

Reset RIN Basis of Preparation 2016-2020



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Overview

United Energy must explain, for all historical information in the regulatory templates (up to and including 2014 and including actual information and estimated information), the basis upon which United Energy prepared information to populate the input cells (basis of preparation).

The Basis of Preparation document (this document) must, for all information:

- a) demonstrate how the information provided is consistent with the requirements of this Notice;
- b) explain the source from which United Energy obtained the information provided;
- c) explain the methodology United Energy used to provide the required information, including any assumptions United Energy made; and
- d) explain circumstances where United Energy cannot provide input for a variable using actual information, and therefore must provide estimated information:
 - 1) why an estimate was required, including why it was not possible for United Energy to provide actual information;
 - 2) the basis for the estimate, including the approach used, assumptions made and reasons why the estimate is United Energy's best estimate, given the information sought in the notice.

In accordance with the requirements above, this appendix provides details to support the information provided by United Energy in the Microsoft Excel workbooks titled:

- *'United Energy Reset RIN template'*
- *'United Energy Backcasting RIN template'*

To satisfy the requirements of the Notice, the following information has been provided for each RIN table:

- assessment of data quality;
- data source;
- classification as actual or estimated information, including appropriate justification if estimated;
- methodology and assumptions adopted to prepare the information; and
- any additional comments to assist users of the information to understand the basis of preparation.

The table below outlines the classifications used to assess data quality.

Table 1: Data quality and classifications

Colour coding	Availability of data from NSP's Primary System	Assumptions / methodology
Green	Available and verifiable	Simple – no additional work or minor work around (e.g. data sourced from a secondary system)
Light green	Available with some gaps	Moderate – estimate based on statistically significant sample size
Yellow	Little or no data available	Complex – estimate based on formula, standard parameters or other source

Colour coding	Availability of data from NSP's Primary System	Assumptions / methodology
Pink	Little or no data available	Subjective – based on significant estimates, judgements and assumptions
Black	N/A	Not applicable to relevant NSP

The table below provides the AER definitions for actual and estimated information.

Table 2: Definitions – ‘Actual and ‘estimated’

Term	Table Heading
Actual information	Information presented in response to the Notice whose presentation is Materially dependent on information recorded in United Energy's historical accounting records or other records used in the normal course of business, and whose presentation for the purposes of the Notice is not contingent on judgments and assumptions for which there are valid alternatives, which could lead to a Materially different presentation in the response to the Notice. 'Accounting records' include trial balances, the general ledger, subsidiary accounting ledgers, journal entries and documentation to support journal entries. Actual financial information may include accounting estimates, such as accruals and provisions, and any adjustments made to the accounting records to populate United Energy's regulatory accounts and responses to the Notice. 'Records used in the normal course of business', for the purposes of non-financial information, includes asset registers, geographical information systems, outage analysis systems, and so on.
Estimated information	Information presented in response to the Notice whose presentation is not Materially dependent on information recorded in United Energy's historical accounting records or other records used in the normal course of business, and whose presentation for the purposes of the Notice is contingent on judgments and assumptions for which there are valid alternatives, which could lead to a Materially different presentation in the response to the Notice.

The estimated information is produced using the methodology detailed below. This methodology represents United Energy's best estimate as applied over prior reporting periods and is sourced from United Energy's information systems, audited information (where applicable), internal management reports and subject matter expert professional judgement based on the nature of United Energy's operations. United Energy is unable to provide information with greater accuracy than that provided in its response.

Where estimates have been provided, United Energy is currently considering the feasibility of improvement opportunities to allow actual information to be provided in the future.

Detailed basis of preparation

The following table outlines the basis of preparation of the information provided in the 'United Energy Reset RIN template' outlined in the Overview section.

Table 3: Reset RIN details

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
2.4	Augex Model		General						UE has produced a number of documents which contain instructions on how the data required for the RIN category is to be obtained and populated. These documents include detailed methodologies to provide both actual and estimated data. The basis of preparation against each relevant RIN category is a summary of the methodology detailed within these UE produced documents. For this particular RIN, document UE PR2223 was referenced and can be provided upon request.		UE have no 'long rural' or CBD feeder classification and information is therefore not provided.
		2.4.1	Augex Model Inputs - Asset Status – Sub transmission Lines		NF	Load Forecast Spreadsheet - Network Planning Circuit Data Sheet - Network Planning AM/FM Report PSSE Simulation Augex Model Table 2.4.2	Actual		Line ID, Line Voltage, Originating Substation and Terminating Substation data is all taken from the Load Forecast Spreadsheet. Urban/Rural classification based on HV feeder classification can be taken		

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						Augex Model Table 2.4.5			<p>from Table 2.4.2. The line lengths are taken from the Circuit Data Sheet. The historical lengths are calculated based on the sub-transmission projects scopes that have taken place within the specified period.</p> <p>The demand in amps is sourced from PSSE and the MVA and MW can be calculated using the power factor and voltage of the sub-transmission line, which is the same as its circuit.</p> <p>The sub-transmission line ratings are taken from the Circuit Data Sheet. The network segment ID can be taken from Table 2.4.5.</p>		
		2.4.2	Augex Model Inputs - Asset Status - High Voltage Feeders		NF	Load Forecast Spreadsheet - Network Planning AM/FM Report Augex Model Table 2.4.5	Actual		<p>Feeder ID Rating, Demand, Originating Substation and Voltage data is all taken from the Load Forecast Spreadsheet.</p> <p>Feeder lengths are taken from AM/FM report. The historical lengths are taken from the end of the year (1st January 2011 report is used for 2010 lengths). The RIN requests maximum demand</p>		

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									(weather corrected at 50% PoE) in both MVA and MW. UE does not have the maximum demand (50% PoE) for each individual feeder. Prior to 2014, the maximum demand (50% PoE) is only available for the network level (terminal stations' demand). Feeder demand (50% PoE) = Feeder demand (Actual) × (Network demand (50% PoE)) / (Network demand (actual)) Historical maximum actual demand in amps for each feeder can be found in the Load Forecast Spreadsheet. The demand in MVA and MW can be calculated using the feeder's power factor and the feeder's voltage sourced from the Load Forecast Spreadsheet. Classification calculated based on demand and length is in accordance with AER definitions Network segment ID can be taken from Table 2.4.5.		
		2.4.3	Augex Model Inputs - Asset Status – Sub transmission Substations, Sub transmission		NF	Load Forecast Spreadsheet - Network Planning Distribution Annual Planning Report	Actual		Of sub-transmission Substations, Switching Stations and Zone Substations, UE only has Zone Substations in its		

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
			Switching Stations, and Zone Substations			Augex Model Table 2.4.5			network. Substation ID, Voltage, Demand and Ratings data is taken from the Load Forecast Spreadsheet. The number of transformers per substation is taken from the Distribution Annual Planning Report. The network segment ID can be found in table 2.4.5.		
		2.4.4	Augex Model Inputs - Asset Status - Distribution Substations		NF	Network Load Management - Network Planning Transformer Load Management - Network Planning Augex Model Table 2.4.5	Actual		The utilisation of a substation is calculated as the peak demand (corrected for weather at 50% probability of exceedance) divided by the cyclic rating. The 2014 peak demand is provided from the TLM report that is sourced from the NLM. As the NLM became fully operational in September 2013, the 2010 peak demand is sourced from 'TLM Analysis 2010' maintained Network Planning. The peak demand is corrected for weather by multiplying by the following factors: (Coincident Summated Weather Adjusted System Annual Maximum Demand 50% POE) / (Coincident Summated Raw System		

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									Annual Maximum Demand) The minimum cyclic rating is sourced from the TLM report for 2014 sourced from NLM system.		
		2.4.5	Augex Model Inputs - Network Segment Data		F / NF	Augex Model Tables 2.4.1, 2.4.2, 2.4.3, 2.4.4 and 2.4.6	Actual		The average unit cost is the CAPEX from Table 2.4.6 divided by the total capacity. Historical capacity is listed in Tables 2.3.1 to 2.3.4. The capacity factor is calculated as the added capacity over the period 2010-2014 for historical period and divided by the total capacity of the upgraded assets at the start of the period. Historical capacity is listed in Tables 2.3.1 to 2.3.4. The augmentation model is used to determine the mean utilisation threshold parameter for each segment that sets the model's forecast of capacity added to the network to be equal the actual capacity added. Standard deviation of the utilisation threshold for the period is the square root of the mean of the utilisation threshold for the period.		

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		2.4.6	CAPEX and Net Capacity Added by Segment Group		F	2013 and 2014 Category Analysis RINs - Tab 2.3 Transformer Load Management - Network Planning Annual Non-Financial RINs (2011, 2012, 2013, 2014)	Actual / Estimate	The capitalised expenditure process does not allow for classification of Urban/Short rural split. This split for capital expenditure has been allocated based on UE's best estimate.	Historical CAPEX has been taken from Table 2.3.4 of Tab 2.3 of the previous and current submitted Category Analysis RINs. The CA RINs have been used to get an estimate of the urban/rural CAPEX split in 2010-2013 for HV feeders, 2014 for HV feeders and 2014 for Distribution Substations. The 2013 and 2014 CA RINs list the individual HV feeder projects with CAPEX that are summed up in Table 2.3.4 of the CA RIN. The relevant Annual Non-Financial RIN is used to determine the classification of that feeder. The 2014 CA RIN lists the individual distribution substation projects with CAPEX that are summed up in Table 2.3.4 of the CA RIN. UE's internal TLM system is used to determine the HV feeder connected to the substation and the relevant Annual Non-Financial RIN is used to determine the classification of that feeder. The estimate breakdown of urban/rural is projected onto the total CAPEX for the asset		

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									category. Previously reported figures in 'other assets' have been included under HV feeder which matches how the CAPEX has been forecasted for the next period. Previously reported figures in 'LV augmentation' have been included under Distribution substation which matches how the CAPEX has been forecasted for the next period.		
2.13	Provisions	2.13.1	Changes in Total Provisions Incl. RPM		F	2013 Economic Benchmarking RIN – Tab 3.2 2014 Economic Benchmarking RIN – Tab 3.2.3	Actual		Provisions reported as per previously submitted RINs.		
		2.13.2	Allocation of Movement in Total Provisions Incl. RPM		F	2013 Economic Benchmarking RIN – Tab 3.2 2014 Economic Benchmarking RIN – Tab 3.2.3	Actual		Provisions reported as per previously submitted RINs.		
2.14	Forecast Price Changes	2.14.1	Forecast Labour and Materials Price Changes								Historical forecast price changes are not applicable to United Energy as forecasts are based on actual contract costs at the time.

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2.17	Step Changes	2.17.1	Forecast OPEX Step Changes for Standard Control Services								Not applicable to United Energy.
		2.17.2	Forecast CAPEX Step Changes for Standard Control Services								Not applicable to United Energy.
		2.17.3	Forecast Opex Step Changes for Dual Function Assets								Not applicable to United Energy.
		2.17.4	Forecast Capex Step Changes for Dual Function Assets								Not applicable to United Energy.
6.1	Telephone Answering	6.1.1	Telephone Answering data		NF	Faults YTD GOS Monitor 2010 - UED Electricity 2011 Faults GOS UED MGN Final - UED Daily Tab 2012 Faults GOS UED MGN Final - UED Daily Tab 2013 Faults GOS UED MGN Final - UED Daily tab 2014 – Aegis Daily Report (raw) - Faults Desk only	Actual		2010 to 2013 data was extracted from source reports as per the AER definitions. 2014 data was extracted from the Aegis Daily Report as per the AER definitions.		

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
6.2	Reliability & Customer Service		General						UE has produced a number of documents which contain instructions on how the data required for the RIN category is to be obtained and populated. These documents include detailed methodologies to provide both actual and estimated data. The Basis of Preparation against each relevant RIN category is a summary of the methodology detailed within these UE produced documents. For this particular RIN, document UE PR2354 was referenced and can be provided on request.		UE have no 'long rural' or CBD feeder classification and information is therefore not provided.
		6.2.1	Unplanned Minutes Off Supply (SAIDI) - Actual, Target and Proposed Reliability		NF	2011-2014 Annual Non-Financial RINs UE Outage History document	Actual		Actual data for 2011 and later is taken from submitted Annual Non-Financial RINs from each year. Actual data for years before 2011 is taken from UE prepared document Outage History04_10.		Feeder categorisation (Urban/Short Rural) of some feeders was changed after the 2011 and 2012 Annual Non-Financial RIN submissions. This re-categorisation changed the customer numbers for each region and the resultant SAIDI for each region.
		6.2.2	Unplanned Minutes Off Supply (SAIFI) - Actual, Target and		NF	2011-2014 Annual Non-Financial RINs	Actual		Actual data for 2011 and later is taken from submitted Annual Non-Financial RINs from each		Feeder categorisation (Urban/Short Rural) of some feeders was changed after the 2011

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
			Proposed Reliability			UE Outage History document			year. Actual data for years before 2011 is taken from UE prepared document Outage History04_10.		and 2012 Annual Non-Financial RIN submissions. This re-categorisation changed the customer numbers for each region and the resultant SAIFI for each region.
		6.2.3	6.2 Reliability and Customer Service Performance 6.2.3 Unplanned MAIFI, Historical, Target and Proposed			2011-2014 Annual Non-Financial RINs UE Outage History document	Actual		Actual data for 2011 and later is taken from submitted Annual Non-Financial RINs from each year. Actual data for years before 2011 is taken from UE prepared document Outage History04_10.		
		6.2.4	Customer Numbers		NF	2011-2014 Annual Non-Financial RINs UE Outage History document	Actual		Actual data for 2011 and later is taken from submitted Annual Non-Financial RINs from each year. Actual data for years before 2011 is taken from UE prepared document Outage History04_10.		Feeder categorisation (Urban/Short Rural) of some feeders was changed after the 2011 and 2012 Annual Non-Financial RIN submissions. This re-categorisation changed the customer numbers for each region and the data entered for these years, in Table 6.2.4.
		6.2.5	Customer Service		NF	2011-2014 Annual Non-Financial RINs Aegis Daily Report (raw) – Faults Desk			Actual data for 2011 and later is taken from submitted Annual Non-Financial RINs from each year. Actual data for years before 2011 is taken from Aegis Daily Report (raw) – Faults Desk.		

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7.4	Shared Assets	7.4.1	Total Unregulated Revenue Earned with Shared Assets (\$'000 Nominal)		F	Historical General Ledger data	Actual		Actual data for revenue recorded under "Pole Rental" general ledger revenue account used.		AER approved methodology.
		7.4.2	Shared Asset Unregulated Services - Apportionment Methodology		F	As above	Actual		N/A		No apportionment methodology used
7.5	EBSS	7.5.1	The Carryover Amounts that Arise from Applying the EBSS during the 2010-11 to 2014-15 Regulatory Control Period		F	2011-2014 Annual Financial RINs 2011-2015 AER Final Determination	Actual		Total of operating expenditure and maintenance expenditure in Annual Financial RINs used as total Opex. Note that debt raising cost is separately reported in Annual Financial RINs and do not form part of the total Opex. The amount is then adjusted for opex related provisions, DMIS and GSL payments to arrive at Opex for the purpose of EBSS. 2009 and 2010 actual opex figures are per the model used in AER's 2011-2015 final determination.		AER approved methodology.
		7.5.2	Proposed Forecast OPEX for the EBSS for the Forthcoming Regulatory Control		F	Opex is calculated using the Best Step Trend method with 2014 calendar year as	Estimate	AER approved methodology.	Best Step Trend method of forecasting opex. 2014 calendar year is the base year. Additionally adjustments		

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
			Period			the base year. The sources of the 2014 values are contained in the submitted Annual RIN.			made for economic assumptions on time value of money. Additionally adjustments made for in the form of step-changes expected to occur over the forthcoming regulatory period.		

The following table outlines the service classification changes contained in the AER approved *Final Framework and approach for the Victorian Electricity Distributors Regulatory control period commencing 1 January 2016* (October 2014) that may have required data to be backcast.

Table 4: Service classification changes

Service	Current classification 2011-15	Proposed classification 2016-20	Backcasting requirement
Connection services			
Customer initiated undergrounding and / or rearrangement of distribution assets services that customer from to	Alternative control (quoted)	Standard control	No impact on historical data reported in RIN templates.
Supply enhancement at customer request	Alternative Control (quoted)	Unclassified	No impact on historical data reported in RIN templates.
Supply abolishment (up to 100 amps)	Alternative Control (fee-based)	Standard control	No impact on historical data reported in RIN templates.
Metering services			
Installation, operation, repair & maintenance, and replacement of type 5, 6 and smart metering installations – not subject to competition	Unclassified	Alternative Control (revenue cap)	No impact on historical data reported in RIN templates.

Service	Current classification 2011-15	Proposed classification 2016-20	Backcasting requirement
Collection of meter data, processing and storage of meter data and provision of access to meter data for type 5-6 metering installations	Unclassified	Alternative Control	No impact on historical data reported in RIN templates.
Meter exit services	Unclassified	Alternative Control	No impact on historical data reported in RIN templates.
Meter restoration service	Unclassified	Alternative Control	No impact on historical data reported in RIN templates.
Ancillary network services			
Reserve feeder construction	Alternative control (fee based)	Negotiated Service	No reserve feeder construction incurred.
Reserve feeder maintenance	Alternative control (fee based)	Alternative control (quoted)	No reserve feeder maintenance expenditure incurred.
Emergency recoverable works	Alternative control (quoted)	Unclassified	No impact on historical data reported in RIN templates.
Public lighting			
Operation, maintenance and repair – dedicated public lighting assets	Alternative control (fee based)	Negotiated Service	Updated to remove 'Operation, maintenance and repair – dedicated public lighting assets' from expenditure reported in Tab 4.1 of the Category Analysis RIN.
Replacement – dedicated public lighting assets	Alternative control (fee based)	Negotiated Service	Updated to remove 'Replacement – dedicated public lighting assets' from expenditure reported in Tab 4.1 of the Category Analysis RIN.

The following table outlines the basis of preparation of the information provided in the 'United Energy Backcasting RIN template' outlined in the Overview section.

Table 5: Backcasting RIN details

Tab	Table Name	Table	Table Title	Data quality	Fin / Non-fin	Data source	Actual / Estimate	Justification (if estimated)	Methodology (Actual & Estimated)	Assumptions (Actual & Estimated)	Additional Comments
4.1	Public lighting		General		F	2013 and 2014 Category Analysis RINs	Estimate	The dedicated / non-dedicated split has been taken from the AER final decision public lighting model as it is the best information available to UED.	<p>Estimated expenditure for dedicated public lighting assets was calculated as 24 per cent of all public lighting assets as per the AER final decision public lighting model.</p> <p>Estimated expenditure for dedicated public lighting assets was removed from total expenditure in 2009 to 2014 reported in previous RINs.</p>		