forward Model for each respective Regulatory Year. This is considered management's best estimate of the information required, as the Financial System does not separately capture this information.

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2.14 Forecast Price Changes

Table 2.14.1 Forecast labour and materials price changes

This Basis of Preparation is only relevant to the 2011 – 2014 columns of the Table. All price changes are expressed in percentage year on year real terms.

Preparation Methodology:

Materials price changes

AusNet Services does not track historical changes in its materials costs. Accordingly, historical changes in the price of commodities used as key inputs in the electricity distribution industry – aluminium, steel, copper and oil – have been used as proxies. Price data for these commodities has been sourced as follows:

- Aluminium – LMAHDY (London Metals Exchange Aluminium Spot (\$) Last Price) (A\$) – from Bloomberg
- Steel – CRU index of steel prices – LMFMDY (London Metals Exchange Steel Billet Spot Last Price) (A\$) – from Bloomberg
- Copper – LME spot price – LMCADY (London Metals Exchange Spot Copper (\$) Last Price) (A\$) – from Bloomberg
- Oil - Historical monthly average historical crude oil prices (Europe Brent Spot Price FOB (Dollars per Barrel)) – US Energy Information Administration website

Annual price changes for each commodity have been calculated as the change in the spot price between the first day of the relevant two calendar years for which data is available, converted to a real change using actual CPI for that year. For example, the 2013 copper price change is equal to the percentage change in the copper spot price between 2 January 2013 and 2 January 2014, converted to a real change using actual 2013 CPI.

Labour and other price changes

Historical labour costs have been disaggregated into internal and external labour, reflecting the categories AusNet Electricity Services has broken down its forecast labour costs into.

Internal labour costs

Internal labour costs from 2011-2014 have been estimated based on the real wage growth set out in AusNet Services' Australian Municipal, Administrative, Clerical and Services Union and Electrical Trades Union enterprise agreements ("EAs"). Estimating these costs involved:

- Obtaining nominal wage outcomes from each EA
- Converting nominal wage outcomes to calendar year values
- Weighting calendar year nominal wage outcomes based on the representation of each union within AusNet Services' unionised workforce (assumed to be consistent across the 2011 – 2014 period)
- Converting the weighted calendar year nominal wage outcomes to real wage outcomes using actual CPI growth (using the same methodology as described in section 2.4 Augex model).

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External labour costs

External labour costs from 2011 - 2014 are estimated based on the actual increase in the June Quarter Construction Wage Price Index (sourced from the Australian Bureau of Statistics website), converted to real values using actual CPI growth.

Estimated information:

For materials price changes, it is noted that the reported data is based on historical changes in commodity prices on the London Metals Exchange and the market for Brent Crude. It is therefore based on the global price of raw materials rather than finished goods (e.g. copper conductor) procured by AusNet Services in the local market. Accordingly, the reported values are estimates of historical real changes in AusNet Services' materials costs based on reasonable proxies.

Both internal and external labour price changes are estimates. The internal labour price changes have been derived based on the assumption that all internal labour costs have increased directly in line with EBA rates. The external labour costs use the Construction Wage Price Index as a proxy for external labour price changes.

These are the best estimate Management can provide, based on information available.

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2.17 Step Changes

A step change is a material difference in forecast expenditure from historic expenditure not attributable to forecast output growth, real price changes or productivity change.

Table 2.17.1 – forecast opex step changes for standard control services

This Basis of Preparation is only relevant to the 2011 – 2014 columns of the Table. All amounts are shown in nominal dollars.

Preparation Methodology:

Proposed step changes

Demand management:

- The 2011 and 2012 costs are the same as reported in the 'Step Changes' templates for the 2011 and 2012 Regulatory Accounts respectively, which were ultimately sourced from the Financial System and thus are actual costs.
- The 2013 costs were extracted from the financial system, however are different from the amounts reported in the 'Step Changes' template of the 2013 Regulatory Accounts. This is because the costs in the 2013 Regulatory Accounts did not include all relevant demand management expenditure incurred in that year.
- The 2014 costs were reported in the 'Income Statement' template of the 2014 Regulatory Accounts, as 'Non Network Alternative Costs'.

VBRC pass through opex:

- 2011 has been set equal to the allowance approved for AusNet Electricity Services for that year and is thus an estimate. Actual costs could not be obtained as AusNet Electricity Services did not track this expenditure separately during 2011; therefore the assumption that the costs incurred equaled the approved allowance is the best estimate management can make.
- 2012 - 2014 are extracted directly the respective Regulatory Accounts. The amounts are contained in both the 'EBSS' and 'Safety and Bushfire' templates. For the Regulatory accounts preparation, the costs were extracted directly from the Financial System; however, some projects are not tracked separately therefore the assumption management made was costs equaled approved allowance where actuals could not be obtained.

Superannuation defined benefit schemes

- The 2011 and 2012 costs were obtained from the underlying workings to the respective Annual Regulatory Accounts. These superannuation defined scheme amounts are the actuarial adjustment portion of the Management Service Charge from SPI Management Services allocated to the Electricity Distribution business (using the results of Activity Based Costing survey process).
- Both the 2013 and 2014 amounts were extracted from the 'EBSS' template of the respective Regulatory Accounts for those years.

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Approved step changes

For approved step changes, the preparation of actual costs incurred during 2011 – 2014 as reported in Table 2.17.1 are summarised in the below table:

Step change	Source			
	2011	2012	2013	2014
Insurance				
National Framework for distribution network planning & expansion	Sourced from 'Step Changes' template in the 2011 Regulatory Accounts	Sourced from 'Step Changes' template in the 2012 Regulatory Accounts	Calculated using workings to the 2013 Regulatory Accounts – sourced from Financial system	Calculated using workings to the 2014 Regulatory Accounts – sourced from Financial system
Substation site cleanup	Sourced from 'Step Changes' template in the 2011 Regulatory Accounts	Sourced from 'Step Changes' template in the 2012 Regulatory Accounts	Calculated using workings to the 2013 Regulatory Accounts – sourced from Financial system	Calculated using workings to the 2014 Regulatory Accounts – sourced from Financial system
Quality of supply	N/A – step change did not apply			
Electricity Safety (Bushfire Mitigation) Regulations— POEL inspection program				
SMS customers				
Amendments to electricity distribution code	Sourced from 'Step Changes' template in the 2011 Regulatory Accounts		Sourced directly from invoices	Sourced directly from invoices
Customer charter		N/A – step change did not apply	N/A – step change did not apply	N/A – step change did not apply
Electric Line Clearance Regulations, incl hazardous trees		Sourced from 'Step Changes' template in the 2012 Regulatory Accounts	Calculated using workings to the 2013 Regulatory Accounts – sourced from Financial system	Calculated using workings to the 2014 Regulatory Accounts – sourced from Financial system
Electricity safety management— Conductor ties	N/A – step change made redundant therefore no costs incurred during the 2011 – 2014 Regulatory Years			
Electricity safety management— Enhanced asset inspection programs	Sourced from 'Step Changes' template in the 2011 Regulatory Accounts	Sourced from 'Step Changes' template in the 2012 Regulatory Accounts	Calculated using workings to the 2013 Regulatory Accounts – sourced from Financial system	Calculated using workings to the 2014 Regulatory Accounts – sourced from Financial system
IT systems				
Leasing of				

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Step change	Source			
	2011	2012	2013	2014
vehicles				
Leasing of major facilities	N/A – step change did not apply	N/A – step change did not apply	This cost has not separately been tracked therefore the approved allowance has been reported	This cost has not separately been tracked therefore the approved allowance has been reported
EDPR regulatory submission cost	N/A – step change did not apply	N/A – step change did not apply	N/A – step change did not apply	
ESV levy	Sourced from 'Step Changes' template in the 2011 Regulatory Accounts	Sourced from 'Step Changes' template in the 2012 Regulatory Accounts	Calculated using workings to the 2013 Regulatory Accounts – sourced from Financial system	Calculated using workings to the 2014 Regulatory Accounts – sourced from Financial system

Estimated Information:

All amounts are considered actual information with the following exceptions:

Proposed step changes

- The 2011– 2014 VBRC amounts are considered estimated, as some projects are not tracked separately in the financial system so an estimate was required. The estimate used by management is that expenditure (of projects which actual amounts are unavailable) equals approved allowance, which is the best estimate available.

Approved step changes

- Leasing of major facilities 2013 - 2014 and EDPR regulatory submission cost 2014 only - as these costs are not tracked separately in the Financial System, the best estimate Management can make is assuming expenditure equals allowance.

Table 2.17.1 – forecast capex step changes for standard control services

This Basis of Preparation is only relevant to the 2011 – 2014 columns of the Table. All amounts are shown in nominal dollars.

Preparation Methodology:

The capex step changes were identified by referring to the two sources of definitions provided by the AER, being:

1. The issues register define a capex step change as: “An externally imposed change in the scope or scale of required capex expenditure”

Basis of Preparation

2. The RIN instructions define a step change as: “A material difference in forecast expenditure from historic expenditure not attributable to forecast output growth, real price changes or productivity change.”

On the basis of these two definitions, Table 2.17.1 reports material changes in capex that were due to government imposed programs (customer imposed capex does not meet the definition as it would count as “output growth”). Historical step changes reported are consistent with programs AusNet Electricity Services have previously reported to the AER as safety programs (either approved in the last EDPR or the VBRC pass through, or the PRF Pass Through).

The capex amounts were all sourced for the respective Regulatory Accounts for the 2009 – 2014 years. They are direct costs only (i.e. exclusive of overheads).

Table 2.17.3 – forecast opex step changes for dual function assets

Table 2.17.1 – forecast capex step changes for dual function assets

AusNet Electricity Services does not have any dual function assets.

Basis of Preparation

6.1 Telephone Answering

Table 6.1.1 Telephone answering data

System data for this report is extracted from Avaya CMS Supervisor Reporting tool (Avaya is the current telephony system provider) and the IPScope Reporting Interface (IPScope are the current IVR Platform Provider).

The following reports are run for each of the columns:

- **Total number of calls received:** Total Calls Per Day Report for 2013 and 2014 ran through IPScope Reporting Interface. This reflects all calls received by AusNet Services, irrespective of whether they are queued to an operator, resolved via automated services, or abandoned. Data is unavailable for 2010, 2011 and 2012 as it was not a requirement of years prior to 2013. Therefore, in order for the prescribed formula in column G to report the correct result for column G, AusNet Electricity Services has populated column D with data that will result in a correctly-stated column G, but is not sourced from a system (column G's calculation is described below in 'sub-total number of calls received'). For the avoidance of doubt, for the years 2010-2012, the data in column D is not consistent with the definition for that column and has simply been entered out of necessity to ensure the formula in column G (which is unable to be changed given the template restrictions) results in the correct result for that column.
- **Calls to payment lines and automated interactive services:** This column is calculated from the following formula:
 - Total number of calls received (column D) *less*
 - Calls abandoned by the customer within 30 seconds of the call being queued for response by a human operator (column F) *less*
 - Sub-total number of calls received (column G).

This formulation required that the formula originally included by the AER in column G be replaced by a number derived from Avaya, for the number of calls offered to an operator. In AusNet Services' view, the integrity of the data is unchanged by switching the formula from column G to column E.

- **Calls abandoned by the customer within 30 seconds of the call being queued for response by a human operator:** Call Profile Daily Faults report (Avaya CMS) ran per day from Jan 1, 2010 – Dec 31, 2014 on the following electricity fault call queues; Wire Down, Streetlights, Life Threatening, Electricity Faults
- **Sub-total number of calls received:** This column excludes calls to payment lines/automated interactive services and calls abandoned within 30 seconds. These are identified as follows:
 - **Calls received excluding calls to payment lines/automated services:** This is calculated by running the Call Profile Daily Faults report (Avaya CMS) by day from Jan 1, 2010 – Dec 31, 2014 on the following electricity fault call queues; Wire Down, Streetlights, Life Threatening, Electricity Faults

Basis of Preparation

- **Calls abandoned within 30 seconds:** Call Profile Daily Faults report (Avaya CMS) ran per day from Jan 1, 2010 – Dec 31, 2014 on the following electricity fault call queues; Wire Down, Streetlights, Life Threatening, Electricity Faults

- **Calls to the fault line answered in 30 seconds:** Call Profile Daily Faults report (Avaya CMS) ran per day from Jan 1, 2010 – Dec 31, 2014 on the following electricity fault call queues; Wire Down, Streetlights, Life Threatening, Electricity Faults.

Basis of Preparation

6.2: Reliability and customer service

Table 6.2.3 - Unplanned momentary interruptions to supply (MAIFI) – Historical

Momentary Average Interruption Frequency Index (MAIFI) is, as per the ESCV's Information specification (Service performance) for Victorian Electricity Distributors, 1 January 2009, p. 30: 'The total number of momentary interruptions divided by the total number of distribution customers.'

A Distribution Customer is a distribution customer (with active accounts) with an active National Metering Identifier (NMI).

The annual MAIFI results have been previously audited before being submitted to the AER each year.

Preparation Methodology:

To report MAIFI in any given year, three supporting reports are first prepared. The process undertaken to produce these supporting reports is described below.

Feeder Classification

- Obtain Feeder Maximum Demand (MVA) from Network Strategy and Planning (Region Planners).
- Obtain the year-end feeder level summary for overhead and underground line length SDME Support Team via IT Helpdesk.
- Feeders were classified to either Urban, Short Rural or Long Rural:
 - Urban Feeder: $\frac{\text{Maximum Demand (MVA)}}{\text{Overhead+Underground Length (km)}} > 0.3 \text{ MVA/km}$
 - Short Rural Feeder is not an urban feeder with total Overhead and Underground line length less than 200 km.
 - Long Rural Feeder is not an urban feeder with total Overhead and Underground line length greater than 200 km.

Customer Count Estimation Process

- Obtain Customer Count by Feeder report from AusNet Services' application Poweron Fusion. This report is automatically generated every first day of each month.
- The average customers count is estimated by :

$$\frac{\text{Customer Count at Start of year} + \text{Customer Count at end of year}}{2}$$

Network Outage Summary

- Extract the Network Outage Summary Report from Poweron Fusion. Ensure that all incident status is equal to "Completed". This status is attained once all data clean-up and validation have been carried out by CEOT Data Analysts.

Basis of Preparation

- Transmission and Sub-transmission related incidents in Poweron Fusion reports currently require CEOT Data Analysts to obtain the breakdown of the affected feeders. The breakdown list contains information on the customer interruptions and customer minutes off supply (CMOS) on each affected feeder.
- To distinguish between Unplanned and Planned outages in the Network Outage Summary Report, apply the following filters to field name "Classification" as follow:
- Planned Outages = Planned HV Incident ; Planned LV Incident
- Unplanned Outages <> Planned HV Incident ; Planned LV Incident
- The MED threshold for the given year was calculated from supply interruption data for the five years previous. If the USAIDI on one particular day exceeds the MED threshold value, it will be classified as a Major Event Day (MED).
- Estimated momentary outages from non-telemetered devices were manually added to the Network Outage Summary report. Since these events have unknown dates, all Cyclo-related events assume a date of 31 December 2014 for recording purposes.

From the Network Outage Summary report, create a summary table of unplanned outages for Customer Interruptions (momentary) and CMOS by feeder classification (i.e. Urban, Short Rural, Long Rural). The MAIFI values are calculated using the average customer count by feeder classification.

Estimated Information:

No estimation required.

Basis of Preparation

7.4 Shared Assets

Shared assets are those assets that are used to provide both standard control services and unregulated services. In some circumstances this may reflect revenue apportionment in line with the AER's Shared Asset Guideline.

A division of AusNet Services is Select Solutions, who provide metering, data and asset management solutions, including integrated mobile and spatial technologies. They perform unregulated services, and are part of the 'AusNet Services Holdings Pty Ltd' consolidated group.

Table 7.4.1: Total unregulated revenue earned with shared assets

Table 7.4.2: Shared asset unregulated services – apportionment methodology

Preparation Methodology:

Note – this is only applicable to the 2006 – 2014 columns within Table 7.4.1.

All Shared Asset Unregulated Services except Site Leasing

Based on information included in the AER Guidelines, an appropriate subject matter expert identified assets which are considered Shared Assets. A review of all external revenue sources was conducted to identify the assets used to provide the service and whether those assets were acquired using Regulated Capex. This information was validated and reviewed by appropriate subject matter experts.

Once the shared assets and associated revenue streams were established, information from the financial system was used to determine the revenue on a calendar year basis for those unregulated services. The revenue reported includes the full amount of unregulated revenue from providing the shared asset service, not just the component attributable to the use of shared assets.

The following adjustments are made to certain categories of unregulated revenue from the use of shared assets.

- Contestable metering contains an element of revenue that is not derived from providing a contestable service but acts as a cost pass through arrangement for the use of consultants. A mechanism exists whereby if the use of a consultant results in winning new work, the charge for that consultant is passed on to the customer through AusNet Services. The consultant will charge AusNet Services and AusNet Services will charge the customer the same amount creating a cost pass through arrangement. This revenue stream is excluded for the purposes of this submission. Invoice information was used to determine the amount to be excluded from Shared Asset Revenue.
- Utility materials management and fibre optic cable leasing revenues require apportionment across AusNet Services' networks. The utility materials management is provided using the corporate IT systems funded by the networks, and the percentage to apportion to the Electricity Distribution network is based on the business cases of the IT systems. The fibre optic cable leasing revenues is allocated to the Electricity Distribution business based on information contained in the lease agreement.

Basis of Preparation

Site Leasing

In relation to Shared Asset Revenue generated from 'Site Leasing – Zone Substation', using reports generated from the Property Asset Management System, it was determined that there was one Lease Revenue stream in place on Zone Substation land.

The information reported in the 2006 – 2014 Regulatory Years was sourced from the lease contract in place with the current tenant. The revenue reported is based on actual amounts invoiced to the tenant (which includes an annual escalation percentage, in accordance with the terms of the lease agreement).

Estimated Information:

All information is actual information with the exception of utility materials management and fibre optic cable leasing revenues which require apportioning to the Electricity Distribution network as the assets are used across AusNet Services' networks. The percentages used to apportion are considered management's best estimates.

Basis of Preparation

7.5 EBSS

Table 7.5.1.1 – opex allowances applicable to EBSS (EBSS target)

2009-2014 total opex allowances and all approved excludable costs have been sourced from the 2006-10 and 2016-20 regulatory determinations. 2009 and 2010 values have been converted into real 2005 using actual CPI (consistent with methodology described in section 2.4 Augex Model).

The network growth adjustment has been calculated using actual and revised estimates of the output growth drivers – line length kilometres, number of distribution transformers and zone substation capacity – used for the 2011-2015 determination.

Table 7.5.1.2 – actual and estimated opex applicable to EBSS

2009 - 2014 Total opex has been sourced from the Regulatory Accounts for each respective year and is equal to the sum of Operating, Maintenance and Net Finance Charges.

In relation to 2009 – 2010:

- 2009 movements in provisions related to opex and other adjustments or exclusions required by the EBSS are consistent with Table 13.5 on pages 637-38 of the AER's final decision for the 2011-2015 regulatory control period and have been sourced from the AER's final decision opex model for that period.
- The 2010 movements in provisions related to opex is extracted from the Template 2.13 'Provisions' and is equal to the sum of all changes in provisions allocated to opex for 2010.
- The 2010 other adjustments or exclusions required by the EBSS are equal to non-recurrent expenditure in that year, which is the sum of:
 - License fees (sourced from the Financial System)
 - Superannuation payments that reflect the amount that AusNet Services' management service provider (during 2010), SPI Management Services (SPIMS), charged for actuarial adjustments to defined benefit superannuation contributions.

In relation to 2011 – 2014:

Approved excludable costs and opex associated with approved cost pass through are as per the EBSS templates for each year of the Regulatory Accounts, with the following exceptions:

- Non-network alternative costs have been set to zero because they were:
 - Included in the controllable opex allowance determined by the AER for the current period; and
 - Not listed as an excluded cost category in the AER's 2011-2015 final determination.¹

¹ AER, SPI Electricity Determination 2011-2015, p.21.

Basis of Preparation

- 2012 self-insurance costs have been restated from zero and calculated by a suitable SME based on data in the relevant work codes and supporting information from contractor invoices
- 2011 and 2012 superannuation defined benefit schemes have been restated from zero using actual data extracted from the Financial System
- 2011 pass through event costs have been restated from zero and estimated based on the allowance approved for that year.

Movements in provisions related to opex have been calculated based on the information reported in the Template 2.13 'Provisions' and are equal to the sum of all changes in provisions allocated to opex for the relevant years.

Estimated Information:

All amounts are considered actual with the following exceptions:

- Movements in provisions related to opex (for all Regulatory Years) is estimated information based on the estimated opex/capex split required to be calculated in Template 2.13 'Provisions'.
- 2011 cost pass through were not separately captured during 2011, therefore an estimate is required. The best estimate Management can make is to assume costs equaled the allowance.