

**AER Economic Benchmarking RIN**

**Powercor Australia Ltd**

**Basis of Preparation documents**

**Year ended 31 December 2015**

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## **3.1 Revenue**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.1 Revenue	
Table name: 3.1.1 Revenue grouping by chargeable quantity – Standard Control Services (SCS) table only	
Table name: 3.1.2 Revenue grouping by Customer type or class – (SCS table only)	
Variable Code	Variable Name
DREV0101 – 113	(ALL)
DREV01	Total revenue by chargeable quantity
DREV0201 - 0206	(ALL)
DREV02	Total Revenue by customer class
BOP ID	BMPAL3.1BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### ***Requirements of the notice:***

Powercor must report revenues split in accordance with the categories in the Templates. The Templates require Powercor to report revenues by chargeable quantity (Table 3.1.1) and by customer class (Table 3.1.2). The total of revenues by chargeable quantity must equal the total of revenues by customer class because they are simply two different ways of disaggregating revenue information. Powercor must also separately provide revenues received or deducted as a result of incentive schemes (Table 3.1.3).

Powercor must report revenues split in accordance with definitions of *Standard Control Services* and *Alternative Control Services* provided in chapter 9. These definitions specify the services to be reported against Standard Control Services and Alternative Control Services in periods where different service classifications applied.

Powercor must enter '0' into cells that have no effect on the revenues of Powercor. For instance, if Powercor does not use a shoulder period for Energy Delivery charges then the amount of revenue reported for the variable would be '0'.

#### **Box 1 Revenue Financial Reporting Framework**

Revenues must be reported in accordance with the requirements of, and should reconcile to, the Direct Control Services revenues reported in the Regulatory Accounting Statements as per the Annual Reporting Requirements. For instance if revenues in the Regulatory Accounting Statements for Direct Control Services are inclusive of taxes or the penalties or rewards of incentive schemes then revenues must be reported inclusive of these amounts.

As a consequence, total revenues for Direct Control Services will equal those reported in the Regulatory Accounting Statements (with the exception of total revenue in Table 3.1.3).

#### **Table 3.1.1 Revenue grouping by chargeable quantity**

Revenues reported must be allocated to the chargeable quantity that most closely reflects the basis upon which the revenue was charged by Powercor to customers (the chargeable quantities are the Variables DREV0101– DREV0112).

Revenues that cannot be allocated to the specific chargeable quantities in variables DREV0101 to DREV0112 must be reported against 'Revenue from other Sources' (DREV0113).

'Revenue From Unmetered Supplies' is the same for table 3.1.1 as for table 3.1.2, so they must be equal.

#### **Table 3.1.2 Revenue grouping by customer type or class**

Powercor must allocate revenues to the customer type that most closely reflects the customers from which Powercor received its revenue.

Revenues that Powercor cannot allocate to the customer types DREV0201–DREV0205 must be reported against 'Revenue from other Customers' (DREV0206).

**Response:**

The data used to populate tables 3.1.1 and 3.1.2 were from Corporate Finance's annual tariff revenue report and checked against the annual regulatory accounting statements.

3.1.1– Tariff revenue reported in this table is categorised in accordance to the definitions stated under 'Charges' in chapter 9.

3.1.2– Tariff revenue reported in this table is categorised in accordance to the definitions stated under 'Customer Types' in chapter 9.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL<sup>1</sup> data green; and ESTIMATED<sup>2</sup> derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

Tariff Revenue data for 2015 was obtained from the annual regulatory accounts which contains actual billed revenue, accruals and billing adjustments. Actual billed quantities and accruals are sourced from Powercor's billing system, CIS Open Vision and billing adjustments (if any) are sourced from the Billing department.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p><b>Tariff Revenue</b> - Data is obtained from Finance's end of year tariff revenue report. The revenue reported includes actual revenue billed in CISOV and accruals calculated in CISOV. Finance adjusts volumes and revenue according to accounting principles when there are known billing issues. E.g. incomplete billing adjustments. The billing department will advise the consumption and splits (i.e. peak, shoulder, off peak) to be adjusted in the future and the applicable distribution tariff rates are then used to calculate the adjusted revenue.</p> <p>This report contains revenue split by tariff, then revenue billed for each tariff component (i.e. standing charges, peak revenue by step, off peak charges etc.). Revenue is then aggregated based on the chargeable quantities and customer class (customer class is based on the tariff).</p>
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	as per 2006
2015	As per 2006

<sup>1</sup> Actual Information presented in response to the Notice whose presentation is Materially dependent on information recorded in Powercor'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 Powercor'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.

<sup>2</sup> Estimated Information is defined as "Information presented in response to the Notice whose presentation is not Materially dependent on information recorded in Powercor'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."

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

**Tariff Revenue** – Powercor tariff structures do not cater for these categories

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.1 Revenue	
Table name: 3.1.1 Revenue grouping by chargeable quantity – Alternative Control Services (ACS) table only	
Variable Code	Variable Name
DREV0101 – DREV0113	(ALL)
DREV01	Total Revenue by chargeable quantity
BOP ID	BMPAL3.1BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report revenues split in accordance with the categories in the Templates. The Templates require Powercor to report revenues by chargeable quantity (Table 3.1.1) and by customer class (Table 3.1.2). The total of revenues by chargeable quantity must equal the total of revenues by customer class because they are simply two different ways of disaggregating revenue information. Powercor must also separately provide revenues received or deducted as a result of incentive schemes (Table 3.1.3).

Powercor must report revenues split in accordance with definitions of *Standard Control Services* and *Alternative Control Services* provided in chapter 9. These definitions specify the services to be reported against Standard Control Services and Alternative Control Services in periods where different service classifications applied.

Powercor must enter '0' into cells that have no effect on the revenues of Powercor. For instance, if Powercor does not use a shoulder period for Energy Delivery charges then the amount of revenue reported for the variable would be '0'.

#### **Box 1 Revenue Financial Reporting Framework**

Revenues must be reported in accordance with the requirements of, and should reconcile to, the Direct Control Services revenues reported in the Regulatory Accounting Statements as per the Annual Reporting Requirements. For instance if revenues in the Regulatory Accounting Statements for Direct Control Services are inclusive of taxes or the penalties or rewards of incentive schemes then revenues must be reported inclusive of these amounts.

As a consequence, total revenues for Direct Control Services will equal those reported in the Regulatory Accounting Statements (with the exception of total revenue in Table 3.1.3).

#### **Table 3.1.1 Revenue grouping by chargeable quantity**

Revenues reported must be allocated to the chargeable quantity that most closely reflects the basis upon which the revenue was charged by Powercor to customers (the chargeable quantities are the Variables DREV0101– DREV0112).

Revenues that cannot be allocated to the specific chargeable quantities in variables DREV0101 to DREV0112 must be reported against 'Revenue from other Sources' (DREV0113).

'Revenue From Unmetered Supplies' is the same for table 3.1.1 as for table 3.1.2, so they must be equal.

#### **Response:**

Alternative Control Services revenue for 2015 excludes an allocation of intercompany interest to maintain consistency with the 2011-2015 Regulatory Information Notice which does not include this revenue in this category. Alternative Control Services revenue for 2011-2015 is consistent with the Regulatory Information Notice. This therefore complies with the Reporting Requirements.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

Alternative Control Services revenue is derived from the annual regulatory reports which are originally sourced from SAP.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<b>Alternative Control Service Revenue</b> – When retailers/customers request work to be done for Alternative Control Services activities a charge is created in either CIS-OV or SAP. These charges are then allocated to a range of specific general ledger accounts dedicated to collecting Alternative Control Services revenue to facilitate reporting in the Statutory Accounts and Regulatory Accounts/Regulatory Information Notice.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	as per 2006
2015	As per2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable



2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

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Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Alternative Control Service Revenue – No data has been provided for DREV0101, DREV0102, DREV0103, DREV0104, DREV0105, DREV0106, DREV0107, DREV0108, DREV0109 and DREV0110 as they are not applicable to Alternative Control Services

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

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*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.1 Revenue	
Table name: 3.1.2 Revenue grouping by Customer type or class – ACS table only	
Variable Code	Variable Name
DREV0201	Revenue from residential customers
DREV0202	Revenue from non-residential customers not on demand tariffs
DREV0203	Revenue from non-residential low voltage demand tariff customers
DREV0204	Revenue from non-residential high voltage demand tariff customers
DREV0205	Revenue from unmetered supplies
DREV0206	Revenue from Other Customers
DREV02	Total Revenue by customer class
BOP ID	BMPAL3.1BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report revenues split in accordance with the categories in the Templates. The Templates require Powercor to report revenues by chargeable quantity (Table 3.1.1) and by customer class (Table 3.1.2). The total of revenues by chargeable quantity must equal the total of revenues by customer class because they are simply two different ways of disaggregating revenue information. Powercor must also separately provide revenues received or deducted as a result of incentive schemes (Table 3.1.3).

Powercor must report revenues split in accordance with definitions of *Standard Control Services* and *Alternative Control Services* provided in chapter 9. These definitions specify the services to be reported against Standard Control Services and Alternative Control Services in periods where different service classifications applied.

Powercor must enter '0' into cells that have no effect on the revenues of Powercor. For instance, if Powercor does not use a shoulder period for Energy Delivery charges then the amount of revenue reported for the variable would be '0'.

#### **Box 1 Revenue Financial Reporting Framework**

Revenues must be reported in accordance with the requirements of, and should reconcile to, the Direct Control Services revenues reported in the Regulatory Accounting Statements as per the Annual Reporting Requirements. For instance if revenues in the Regulatory Accounting Statements for Direct Control Services are inclusive of taxes or the penalties or rewards of incentive schemes then revenues must be reported inclusive of these amounts.

As a consequence, total revenues for Direct Control Services will equal those reported in the Regulatory Accounting Statements (with the exception of total revenue in Table 3.1.3).

### **Table 3.1.2 Revenue grouping by customer type or class**

Powercor must allocate revenues to the customer type that most closely reflects the customers from which Powercor received its revenue.

Revenues that Powercor cannot allocate to the customer types DREV0201–DREV0205 must be reported against 'Revenue from other Customers' (DREV0206).

#### **Response:**

Alternative Control Services revenue for 2015 excludes an allocation of intercompany interest to maintain consistency with the 2011-2015 Regulatory Information Notice which does not include this revenue in this category. Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011-15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis,

revenue has been reported consistent with the cost allocation methodologies, Regulatory Financial Statements and revenue categories that applied in the relevant year. This therefore complies with the Reporting Requirements.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

Revenue from Other Customers

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

Revenue from unmetered supplies

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

Alternative Control Services revenue is derived from the annual regulatory reports which are originally sourced from SAP.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<b>Alternative Control Service Revenue</b> – When retailers/customers request work to be done for Alternative Control Services activities a charge is created in either CIS-OV or SAP. These charges are then allocated to a range of specific general ledger accounts dedicated to collecting Alternative Control Services revenue to facilitate reporting in the Statutory Accounts and Regulatory Accounts/Regulatory Information Notice.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	as per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	<b>Alternative Control Service Revenue</b> – While public lighting revenue can be separated into the unmetered supplies category, other components of this category cannot be isolated. All the revenue has been classified to "Other Customers" as we do not record this information down to this level. <b>Unmetered supplies revenue</b> – Actual <b>Other Customers revenue</b> - estimated
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006

2014	as per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<b>Alternative Control Service Revenue</b> – Allocating revenue between customer groups would require considerable work to isolate individual jobs and would not provide a meaningful result due to classification issues. In the absence of a method to split revenue between customer groups, revenue has been reported to “Other Customers” in accordance with the reporting requirements.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	as per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	<b>Alternative Control Service Revenue</b> – This avoids distorting the customer groups with incorrect revenue assumptions.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	as per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provide**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Alternative Control Service Revenue – No data has been provided for DREV0201, DREV0202, DREV0203 and DREV0204 as revenue from alternative control services cannot be broken down into these categories.

## AER BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.1 Revenue	
<b>Table name:</b> 3.1.3 Revenue (penalties) allowed (deducted) through incentive schemes	
<b>Variable Code</b>	<b>Variable Name</b>
DREV0301	EBSS
BOP ID	BMPAL3.1BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report the penalties or rewards of incentive schemes in this table. The penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the service target performance incentive scheme (STPIS) or efficiency benefit sharing scheme (EBSS) must be reported against the line items for those schemes.

Revenues reported in table 3.1.3 must reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years). For instance, if Powercor is rewarded extra revenues for performance under the STPIS in 2009 and gains these revenues in 2011 these revenues must be reported in the 2011 year only.

#### **Response:**

Essential Services Commission of Victoria (ESCV) efficiency carryover scheme revenues are also reported since the efficiency carryover scheme is the equivalent of the EBSS scheme.

EBSS revenues are reported in the year the incentive has an impact on revenue rather the year of expenditure performance. Additionally, the EBSS carry over amounts have been smoothed over each regulatory period because prices were smoothed over regulatory periods.

The requirements of the Notice have been met.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the originating source (i.e. it is sourced from a report such as the Annual Regulatory Performance report), please explain the source of the data that went into the report.

#### **Response:**

EBSS revenue is derived from a calculation with the following inputs and their sources:

- 2006-10 EBSS allowances sourced from the ESC 2006-10 final determination models provided on 19 October 2005
- 2011-15 EBSS allowances sourced from the AER 2011-15 redetermination post tax revenue model (PTRM) published on the AER website
- Inflation sourced from the Australian Bureau of Statistics eight capital cities consumer price inflation index

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	EBSS revenue allowances are set out in final determinations. Because prices are smoothed, these revenues have been smoothed over the relevant regulatory period.  The AER first calculates the annual revenue requirement over a regulatory period. The annual profile over the regulatory period is not smooth as some of the revenue requirements, such as EBSS, can vary substantially from one year to the next. For this reason, the AER then calculates a smooth price profile over the regulatory period which recovers the NPV of the total revenue requirement over the regulatory period. Therefore, each revenue requirement inclusive of EBSS is smoothed over a regulatory period.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	EBSS revenue is one of the building blocks used to calculate distribution tariffs. Revenue from each component of distribution tariffs is not reported in the business systems. Therefore EBSS revenue must be derived.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	EBSS revenues are derived from EBSS allowances as set out in regulatory determinations and therefore it is the best method.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No better alternative method could be devised. It is assumed that earned revenues are constant in real terms over the regulatory period.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006

2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.1 Revenue	
<b>Table name:</b> 3.1.3 Revenue (penalties) allowed (deducted) through incentive schemes	
<b>Variable Code</b>	<b>Variable Name</b>
DREV0302	STPIS
BOP ID	BMPAL3.1BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report the penalties or rewards of incentive schemes in this table. The penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the service target performance incentive scheme (STPIS) or efficiency benefit sharing scheme (EBSS) must be reported against the line items for those schemes.

Revenues reported in table 3.1.3 must reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years). For instance, if Powercor is rewarded extra revenues for performance under the STPIS in 2009 and gains these revenues in 2011 these revenues must be reported in the 2011 year only.

#### **Response:**

Essential Services Commission of Victoria (ESCV) S Factor scheme revenues are also reported since the S Factor scheme is the equivalent of the STPIS scheme.

STPIS revenues are reported in the year the incentive has an impact on revenue rather the year of service performance. Additionally, the S Factor close out amount that was applied in the 2011-15 price reset has been smoothed over the 2011-15 regulatory period because prices were smoothed over this period.

The requirements of the Notice have been met.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the originating source (i.e. it is sourced from a report such as the Annual Regulatory Performance report), please explain the source of the data that went into the report.

#### **Response:**

STPIS revenue is derived from a calculation with the following inputs and their sources:

- Distribution tariffs and volumes sourced from AER approved annual tariff schedules
- 2003-05 S factors sourced from ESC 2006-10 final determination post tax revenue model (PTRM) provided on 19 October 2005
- 2006-13 S factors sourced from AER approved annual tariff schedules
- 2011-15 S factor close out revenue sourced from AER 2011-15 redetermination PTRM published on the AER website
- Inflation sourced from the Australian Bureau of Statistics eight capital cities consumer price inflation index



**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	S factor is an input into the calculation of maximum annual distribution tariffs with the purpose of rewarding or penalising a distributor under the service target performance incentive scheme (STPIS). S factors are cumulative. The ESCV S factor scheme was closed out in 2010. Each year a cumulative S factor and total distribution revenue including S factor has been calculated, which then allows the S Factor revenue to be derived from distribution revenue.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	Revenue arising from the AER's new STPIS is calculated as per 2006. The AER closed out the ESCV STPIS in 2010 by including the revenues that would arise from the 2005-10 S Factors in the 2011-15 revenue allowance. These STPIS revenues are set out in the AER 2011-15 redetermination PTRM. Because prices are smoothed, these revenues have been smoothed over the 2011-15 regulatory period.  The AER first calculates the annual revenue requirement over a regulatory period. The annual profile over the regulatory period is not smooth as some of the revenue requirements, such as EBSS, can vary substantially from one year to the next. For this reason, the AER then calculates a smooth price profile over the regulatory period which recovers the NPV of the total revenue requirement over the regulatory period. Therefore, each revenue requirement inclusive of EBSS is smoothed over a regulatory period.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	STPIS revenue is one component of distribution revenue. Each component of distribution revenue is not reported in the business systems. Therefore STPIS revenue must be derived.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	The estimate approach applied should provide an accurate estimate of STPIS revenue, therefore no alternatives were considered.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	STPIS revenue is derived from regulator approved S Factors and S-Factor close out allowances and therefore it is the best method.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.1 Revenue	
<b>Table name:</b> 3.1.3 Revenue (penalties) allowed (deducted) through incentive schemes	
<b>Variable Code</b>	<b>Variable Name</b>
DREV0304	S-Factor True Up
BOP ID	BMPAL3.1BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report the penalties or rewards of incentive schemes in this table. The penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the service target performance incentive scheme (STPIS) or efficiency benefit sharing scheme (EBSS) must be reported against the line items for those schemes.

Revenues reported in table 3.1.3 must reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years). For instance, if Powercor is rewarded extra revenues for performance under the STPIS in 2009 and gains these revenues in 2011 these revenues must be reported in the 2011 year only.

#### **Response:**

The Essential Services Commission of Victoria (ESCV) S Factor was trued up into the revenue allowance over 2011-15. The requirements of the Notice have been met.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2011	2012	2013	2014	2015
------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the originating source (i.e. it is sourced from a report such as the Annual Regulatory Performance report), please explain the source of the data that went into the report.

#### **Response:**

STPIS revenue is derived from a calculation with the following inputs and their sources:

- 2011-15 S factor close out revenue sourced from AER 2011-15 redetermination PTRM published on the AER website
- Inflation sourced from the Australian Bureau of Statistics eight capital cities consumer price inflation index

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2011	2011-15 S factor close out revenue sourced from AER 2011-15 redetermination PTRM published on the AER website
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2011	Under a price cap actual revenue earned is different to forecast revenue. It is not possible to assign revenue allowance constituent components to actual revenue earned.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2011	The final determination S Factor true up amount has been smoothed equally in real terms across the regulatory control period.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2011	To mimic the revenue smoothing that occurs in the PTRM.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.1 Revenue	
<b>Table name:</b> 3.1.3 Revenue (penalties) allowed (deducted) through incentive schemes	
<b>Variable Code</b>	<b>Variable Name</b>
DREV0303	Fire Factor
BOP ID	BMPAL3.1BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report the penalties or rewards of incentive schemes in this table. The penalties or rewards from the schemes applied by previous jurisdictional regulators that are equivalent to the service target performance incentive scheme (STPIS) or efficiency benefit sharing scheme (EBSS) must be reported against the line items for those schemes.

Revenues reported in table 3.1.3 must reflect the effect on revenues of incentive schemes in the year that the penalty or reward is applied (as opposed to when it was earned which depending on the scheme may be in earlier years). For instance, if Powercor is rewarded extra revenues for performance under the STPIS in 2009 and gains these revenues in 2011 these revenues must be reported in the 2011 year only.

#### **Response:**

Powercor submits the Fire Factor (F-Factor) RIN to the Australian Energy Regulator (AER) on an annual basis; the AER then approves the F-Factor revenue in the Powercor annual tariff proposals.

The requirements of the Notice have been met as table 3.1.3 reflects the effect on revenues of the F-Factor incentive scheme in the year that the penalty or reward is applied.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the originating source (i.e. it is sourced from a report such as the Annual Regulatory Performance report), please explain the source of the data that went into the report.

#### **Response:**

F Factor revenue is derived from the AER approved annual pricing proposal models, which is the source for this revenue.

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2011	F Factor revenue is derived from the AER approved annual pricing proposal models. Powercor is either rewarded or penalized at the incentive rate of \$25,000 per fire for performing better or worse than their respective fire start targets.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## **3.2 Opex**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.2 Opex	
Table name: 3.2.1 Opex categories	
Table name: 3.2.1.1 Current opex categories and cost allocations	
Variable Code	Variable Name
DOPEX01	Total opex
DOPEX0101 – DOPEX0127	Opex categories 1-27
BOP ID	BMPAL3.2BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.1.1 Current Opex categories and cost allocations**

Powercor is only required to complete this table if there has been a Material change (over the course of the back cast time series) in Powercor's:

- Cost Allocation Approach, or
- basis of preparation for its Regulatory Accounting Statements, or
- Annual Reporting Requirements.

If any of the above has Materially changed, the blue cells become compulsory input cells. Where there has not been a Material change in the Cost Allocation Approach, basis of preparation or Annual Reporting Requirements, the Opex reported in Table 3.2.1.1 will be consistent with the Opex reported in Table 3.2.1.2A. Thus we are not requiring NSPs to report changes that are not Material.

Table 3.2.1.1 requires Powercor to report historical Opex categories in accordance with their most recent annual reporting RIN activities (eg. vegetation management, emergency response, network planning and development, etc). Powercor must add additional rows where necessary to report Opex activities.

#### **Box 2 Reporting framework – Table 3.2.1.1 Current Opex categories and allocations**

Opex must be prepared for all Regulatory Years in accordance with Powercor's Cost Allocation Approach and directions within the Annual Reporting Requirements for the most recent completed Regulatory Year. For the avoidance of doubt:

- The accounting principles and policies specified in the Annual Reporting Requirements applying to the Regulatory Financial Statements for the most recent completed Regulatory Year must be applied for all Regulatory Years.
- Powercor must report Opex line items in a manner that is consistent with the Regulatory Financial Statements.

As a consequence, for years where the Cost Allocation Approach and Regulatory Accounting Statements are consistent with those that applied in the most recent completed Regulatory Year, total Opex should equal that reported in the Regulatory Accounting Statements.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for Table 3.2.1.1 it must do so; otherwise Powercor must provide Estimated Information.

**Response:** Opex has been reported consistent with the cost allocation methodology, Regulatory Financial Statements and current opex categories for the most recent year.



**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the current opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology applicable for the most recent year and presents the data in alignment with the current opex categories. Emergency Recoverable Works has been added to DOPEX0117 Alternative control - other in order to align with the current opex categories and cost allocation approach. This service was classified as Capex in the Regulatory Accounting Statements for this particular year.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology applicable for the most recent year and presents the data in alignment with the current opex categories.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	As per 2011

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.2 Opex	
Tab name: 3.2.1 Opex Categories	
Table name: 3.2.1.2A Historical opex categories and cost allocations	
Variable Code	Variable Name
DOPEX01A	Total opex
DOPEX0101A - DOPEX0127A	Opex categories 1-27
BOP ID	BMPAL3.2BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

Powercor must report its historical Opex categories in accordance with the Opex activities (e.g. vegetation management, emergency response Opex, etc) within the Annual Reporting Requirements that applied in the relevant Regulatory Year. These categories must align with the activities reported in response to the Annual Reporting Requirements for each Regulatory Year. Powercor must add additional rows where necessary to report Opex activities.

### **Box 3 Reporting framework – Table 3.2.1.2A Historical Opex categories and allocations**

Powercor must report, for all Regulatory Years, Opex in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the individual Regulatory Year. For the avoidance of doubt this means that:

- The accounting principles applied by the NSP to complete its Regulatory Financial Statements for each individual Regulatory Year must be applied when reporting Opex for that Regulatory Year.
- Opex reported must be prepared in a consistent manner to that of Opex reported in the Annual Reporting Requirements.
- Opex line items reported in table 3.2.1.2A should equal Opex line items reported in the Regulatory Accounting Statements for each Regulatory Year.

Table 3.1 (refer Instructions and definitions document page 19) provides an example of the reporting requirements where three sets of Opex categories have been used by a hypothetical DNSP. As the Opex categories have changed, Powercor is required to add rows to report the Opex as categorised in the relevant Regulatory Years.

**Response:** Opex has been reported consistent with the cost allocation methodology, Regulatory Financial Statements and opex categories in place at the time for those regulatory years, with the exception of the 2011 and 2012 years. Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011- 15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis, opex has been reported consistent with the cost allocation methodologies, Regulatory Financial Statements and opex categories that applied in the relevant year.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the historical opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology applicable for the particular year and presents the data in alignment with the historical opex categories for that particular year.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.2 Opex	
Table name: Table 3.2.2.2 Opex consistency - historical cost allocation approaches	
Variable Code	Variable Name
DOPEX0201A	Opex for network services
BOP ID	BMPAL3.2BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.2.2 Opex consistency - historical Cost Allocation Approaches**

Powercor must report Opex in accordance with our Variables and the Cost Allocation Approaches and reporting framework applied in the relevant Regulatory Years. Our Opex Variables are defined in chapter 9.

#### **Box 5 Reporting framework – Table 3.2.2.2 Opex consistency – historical Cost Allocation Approaches**

**Powercor** is required to report, for all Regulatory Years, Opex in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the relevant Regulatory Year. For the avoidance of doubt this means that:

- The accounting principles applied by the NSP in completing its Regulatory Financial Statements for each individual Regulatory Year must be applied when reporting Opex for that Regulatory Year.
- Opex reported must be prepared in a consistent manner to that of Opex reported in the Annual Reporting Requirements.

**Response:** Opex has been reported consistent with the cost allocation methodology, Regulatory Financial Statements and opex categories in place at the time for those regulatory years, with the exception of the 2011 and 2012 years.

Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011- 15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis, opex has been reported consistent with the cost allocation methodologies, Regulatory Financial Statements and opex categories that applied in the relevant year.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the current opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor. The data has been allocated between categories of distribution service in accordance with the cost allocation methodology that applied in the relevant regulatory year.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Opex for network services is the total of standard control total opex less the amount reported as opex for transmission connection point planning. The amount deducted for transmission connection point planning is an estimation. For the methodology and assumptions relating to transmission connection point planning please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Opex for network services is the total of standard control total opex less the amount reported as opex for transmission connection point planning and the amount for connection services. The amount deducted for transmission connection point planning is an estimation. For the methodology and assumptions relating to connection services please refer to: <b>DOPEX0203 Opex for connection services.</b> For the methodology and assumptions relating to transmission connection point planning please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	An estimate is required for opex for network services as this is a product of standard control total opex less the estimated amount calculated as opex for transmission connection point planning. As this estimated amount is deducted from the actual standard control opex, this therefore makes opex for network services an estimate. For the reasons why an estimate was required, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006

2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	For the basis for the estimate, including the approach used, options considered and assumptions made, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	For the reason(s) for the selected approach and why it is the best estimate, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.2 Opex	
Table name: Table 3.2.2.2 Opex consistency - historical cost allocation approaches	
Variable Code	Variable Name
DOPEX0202A	Opex for metering
DOPEX0203A	Opex for connection services
DOPEX0204A	Opex for public lighting
DOPEX0205A	Opex for amounts payable for easement levy or similar direct charges on DNSP
BOP ID	BMPAL3.2BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.2.2 Opex consistency - historical Cost Allocation Approaches**

Powercor must report Opex in accordance with our Variables and the Cost Allocation Approaches and reporting framework applied in the relevant Regulatory Years. Our Opex Variables are defined in chapter 9.

#### **Box 5 Reporting framework – Table 3.2.2.2 Opex consistency – historical Cost Allocation Approaches**

**Powercor** is required to report, for all Regulatory Years, Opex in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the relevant Regulatory Year. For the avoidance of doubt this means that:

- The accounting principles applied by the NSP in completing its Regulatory Financial Statements for each individual Regulatory Year must be applied when reporting Opex for that Regulatory Year.
- Opex reported must be prepared in a consistent manner to that of Opex reported in the Annual Reporting Requirements.

**Response:** Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011-15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis, opex has been reported consistent with the cost allocation methodology and Regulatory Financial Statements that applied in the relevant regulatory year.

Information has been reported as applicable to the categories listed and is a subset of total opex

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL** data green; and **ESTIMATED/derived** data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the current opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor. The data has been allocated between categories of distribution service in accordance with the cost allocation methodology that applied in the relevant regulatory year.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Information has been reported as applicable to the categories listed and is a subset of total opex.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Information has been reported as applicable to the categories listed and is a subset of total opex. Opex for connection services has been derived by applying connections RAB as a percentage of total SCS RAB as per template 3.3 over the current year's maintenance expenditure.
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006

2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.2 Opex	
Table name: 3.2.2 Opex consistency	
Table name: 3.2.2.1 Opex consistency – current cost allocation approaches	
Table name: 3.2.2.2 Opex consistency – historical cost allocation approaches	
Variable Code	Variable Name
DOPEX0206 & 206A	Opex for transmission connection point planning
BOP ID	BMPAL3.2BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.2.1 Opex consistency - current Cost Allocation Approaches**

Powercor must report Opex for the Opex Variables in accordance with its current reporting arrangements (such as its Cost Allocation Approach). Our Opex Variables are defined in chapter 9.

Powercor is required to complete this table only if there has been a Material change (over the course of the back cast time series) in Powercor's:

- Cost Allocation Approach, or
- basis of preparation for its Regulatory Accounting Statements, or
- Annual Reporting Requirements.

If any of the above has materially changed, the blue cells become compulsory input cells.

A Material change, in this context, is a change in Opex of greater than half of a per cent of total Standard Control Services in the year that the change occurred.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information in Table 3.2.2.1 it must do so; otherwise Powercor must provide Estimated Information.

#### **Box 4 Reporting framework – Table 3.2.2.1 Opex consistency – current Cost Allocation**

**Opex** must be prepared in accordance with Powercor's Cost Allocation Approach and directions within the Annual Reporting Requirements for the most recent completed Regulatory Year for all Regulatory Years. For the avoidance of doubt:

- The accounting principles and policies specified in the Annual Reporting Requirements applying to the Regulatory Financial Statements for the most recent completed Regulatory Year must be applied for all Regulatory Years.
- Powercor must prepare the Opex line items in a consistent manner to that of Opex reported in response to its most recent Annual Reporting Requirements.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for Table 3.2.2.1 it must do so; otherwise Powercor must provide Estimated Information.

#### **Table 3.2.2.2 Opex consistency - historical Cost Allocation Approaches**

Powercor must report Opex in accordance with our Variables and the Cost Allocation Approaches and reporting framework applied in the relevant Regulatory Years. Our Opex Variables are defined in chapter 9.

#### **Box 5 Reporting framework – Table 3.2.2.2 Opex consistency – historical Cost Allocation Approaches**

**Powercor** is required to report, for all Regulatory Years, Opex in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the relevant Regulatory Year. For the avoidance of doubt this means that:

- The accounting principles applied by the NSP in completing its Regulatory Financial Statements for each individual

- Regulatory Year must be applied when reporting Opex for that Regulatory Year.
- Opex reported must be prepared in a consistent manner to that of Opex reported in the Annual Reporting Requirements.

**Response:**

In relation to the opex related to transmission connection planning, there has been no material change in the current opex cost allocation process, compared to the historic cost allocation process.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

**DOPEX0206A – Opex for transmission connection point planning**

The costs are prepared in an internal spreadsheet which is a summation of the following categories:

- The number of Terminal Stations, sourced from the annual Transmission Connection Planning Report (TCPR),
- percentage of average FTE's time spent per Connection Point on demand forecasting and directing augmentations, sourced from management judgment,
- Regulatory Test Report Legal Costs sourced from the SAP system,
- External consultant costs for the TCPR (Transmission Connection Planning Report) development were sourced from a combination of SAP and using management judgment
- Regulatory Test Report related work was sourced from a combination of SAP and management judgment.
- Planning Permit, Tender documents, Use of System Agreement, Exit Services Agreement costs and share of funding from AEMO for Deer Park terminal station were sourced from actual invoices and the SAP system.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	DOPEX0206A The methodology used employed as much actual information as possible, and estimations were made where actual information was not available.  <ul style="list-style-type: none"> <li>Each year is a summation of the categories listed in section C, and the methodology consists of: <ul style="list-style-type: none"> <li>The total internal FTE costs were based on the proportion of an FTE spent on each terminal station per year. The number of terminal station connections was an actual figure.</li> <li>Legal costs were actual costs from invoices from external legal providers</li> <li>Consultant fees for, Transmission Connection Planning Report (TCPR) Development, Internal Regulatory Test Reports, Joint Distribution Business Connection Planning were estimated by management judgment.</li> <li>Internal costs for preparing regulatory test reports were based on the proportion of an FTE spent on preparing the reports.</li> <li>External consultants' costs for published Regulatory Test Reports were actual costs from invoices.</li> </ul> </li> </ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006

2012	<p>The methodology used employed as much actual information as possible, and estimations where actual information was not available.</p> <ul style="list-style-type: none"> <li>• Each year is a summation of the categories listed in section C, and the methodology consists of: <ul style="list-style-type: none"> <li>- The total internal FTE costs were based on the proportion of an FTE spent on each terminal station per year. The number of terminal station connections was an actual figure.</li> <li>- Legal costs were actual costs from invoices from external legal providers</li> <li>- Consultant fees for, Transmission Connection Planning Report (TCPR) Development were estimated by management judgment.</li> <li>- The total internal FTE costs for preparing internal regulatory test reports and attending joint planning sessions with other distribution businesses were based on the proportion of time spent on these activities.</li> <li>- External consultants' costs for published Regulatory Test Reports were actual costs from invoices.</li> <li>- Deer Park terminal station costs were based on a proportion of actual external consultant's development plan costs. The proportion was 50%, as costs were shared with Australian Energy Market Operator (AEMO).</li> </ul> </li> </ul>
2013	As per 2012
2014	<p>The methodology used employed as much actual information as possible, and estimations where actual information was not available.</p> <ul style="list-style-type: none"> <li>• 2014 is a summation of the categories listed in section C, and the methodology consists of: <ul style="list-style-type: none"> <li>- The total internal FTE costs were based on the proportion of an FTE spent on each terminal station per year. The number of terminal station connections was an actual figure.</li> <li>- Legal costs for general Use of System Agreement (UoSA) negotiations were actual costs from invoices from external legal providers</li> <li>- Consultant fees for, Transmission Connection Planning Report (TCPR) Development were sourced from actual cost invoices.</li> <li>- The total internal FTE costs for preparing internal regulatory test reports and attending joint planning sessions with other distribution businesses were based on the proportion of time spent on these activities.</li> <li>- External consultants' costs for published Regulatory Test Reports were actual costs from invoices.</li> <li>- Deer Park terminal station costs were based on actual external consultants invoices for the planning permit, invitation to tender and other contracts including the UoSA and Exit Services Agreement (ESA) costs. 50%, of the tender document costs were shared with Australian Energy Market Operator (AEMO).</li> </ul> </li> </ul>
2015	<p>The methodology used employed as much actual information as possible, and estimations where actual information was not available.</p> <ul style="list-style-type: none"> <li>• 2015 is a summation of the categories listed in section C, and the methodology consists of: <ul style="list-style-type: none"> <li>- The total internal FTE costs were based on the proportion of an FTE spent on each terminal station per year. The number of terminal station connections was an actual figure.</li> <li>- Legal costs for general Use of System Agreement (UoSA) negotiations were actual costs from invoices from external legal providers</li> <li>- Consultant fees for, Transmission Connection Planning Report (TCPR) Development were sourced from actual cost invoices.</li> <li>- The total internal FTE costs for preparing internal regulatory test reports and attending joint planning sessions with other distribution businesses were based on the proportion of time spent on these activities.</li> <li>- External consultants' costs for published Regulatory Test Reports were actual costs from invoices.</li> <li>- Deer Park terminal station costs were based on actual external consultants invoices for the planning permit, invitation to tender and other contracts including the UoSA and Exit Services Agreement (ESA) costs.</li> </ul> </li> </ul>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	<p>A. Internal FTE costs for forecasting and directing augmentations:</p> <ul style="list-style-type: none"> <li>• Actual data on hours spent on these activities was not available.</li> </ul> <p>B. Consultant Fees for Transmission Connection Planning Report (TCPR) Development, Internal Regulatory Test Reports, Joint Distribution Business Connection Planning:</p> <ul style="list-style-type: none"> <li>• Actual costs were not available directly against these activities, as the Consultant's invoiced costs were a combination of many other costs.</li> </ul> <p>C. Internal FTE costs for preparing internal regulatory test reports and attending to joint transmission planning meetings and actions with other distribution businesses:</p> <ul style="list-style-type: none"> <li>• Actual data on hours spent on these activities was not available.</li> </ul> <p>The annual Consultant fee is an estimate based on an approximate hourly rate charge by the number of hours to complete report review. The internal regulatory test, and joint DB (distribution businesses) planning costs were estimates based on average FTE costs of \$120k pa.</p>
2007	As per 2006

2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<p>A. Internal FTE costs for forecasting and directing augmentations: Basis used was management judgment to determine that each terminal station required 15% of the annual time of one engineering FTE, and each engineering FTE was estimated to be on a salary of \$120k per year.</p> <p>B. The annual Consultant fee is an estimate based on management judgment of an approximate hourly rate charged by external consultants by the number of hours to complete the required reports.</p> <p>C. Internal FTE costs for preparing internal regulatory test reports and joint planning activities: Basis used was management judgment to determine the total equivalent manhours spent on these activities as a percentage of the annual time of one engineering FTE, and each engineering FTE was estimated to be on a salary of \$120k per year. The estimation was 25% of time of one engineering FTE.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	In the consideration of management, no other viable option was available.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blackened out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.2 Opex	
<b>Table name:</b> 3.2.4: Opex for high voltage customers	
<b>Variable Code</b>	<b>Variable Name</b>
DOPEX0401	Opex for high voltage customers
BOP ID	BMPAL3.2BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Powercor must report the amount of Opex that it would have incurred had it been responsible for operating and maintaining the electricity Distribution Transformers that are owned by its high voltage customers.

Where Actual Information is unavailable, this must be estimated based on the Opex Powercor incurs for operating similar MVA capacity Distribution Transformers within its own network. Where the MVA capacity of high voltage customer-owned Distribution Transformers is not known, it must be approximated by the observed Maximum Demand for that customer.

The data in this table will not reconcile to amounts reported in the Regulatory Accounting Statements as it does not relate to services provided by Powercor.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for the Variables in Table 3.2.4 it must do so; otherwise Powercor must provide Estimated Information.

#### **Response:**

The response to the requirement DOPEX0401 is shown as estimated as Powercor, by definition, cannot have actual data for costs it would have incurred if it had operating and maintenance responsibility for distribution transformers owned by HV customers.

The estimation of DOPEX0401 has been carried out in accordance with the Requirements of the Notice instructions as above.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL data green**; and **ESTIMATED/derived data red**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

Data sources years 2006-2014:

- CPI data - sourced from ABS weighted 8 Capital City's CPI
- Maintenance costs - sourced from Function Code 350 and Function Code 318 expenditure as reported from BI. Definition of function codes as per Function Code Definitions Manual Document No 10-40-M0001.
- Network non coincident maximum demand (MD) - Summation of wholesale terminal station subtransmission feeder metering – sourced from Network Planning – also reported as DOPSD0107

- HV customers identified by NMI (National Meter Identifier) by HV tariff by year using data from CIS
- HV Customer non coincident MD – Query (Load Profile Report Launcher) of AMI (Advanced Metering Infrastructure) metering database for those customer NMIs identified with HV tariff

Data sources years 2015:

- CPI data - sourced from ABS weighted 8 Capital City's CPI
- Maintenance costs - sourced from Function Code 350 and Function Code 318 expenditure as reported from BI. Definition of function codes as per Function Code Definitions Manual Document No 10-40-M0001.
- Distribution transformer capacity owned by utility – sourced from Network Planning – also reported as DPA0501
- Distribution transformer capacity owned by High Voltage Customers – sourced from Network Planning – also reported as DPA0502

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	(i) Establish annual Network non coincident maximum demand (DOPSD0107) data from annual planning reports. (MW) (ii) Establish total Distribution Substation Maintenance Opex from expenditure reports for Function Codes 350 and 318. (EN Distribution substation maintenance) (\$k). Cost reports reviewed and costs not applicable to distribution substation maintenance removed. Note: Opex unavailable for 2006, (\$k) (iii) Calculate a nominal unit rate for Network Distribution Substation maintenance by dividing total MD by total Opex to arrive at (\$/MW) (iv) Calculate a real unit rate by applying CPI to the rate calculate previously for years prior to 2013 (v) Average the real unit rates and set 2013 as the average, (\$/MW) (vi) Apply CPI to the average unit rate for years prior to 2013, (\$/MW) Note: this methodology overcomes the absence of Opex data for 2006 (vii) Establish annual (non-coincident) maximum demand for all HV customers. HV customers identified from CIS by tariff. Query of AMI metering database (Load Profile Report Launcher) used to arrive at an annual MD for each HV Customer NMI (MW) (viii) Calculate HV Customer Opex for each year by multiplying Average unit rate by the Sum of the HV Customer maximum demands, (\$/MW)
2007	Please refer to the estimate data section E below.
2008	As per 2006.
2009	As per 2007.
2010	As per 2006.
2011	As per 2006.
2012	As per 2006.
2013	As per 2006.
2014	(i) As per 2006. (ii) As per 2006. (iii) As per 2006. (iv) Not applicable. (v) Average the real unit rates and set 2014 as the average (\$/MW) (vi) Not applicable. (vii) As per 2006. (viii) As per 2006.

2015	<p>(i) Establish distribution transformer capacity owned by utility – sourced from Network Planning (DPA0501) annual planning reports. (MVA)</p> <p>(ii) As per 2006</p> <p>(iii) Calculate a nominal unit rate for Network Distribution Substation maintenance by dividing total MVA by total Opex to arrive at (\$/MVA)</p> <p>(iv) Calculate a real unit rate by applying CPI to the rate calculate previously for years prior to 2015</p> <p>(v) Average the real unit rates and set 2015 as the average, (\$/MVA)</p> <p>(vi) Apply CPI to the average unit rate for years prior to 2015, (\$/MVA)</p> <p>(vii) Establish Distribution transformer capacity owned by High Voltage Customers – sourced from Network Planning (DPA0502) annual planning reports. (MVA)</p> <p>(viii) Calculate HV Customer Opex for each year by multiplying Average unit rate by the Sum of the HV Customer Capacity, (\$/MVA)</p>
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**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Please refer to methodology section D above.
2007	Where complete data could not be retrieved using the (Load Profile Report Launcher) as above, retrieval of data using SAP Hana was attempted. Where data was missing from a year which could not be retrieved by SAP Hana (a database query tool), an estimate has been provided.
2008	As per 2006.
2009	As per 2007.
2010	As per 2006.
2011	As per 2006.
2012	As per 2006.
2013	As per 2006.
2014	As per 2006.
2015	<p>Please initially refer to to section A above. This data is estimated as:</p> <ul style="list-style-type: none"> <li>HV customer capacity is not controlled by Powercor and inherently is estimated.</li> <li>The review and removal of costs not applicable to distribution substation maintenance from function codes 318 and 350 cannot be perfectly undertaken as general cost elements such as logistics expense and operational overheads such as works planning cannot be separated.</li> </ul>

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Please refer to methodology section D above.
2007	The HV customer non coincident MD (Step 2 in Method) has been estimated by applying the average % of total network MD using those years for which complete data is available.
2008	As per 2006.
2009	As per 2007.
2010	As per 2006.
2011	As per 2006.
2012	As per 2006.
2013	As per 2006.
2014	As per 2006.
2015	As per 2006.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Please refer to methodology section D above.
2007	We can be confident that the percentage of annual maximum demand that can be attributed to HV Customers is very stable from year to year, as the standard deviation of the year-to-year percentages is approximately 0.01. Therefore, this is a much more accurate approach to take than the alternative of averaging the results from the previous and following years, as this may introduce unnecessary smoothing of the data.
2008	As per 2006.
2009	As per 2007.
2010	As per 2006.
2011	As per 2006.
2012	As per 2006.
2013	As per 2006.

2014	As per 2006.
2015	As per 2006.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:** All data has been provided.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.2 Opex	
Table name: 3.2.2 Opex Consistency	
Table name: Table 3.2.2.1 Opex consistency - current cost allocation approaches	
Variable Code	Variable Name
DOPEX0201	Opex for network services
BOP ID	BMPAL3.2BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.2.1 Opex consistency - current Cost Allocation Approaches**

Powercor must report Opex for the Opex variables in accordance with its current reporting arrangements (such as its Cost Allocation Approach). Our Opex Variables are defined in chapter 9.

Powercor is required to complete this table only if there has been a Material change (over the course of the back cast time series) in Powercor's:

- Cost Allocation Approach, or
- Basis of preparation for its regulatory accounting statements, or
- Annual Reporting Requirements.

If any of the above has Materially changed, the blue cells become compulsory input cells.

A Material change, in this context, is a change in Opex of greater than half a per cent of total Standard Control Services in the year that the change occurred.

When completing templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information in Table 3.2.2.1 it must do so; otherwise Powercor must provide Estimated Information.

#### **Box 4 Reporting framework – Table 3.2.2.1 Opex consistency – current Cost Allocation Approaches**

Opex must be prepared in accordance with Powercor's Cost Allocation Approach and directions within the Annual Reporting Requirements for the most recent completed Regulatory Year for all Regulatory Years. For the avoidance of doubt:

- The accounting principles and policies specified in the Annual Reporting Requirements applying to the Regulatory Financial Statements for the most recent completed Regulatory Year must be applied for all Regulatory Years.
- Powercor must prepare the Opex line items in a consistent manner to that of Opex reported in response to its most recent Annual Reporting Requirements.

#### **Response:**

Opex has been reported consistent with the cost allocation methodology, Regulatory Financial Statements and opex categories in place at the time for those regulatory years, with the exception of the 2011 and 2012 years.

Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011- 15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis, opex has been reported consistent with the cost allocation methodologies, Regulatory Financial Statements and opex categories that applied in the relevant year.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the current opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor. The data has been allocated between categories of distribution service in accordance with the cost allocation methodology that applied in the relevant regulatory year.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Opex for network services is the total of standard control total opex less the amount reported as opex for transmission connection point planning. The amount deducted for transmission connection point planning is an estimation. For the methodology and assumptions relating to transmission connection point planning please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Opex for network services is the total of standard control total opex less the amount reported as opex for transmission connection point planning and the amount for connection services. The amount deducted for transmission connection point planning is an estimation. For the methodology and assumptions relating to connection services please refer to: <b>DOPEX0203 Opex for connection services.</b> For the methodology and assumptions relating to transmission connection point planning please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	An estimate is required for opex for network services as this is a product of standard control total opexless the estimated amount calculated as opex for transmission connection point planning. As this estimated amount is deducted from the actual standard control opex, this therefore makes opex for network services an estimate. For the reasons why an estimate was required, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	For the basis for the estimate, including the approach used, options considered and assumptions made, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	For the reason(s) for the selected approach and why it is the best estimate, relating to transmission connection point planning, please refer to: <b>DOPEX0206A – Opex for transmission connection point planning</b>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:** Not applicable



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.2 Opex	
Table name: 3.2.2 Opex Consistency	
Table name: Table 3.2.2.1 Opex consistency - current cost allocation approaches	
Variable Code	Variable Name
DOPEX0202	Opex for metering
DOPEX0203	Opex for connection services
DOPEX0204	Opex for public lighting
DOPEX0205	Opex for amounts payable for easement levy or similar direct charges on DNSP
BOP ID	BMPAL3.2BOP8

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report Opex in accordance with the categories that they reported in in response to their Annual Reporting Requirements.

#### **Table 3.2.2.1 Opex consistency - current Cost Allocation Approaches**

Powercor must report Opex for the Opex variables in accordance with its current reporting arrangements (such as its Cost Allocation Approach). Our Opex Variables are defined in chapter 9.

Powercor is required to complete this table only if there has been a Material change (over the course of the back cast time series) in Powercor's:

- Cost Allocation Approach, or
- Basis of preparation for its regulatory accounting statements, or
- Annual Reporting Requirements.

If any of the above has Materially changed, the blue cells become compulsory input cells.

A Material change, in this context, is a change in Opex of greater than half a per cent of total Standard Control Services in the year that the change occurred.

When completing templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information in Table 3.2.2.1 it must do so; otherwise Powercor must provide Estimated Information.

#### **Box 4 Reporting framework – Table 3.2.2.1 Opex consistency – current Cost Allocation Approaches**

Opex must be prepared in accordance with Powercor's Cost Allocation Approach and directions within the Annual Reporting Requirements for the most recent completed Regulatory Year for all Regulatory Years. For the avoidance of doubt:

- The accounting principles and policies specified in the Annual Reporting Requirements applying to the Regulatory Financial Statements for the most recent completed Regulatory Year must be applied for all Regulatory Years.
- Powercor must prepare the Opex line items in a consistent manner to that of Opex reported in response to its most recent Annual Reporting Requirements.

**Response:** Powercor's approved CAM for 2011 and 2012 was inconsistent with the AER's final distribution determination 2011-15 service classification. In December 2013 the AER approved an amended CAM which is consistent with the AER's final distribution determination 2011-15 service classification. For the purposes of this RIN, Powercor has deemed that the 2011 and 2012 Regulatory Accounting Statements restated to be consistent with the approved amended CAM are the relevant Regulatory Accounting Statements. On this basis, opex has been reported consistent with the cost allocation methodology and Regulatory Financial Statements that applied in the relevant regulatory year. Information has been reported as applicable to the categories listed and is a subset of total opex

**B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL data green**; and **ESTIMATED/derived data red**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for the current opex categories and cost allocations for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor. The data has been allocated between categories of distribution service in accordance with the cost allocation methodology that applied in the relevant regulatory year.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Information has been reported as applicable to the categories listed and is a subset of total opex.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	The SAP financial system is used to extract the information required to state the DNSP opex information by category and regulatory segment. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning opex costs between opex categories and regulatory segments in accordance with the cost allocation methodology. Information presented in this table utilises the cost allocation methodology that applied in the relevant regulatory year. Information has been reported as applicable to the categories listed and is a subset of total opex. Opex for connection services has been derived by applying connections RAB as a percentage of total SCS RAB as per template 3.3 over the current year's maintenance expenditure.
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimate required
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.2 Opex	
Table name: 3.2.3 Provisions	
Variable Code	Variable Name
DOPEX0301A - DOPEX0312A	Opex categories 1-12
DOPEX0301B - DOPEX0312B	Opex categories 1-12
DOPEX0301C - DOPEX0312C	Opex categories 1-12
DOPEX0301D - DOPEX0312D	Opex categories 1-12
DOPEX0301E - DOPEX0312E	Opex categories 1-12
DOPEX0301F - DOPEX0312F	Opex categories 1-12
BOP ID	BMPAL 3.2.3BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Powercor must report, for all Regulatory Years, financial information on provisions for Standard Control Services in accordance with the requirements of the Cost Allocation Approach and the Regulatory Accounting Statements that were in effect for the relevant Regulatory Year.

Powercor must report financial information for each of its individual provisions. A provision is an account which records a specific present liability of an entity to another entity. Examples of provision accounts include employee entitlements, doubtful debts and uninsured losses. Powercor must complete the table for each individual provision and must add rows as necessary to the template for this purpose.

For each additional provision specify the name of the provision and add Variable codes for line items. A letter or letters must be added to the end of each Variable code link it to the provision. For example, the Variable codes for the first additional provision would be DOPEX0301A to DOPEX0312A, Variable codes for the second would be

DOPEX0301B to DOPEX0312B and the Variable codes for the 28<sup>th</sup> provision would be DOPEX0301AA to DOPEX0312AA.

#### **Box 6 Reporting framework for provisions**

Provisions must be reported in accordance with the principles and policies within the Annual Reporting Requirements for each Regulatory Year.

Financial information on provisions should reconcile to the reported amounts for provisions the Regulatory Accounting Statements for each Regulatory Year.

Response: Provisions have been reported consistent with that of the Regulatory Financial Statements for each regulatory year.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data for provisions for the years 2006-2015 has been sourced from the SAP accounting system. SAP is the primary financial reporting system and is the source of providing the audited statutory accounts for Powercor.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The SAP financial system is used to extract the information required to state the DNSP provision information. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning provisions to the applicable capex and opex regulatory segments. Data contained in these tables is consistent with the data reported within the Historical Annual RINs. As the provisions are attached to employees and not to capital and operating activities, employee entitlement provisions are allocated between capital and operating costs using labour reported in the annual Regulatory Accounting Statements (Labour Cost – Matrix template) as the allocator. The Long Service Leave Bond adjustment is allocated solely to opex and the remainder of the movement is split between opex and capex using this assumption.
2007	As per 2006
2008	As per 2006
2009	The SAP financial system is used to extract the information required to state the DNSP provision information. Using the audited statutory accounts for Powercor, the business uses cost elements within SAP in order to disaggregate the data for the purposes of apportioning provisions to the applicable capex and opex regulatory segments. Data contained in these tables is consistent with the data reported within the Historical Annual RINs. As the provisions are attached to employees and not to capital and operating activities, employee entitlement provisions are allocated between capital and operating costs using cost element mappings on financial data reported in the Annual Regulatory Accounting Statements as the allocator. (The Labour Cost – Matrix template in the Regulatory Accounting Statements for this particular year is not representative of the labour mix and this work paper has been used as a substitute). The Long Service Leave Bond adjustment is allocated solely to opex and the remainder of the movement is split between opex and capex using this assumption.
2010	As per 2009
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' (i.e. no data) inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

### **3.3    Assets**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
<b>Table name:</b> 3.3.2 Asset value roll forward	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB0201 – DRAB0207	For overhead network assets less than 33kV
DRAB0301 – DRAB0307	For underground network assets less than 33kV
DRAB0401 – DRAB0407	For distribution substations and transformers
DRAB0501 – DRAB0507	For overhead network assets 33kV and above
DRAB0601 – DRAB0607	For underground network assets 33kV and above
DRAB0701 – DRAB0707	Zone substations and transformers
BOP ID	BMPAL3.BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

#### **Response:**

The business has used AER's standard approach provided under Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions. RAB information reconciles to the AER preliminary determination Roll Forward Model, except that forecast net capex has been replaced with actual capex as reported in the 2015 Annual RIN.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2014	2015
------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

- 2015 RAB information is sourced from the 2015 AER preliminary determination Roll Forward Model, updated with actual 2015 capex as reported in the 2015 Annual RIN.
- CPI is sourced from ABS website (Weighted Average of 8 capital cities).

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.



Year	Methodology & Assumptions
2014	<ol style="list-style-type: none"> <li>1. The RAB has been rolled forward to 2014 consistent with the AER 2010 final determination and applying the AER published roll Forward Model.</li> <li>2. The remaining steps in the methodology are about allocating the RAB categories to the Benchmarking RIN categories: <ol style="list-style-type: none"> <li>a. The RAB financial information for network assets (subtransmission, distribution system assets and VBRC) has been allocated into benchmarking RIN categories (Overhead distribution assets, underground distribution assets, distribution substation including transformers and zone substation and transformers) consistent with allocation performed for 2013 Benchmarking RIN.</li> <li>b. Disposals are taken as the cash proceeds from sale of assets as reported in the cash flow section of annual RIN.</li> <li>c. The business does not have data in relation to connection services and therefore it has estimated this using new customer connection capex information using the following methodology – <ol style="list-style-type: none"> <li>i. The business has estimated the average gross dedicated capex as a proportion of gross new customer connection capex for 2012 and 2013. From this average proportion the customer contribution proportion of gross new customer connection capex is deducted to get net dedicated capex proportion of net new customer connection capex</li> <li>ii. The ratio of net dedicated capex to net new customer connection capex is then multiplied to the ratio of net new customer connection capex to net network capex to get the proportion of net dedicated assets capex to net network capex.</li> <li>iii. This ratio is assumed to reflect the connection services portion of network RAB financial information and is deducted from SCS network RAB to get Network Services RAB.</li> </ol> </li> </ol> </li> </ol>
2015	<ol style="list-style-type: none"> <li>1. The RAB has been rolled forward to 2015 consistent with the AER 2015 preliminary determination Roll Forward Model. Forecast net capex has been replaced with actual capex as reported in the 2015 Annual RIN.</li> <li>2. The remaining steps in the methodology are about allocating the RAB categories to the Benchmarking RIN categories: <ol style="list-style-type: none"> <li>a. The RAB financial information for network assets (subtransmission, distribution system assets and VBRC) has been allocated into benchmarking RIN categories (Overhead distribution assets, underground distribution assets, distribution substation including transformers and zone substation and transformers) consistent with allocation performed for 2013 Benchmarking RIN.</li> <li>b. Disposals are taken as the cash proceeds from sale of assets as reported in the cash flow section of annual RIN.</li> <li>c. Final year adjustments (for the difference in actual and forecast capex in 2010 and the return on the difference) have been included with Disposals, and have been allocated into benchmarking RIN categories for overhead distribution assets, underground distribution assets, distribution substation including transformers and zone substation and transformers, using the methodology described in a) above.</li> <li>d. The business does not have data in relation to connection services and therefore it has estimated this using new customer connection capex information using the following methodology – <ol style="list-style-type: none"> <li>i. The business has estimated the average gross dedicated capex as a proportion of gross new customer connection capex for 2012 and 2013.</li> <li>ii. From this average proportion the customer contribution proportion of gross new customer connection capex is deducted to get net dedicated capex proportion of net new customer connection capex</li> <li>iii. The ratio of net dedicated capex to net new customer connection capex is then multiplied to the ratio of net new customer connection capex to net network capex to get the proportion of net dedicated assets capex to net network capex.</li> <li>iv. This ratio is assumed to reflect the connection services portion of network RAB financial information and is deducted from SCS network RAB to get Network Services RAB.</li> </ol> </li> </ol> </li> </ol>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why an estimate was required, including why it is not possible to use actual data;
2014	<p>The benchmarking RIN has introduced new reporting asset categories and methodology which the business has never been asked to report earlier. The business cannot directly allocate information for the network assets and therefore has to derive estimates for the benchmarking RAB financial information based on allocation of historically reported RAB financial information. The allocation is done based on AER's default approach of using 2013 replacement cost information mentioned in the Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions.</p> <p>The business does not have data in relation to connection services and therefore uses net dedicated capex to net network capex as a proxy for determining connection services portion of RAB information.</p>
2015	As per 2014

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	The business has adopted AER's default methodology provided in the Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions.
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	The business has adopted AER's default methodology provided in the Economic Benchmarking RIN - Instructions and Definitions document.
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2. item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Easement data has not been provided as it is not reported separately by the business.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
<b>Table name:</b> 3.3.2 Asset value roll forward	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB0901 – DRAB0907	For meters
DRAB01001 – DRAB1007	For “other” asset items with long lives
DRAB01101 – DRAB1107	For “other” asset items with short lives
BOP ID	BMPAL3.3BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

#### **Response**

The business has used AER’s standard approach provided under Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions, RAB information reconciles to the AER preliminary determination Roll Forward Model, except that forecast net capex has been replaced with actual capex as reported in the 2015 Annual RIN.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For Network Services variables DRAB0901-0907, and Standard Control Services variable DRAB0905:

2014	2015
------	------

For the rest of the variables:

2014	2015
------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER’s statement in the Economic Benchmarking Instructions and Definitions document that ‘some variables are inherently estimated or may continue to be estimated.’

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

- 2015 RAB information is sourced from the Roll Forward Model from the AER preliminary determination, updated with actual 2015 capex as reported in the 2015 Annual RIN.
- CPI is sourced from ABS website (Weighted Average of 8 capital cities).

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	<ol style="list-style-type: none"> <li>1. The RAB has been rolled forward to 2014 consistent with the AER 2010 final determination and applying the AER published Roll Forward Model.</li> <li>2. The remaining steps in the methodology are about allocating the RAB categories to the Benchmarking RIN categories: <ol style="list-style-type: none"> <li>a. Other RAB assets such as Standard Metering (left over non-AMI), Public Lighting (left over Standard Control), SCADA/Network control, Non-network General-IT, Non-Network General-Other and Equity Raising Costs have been directly allocated to benchmarking RIN categories.</li> <li>b. Benchmarking RIN category "Other Assets with long lives" include the RAB categories of Non-Network General-Other, SCADA/Network control, Public Lighting (left over Standard Control) and Equity Raising Costs.</li> <li>c. Benchmarking RIN category "Other assets with short lives" include Non-network General-IT assets.</li> <li>d. Metering is excluded from the Network Services RAB based on definition of Network Services provided under Chapter 9 of the Economic Benchmarking RIN – Instructions and Definitions.</li> <li>e. The Network Services RAB for "Other Assets with long lives" excludes Public Lighting RAB information from the Standard Control RAB for this asset category.</li> <li>f. The Network Services RAB for "Other assets with short lives" is the same as the standard control RAB for this asset category.</li> </ol> </li> </ol>
2015	<ol style="list-style-type: none"> <li>1. The RAB has been rolled forward to 2015 consistent with the AER 2015 preliminary determination Roll Forward Model. Forecast net capex has been replaced with actual capex as reported in the 2015 Annual RIN.</li> <li>2. The remaining steps in the methodology are about allocating the RAB categories to the Benchmarking RIN categories: <ol style="list-style-type: none"> <li>a. Other RAB assets such as Standard Metering (left over non-AMI), Public Lighting (left over Standard Control), SCADA/Network control, Non-network General-IT, Non-Network General-Other and Equity Raising Costs have been directly allocated to benchmarking RIN categories.</li> <li>b. Benchmarking RIN category "Other Assets with long lives" include the RAB categories of Non-Network General-Other, SCADA/Network control, Public Lighting (left over Standard Control) and Equity Raising Costs.</li> <li>c. Benchmarking RIN category "Other assets with short lives" include Non-network General-IT assets.</li> <li>d. Metering is excluded from the Network Services RAB based on definition of Network Services provided under Chapter 9 of the Economic Benchmarking RIN – Instructions and Definitions.</li> <li>e. The Network Services RAB for "Other Assets with long lives" excludes Public Lighting RAB information from the Standard Control RAB for this asset category.</li> <li>f. The Network Services RAB for "Other assets with short lives" is the same as the standard control RAB for this asset category.</li> </ol> </li> </ol> <p>Final year adjustments from the AER preliminary determination Roll Forward Model (for the difference in actual and forecast capex in 2010 and the return on the difference) have been included with Disposals, using the allocations described above.</p>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why an estimate was required, including why it is not possible to use actual data;
2014	The benchmarking RIN has introduced new reporting asset categories and methodology which the business has never been asked to report earlier. The business cannot directly provide information for the other asset categories and therefore has to apply judgment in allocating the regulatory asset categories to benchmarking categories.
2015	As per 2014
Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	The business has as per AER's instructions adopted AER's standard approach provided in the Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions. The business has used service lives approved by AER in its determinations.
2015	As per 2014
Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	The business has as per AER's instructions adopted AER's standard approach provided in the 2013 Economic Benchmarking RIN - Instructions and Definitions document.
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
Table name: 3.3.3 Total disaggregated RAB asset values	
Variable Code	Variable Name
DRAB01201 – DRAB01210	All
BOP ID	BMPAL3.3BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

**Response:** According to AER's instructions on RAB Financial Reporting Framework the following instructions have been met –

The business has estimated the Total Disaggregated RAB Asset Values as per AER's instructions under Chapter 4 of the Economic Benchmarking RIN Instructions and Definitions, that the business must report average RAB asset values that have been disaggregated into the benchmarking asset categories. In accordance with the instructions these are calculated as the average of the opening and closing RAB values and are directly reconcilable to the opening and closing values in Table 3.3.2 for the relevant categories

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For Network Services variable DRAB1208

2014	2015
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For the rest of the variables:

2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

The business has estimated the Total Disaggregated RAB Asset Values as per AER's instructions under Chapter 4 of the Economic Benchmarking RIN Instructions and Definitions.

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	The Total Disaggregated RAB Asset Values for all asset categories have been calculated as the average of the opening and closing RAB values in line with the requirements.
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why an estimate was required, including why it is not possible to use actual data;
2014	Because the average is based on estimated opening and closing RAB values.
2015	As per 2014

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	Direct calculation using estimate data
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	The business has as per instructions adopted AER's standard approach provided in the Economic Benchmarking RIN - Instructions and Definitions document.
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Easement data has not been provided as it is not reported separately by the business.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

<b>Tab name:</b> 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
<b>Table name:</b> 3.3.3 Total disaggregated RAB asset values	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB013	Value of Capital Contributions or Contributed Assets
BOP ID	BMPAL3.3BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

**Response:** According to AER's instructions on RAB Financial Reporting Framework the following instructions have been met –  
According to Chapter 4 of 2013 Economic Benchmarking RIN – Instructions and Definitions, where the RAB includes capital contributions, capital contributions must be reported in the '4.Assets (RAB)' sheet. The business includes only net capex into its RAB. Therefore its RAB does not include capital contributions and hence are not reported.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**  
Not applicable

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	Not Applicable
2015	As per 2014

### **E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2014	Not Applicable
2015	As per 2014



Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	Not Applicable
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	Not Applicable
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Capital Contributions data not provided since RAB financial information does not include capital contributions.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
<b>Table name:</b> 3.3.4 Asset lives	
<b>Table name:</b> 3.3.4.1 Asset Lives – estimated service life of new assets	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB1401 - 1409	all
BOP ID	BMPAL3.3BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

#### **Response:**

The business has used AER's standard approach provided under Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions, and it has reconciled its RAB information to the AER 2015 preliminary determination Roll Forward Model.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

- 2015 RAB information is sourced from the 2015 AER preliminary determination Roll Forward Model, updated with actual 2015 capex as reported in the 2015 Annual RIN.
- CPI is sourced from ABS website (Weighted Average of 8 capital cities).

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	1. The business has adopted the same standard service lives that are consistent with the Roll Forward Model, PTRM and 2013 benchmarking RIN.
2015	1. The business has adopted the same standard service lives that are consistent with the Roll Forward Model and the methodology used in the 2013 and 2014 benchmarking RINs.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why an estimate was required, including why it is not possible to use actual data;
2014	The business has no asset register that reconciles to the RAB information and therefore the AER's preferred method of estimating asset lives cannot be applied. The estimated service lives of the new assets are therefore estimated as weighted average lives for RAB categories approved by AER in its determinations. The asset lives for 2014 period are consistent with the AER's 2006-10 final decision model and AER's 2011-15 final decision PTRM model published on the AER website.
2015	The business has no asset register that reconciles to the RAB information and therefore the AER's preferred method of estimating asset lives cannot be applied. The estimated service lives of the new assets are therefore estimated as weighted average lives for RAB categories approved by AER in its determinations. The asset lives for 2015 period are consistent with the AER's 2015 preliminary determination model.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	The basis for the estimate are AER's determinations
2015	The basis for the estimate is the AER 2015 preliminary determinations

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	Since the business does not have asset register that reconciles to the RAB information, the business believes it is best to use the asset lives approved by the AER in its determinations.
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.3 Assets (RAB) - Network Services and Standard Control Services tables only	
<b>Table name:</b> 3.3.4 Asset lives	
<b>Table name:</b> 3.3.4.2 Asset Lives – estimated residual service life	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB1501 - 1509	all
BOP ID	BMPAL3.3BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

#### **Response:**

The business has used AER's standard approach provided under Economic Benchmarking RIN for distribution network service providers – Instructions and Definitions, and it has reconciled its RAB information to the AER 2015 preliminary determination Roll Forward Model.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2014	2015
------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

- 2015 RAB information is sourced from the 2015 AER preliminary determination Roll Forward Model, updated with actual 2015 capex as reported in the 2015 Annual RIN.
- CPI is sourced from ABS website (Weighted Average of 8 capital cities).

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	<ol style="list-style-type: none"> <li>The estimated residual service lives of all assets are determined as the ratio of Opening RAB to straight line depreciation for regulatory categories (Subtransmission, Distribution system assets, Metering, Public Lighting, SCADA/Network Control, Non-Network General-Other and Non-Network General-IT).</li> <li>For benchmarking network asset categories the residual service lives is estimated as the weighted average of residual lives of subtransmission and distribution system assets.</li> <li>For Other assets with long lives, weighted average is calculated for SCADA/Network Control, Public Lighting and Non-Network General-Other.</li> <li>For Other assets with short lives, the remaining lives are the same as that for Non-Network General-IT.</li> </ol>

2015	As per 2014
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**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why an estimate was required, including why it is not possible to use actual data;
2014	The business has no asset register that reconciles to the RAB information and therefore the AER's preferred method of estimating asset lives cannot be applied. The estimated residual service lives of the assets are therefore estimated as ratio of opening RAB to depreciation.
2015	As per 2014

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	The business has taken AER's approved lives as these are used for regulatory purposes.
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	The business has taken AER's approved lives as these reflect the regulatory asset lives and since the business does not have an asset register that reconciles to the RAB information the business believes this is the best estimate of asset lives for regulatory purposes.
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no material changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.3 Assets (RAB) - Alternative Control Services (ACS) tables only	
<b>Table name:</b> 3.3.1 Regulatory Asset Base Values	
<b>Table name:</b> 3.3.2 Asset value roll forward	
<b>Table name:</b> 3.3.3 Total disaggregated RAB asset values	
<b>Table name:</b> 3.3.4 Asset lives	
<b>Variable Code</b>	<b>Variable Name</b>
DRAB0101 to 0107	ALL – for total asset base
DRAB0201 – DRAB0907	Asset value roll forward
DRAB01001 - DRAB1007	ALL – For 'other' assets items with long lives – ACS only
DRAB13	Estimated Value of Capital Contributions or Contributed Assets – ACS only
DRAB1408	"Other" assets with long lives - ACS only
DRAB1508	"Other" assets with long lives - ACS only
BOP ID	BMPAL3.BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

The Instructions & Definitions provide extensive information on how the RAB data should be populated. Please document how each of the requirements set forth in section 4 of the Instructions & Definitions have been met.

#### **Response:**

The business has reported RAB information in relation to Public Lighting consistent with the AER's 2016-20 preliminary determination Public Lighting Model, provided 29 October 2015. Forecast net capex in the AER model has been replaced with actual capex as reported in the 2015 Annual RIN.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2014	2015
------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

Note that any 'zeros' are deemed 'actuals'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

The AER 2016-20 preliminary determination Public Lighting Model, provided 29 October 2015, has been used as the basis for the Public Lighting RAB roll forward. Forecast capex has been replaced with actual public lighting capex as reported in the 2015 Annual RIN (for both Alternative control fee and quoted services, and Negotiated services). The total capex has been allocated across Poles and brackets, Existing Lights and Energy Efficient Lights proportionately based on the capex shown in the model for 2014.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2014	<ol style="list-style-type: none"><li>1. For 2014 the AER's 2011-15 Final Decision Public Lighting Model is used. The capital expenditure includes public lighting replacements which does not incur customer contributions.</li><li>2. The estimated service life of the new "Other Assets with long lives" has been estimated based on the weighted average of poles and brackets and luminaires as per the AER's 2011-15 Final Decision Public Lighting Model, provided 29 October 2010. This was calculated using a 20% and 80% historical split of capital expenditure for poles and brackets and luminaires respectively.</li><li>3. The estimated residual service life of the "Other Assets with long lives" is determined as the ratio of opening RAB to straight line depreciation.</li></ol>
2015	<ol style="list-style-type: none"><li>1. For 2015 the AER 2016-20 preliminary determination Public Lighting Model was used, with forecast capex replaced by actual capex as reported in the 2015 Annual RIN. The capital expenditure includes public lighting replacements which does not incur customer contributions.</li><li>2. The estimated service life of the new "Other Assets with long lives" has been estimated using asset lives from the AER 2016-20 preliminary determination Public Lighting Model, provided 29 October 2015. This was calculated using the weighting of capex from 2014.</li><li>3. The estimated residual service life of the "Other Assets with long lives" is determined as the ratio of opening RAB to straight line depreciation.</li></ol>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2014	The business has no asset register that reconciles to the RAB information and therefore the AER's preferred method of estimating asset lives cannot be applied. The estimated service lives of new assets are therefore estimated as weighted average lives for RAB categories approved by the AER in its determination and the estimated residual service lives of the assets are estimated as a ratio of opening RAB to depreciation.
2015	As per 2014

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2014	Straight line depreciation has been used as this is consistent with the AER's 2011-15 Final Decision Public Lighting Model.
2015	Straight line depreciation has been used as this is consistent with the AER 2016-20 preliminary determination Public Lighting Model.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2014	This method is used for consistency as it matches the method used in the AER's 2011-15 Final Decision Public Lighting Model.
2015	This method is used for consistency as it matches the method used in the AER 2016-20 preliminary determination Public Lighting Model.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable



## **3.4 Operational Data**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.1 Energy delivery	
Table name: 3.4.1.1 Energy grouping - delivery by chargeable quantity	
Table name: 3.4.1.4 Energy grouping - customer type or class	
Variable Code	Variable Name
DOPED01	Total energy delivered
DOPED0201 - DOPED0206	(ALL)
DOPED0501 - DOPED0505	(ALL)
BOP ID	BMPAL3.4BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

#### **Table 3.4 Energy Delivery**

Energy delivered is the amount of electricity transported out of Powercor's network in the relevant Regulatory Year (measured in GWh). It must be the energy metered or estimated at the customer charging location rather than the import location from the TNSP. Energy delivered must be actual energy delivered data, unless this is unavailable. Where Actual Information is not available for the most recent reporting period, Energy Delivery data for that period may be reported on an accrual basis.

Peak, shoulder and off-peak periods relate to Powercor's own charging periods.

#### **Table 3.4.1.1 Energy grouping - delivery by chargeable quantity**

Powercor must report energy delivered in accordance with the category breakdowns as per the definitions provided in chapter 9.

Powercor must only report 'Energy Delivery where time of use is not a determinant' (DOPED0201) for Energy Delivery that was not charged for peak, shoulder or off-peak periods.

#### **Table 3.4.1.4 Energy grouping - customer type or class**

Powercor must report energy delivered in accordance with the category breakdown as per the definitions provided in chapter 9. The category breakdown must be consistent with the customer types reported in table 3.4.2.1

#### **Response:**

3.4 – Data obtained for this table was obtained from billed energy volumes, accruals and any billing adjustments for that given year. Billed energy volumes, accruals and billing adjustments is calculated at site (NMI) level and aggregated as a total.

3.4.1.1 – As per the definitions under 'Charges' in chapter 9 of the Economic benchmarking RIN for DNSP, data recorded in this table is aggregated by tariff and reported in the benchmarking RIN by the definitions provided. Energy volumes reported under single rate tariffs was used to populate DOPED0201 where 'Energy Delivery where time of use is not a determinant'.

3.4.1.4 - As per the definitions under 'Customer Types' in chapter 9 of the Economic benchmarking RIN for DNSP, data recorded in this table is aggregated based on the definitions provided

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

2015 energy delivery data is obtained from the annual regulatory accounts/RIN. The data contains actual billed quantities, accruals and billing adjustments. Actual billed quantities and accruals are sourced from Powercor's billing system, CIS Open Vision and billing adjustments (if any) are sourced from the Billing department.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<b>Energy Volumes</b> - Data is obtained from Finance's end of year tariff revenue report. The volumes reported include actual volumes billed in CISOV and accruals calculated in CISOV. Finance adjusts volumes based upon known issues according to accounting principles. Eg known/pending disputes as yet unresolved. The billing department will advise the consumption and splits (i.e. peak, shoulder, off peak) to be adjusted in the future.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	as per 2006

2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

**Tariff Revenue** – Powercor tariff structures do not cater for these categories.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.1 Energy delivery	
Table name: 3.4.1.2 Energy - received from TNSP and other DNSPs by time of receipt	
Variable Code	Variable Name
DOPED0301	Energy into DNSP network at On-peak times
DOPED0302	Energy into DNSP network at Shoulder times
DOPED0303	Energy into DNSP network at Off-peak times
DOPED0304	Energy received from TNSP and other DNSPs not included in the above categories
BOP ID	BMPAL3.4BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Powercor must report energy input into its network as measured at supply points from the TNSP and other DNSPs in accordance with the definitions provided in chapter 9.

Powercor must only report energy against 'Energy received from TNSP and other DNSPs not included in the above categories' (DOPED0304) where it is not possible to allocate the energy received into on-peak, shoulder and off- peak times.

#### **Response:**

Powercor has reported energy input into its network as measured at supply points from the TNSP and other DNSPs. Energy received from TNSP and other DNSP has been measured/calculated in accordance with the definitions of chapter 9, which is the amount of electricity transported out of Powercor's network in the relevant Regulatory Year (measured in GWh).

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

All of the data for the three sections for the years 2006-2015 has been sourced from the Powercor Itron Enterprise Edition (IEE) revenue metering system (in some cases via the SAP HANA reporting tools). The IEE system contains all metering data for all meters from 2006 onwards. It has replaced metering systems previously used as the source of data in reporting energy figures. There may be differences in metering figures for past years compared to previously reported, however this will not relate to the change in the system, it relates to the fact that metering data can be revised from time to time and the current figures reflect the latest revisions.

The data that comes from IEE system contains interval data from 3rd party meters that are located at the points of connection between the Powercor network and the TNSP/DNSP. All of the data from all parties in IEE is provided in line with the metering rules, which does allow for occasional estimating and substituting of values however this would make up a less than 1% of all readings.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Data was extracted from the Powercor IEE revenue metering system into MS Excel. A macro was then run to convert the interval data into Peak and Off Peak using the rule that Peak is 7am – 11pm on weekdays, and all other times are Off Peak. Shoulder times have not been considered in this modelling as it would create an inconsistency with the energy figures provided in DOPED0401 - DOPED0404 where it is not possible to perform that split.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No data has been estimated as it all comes from the Powercor IEE revenue metering system. The only derivation that has taken place were those used to split the interval data into Peak and Off Peak from the raw 15 and 30 minute interval data in the source system, as described in part C.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.4 Operational Data	
Table name: 3.4.1 Energy delivery	
Table name: 3.4.1.3 Energy – Received into DNSP system from embedded generation by time of receipt	
Variable Code	Variable Name
DOPED0401 - DOPED0408	(ALL)
BOP ID	BMCP3.4BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Energy delivered must be reported in accordance with the category breakdown as per the definitions provided in chapter 9.

Powercor is required to report energy received from Non-residential Embedded Generation by time of receipt. Powercor is required to report back cast energy received from Residential Embedded Generation only if it records data for these variables (DOPED0405–DOPED0408), however Powercor is required to provide this data for future Regulatory Years.

'Energy received from Embedded Generation not included in above categories' (DOPED0404 and DOPED0408) includes energy received from Embedded Generation on an accumulation basis and not measured by the time of receipt. Powercor must only report energy received in DOPED0404 where it is not possible to allocate the energy received into on-peak, shoulder and off-peak times (DOPED0401–DOPED0403 and DOPED0405–DOPED0407).

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for the Residential Embedded Generation variables (DOPED0405–DOPED0408) it must do so; otherwise Powercor must provide Estimated Information.

#### **Response:**

Powercor has reported energy received from Non-residential and residential Embedded Generation by time of receipt. Energy received from embedded generators has been measured/calculated in accordance with the definitions of chapter 9, as meter data has been reported, for energy received.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

All of the data for the three sections (peak, off peak, shoulder) for the years 2006-2015 has been sourced from the Powercor Itron Enterprise Edition (IEE) revenue metering system (in some cases via the SAP HANA reporting tools). Data to break up customers into Residential and Non-Residential has come from CIS, where the flag Domestic has been used to assume a customer is Residential. All other customers have been treated as Non-Residential.



**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Currently there is no way to break the energy supplied by customer PV into the network into peak and off peak. To reduce complexity it has been assumed that 5/7 of the energy will be peak (for weekdays) and the remainder off peak (for the weekend). All other generators have been modelled into peak and off peak in from their interval data using Peak and Off Peak using the rule that Peak is 7am – 11pm on weekdays, and all other times are Off Peak.  Shoulder times and generated energy that does not fit into a time have not been considered as there was no way that the solar data could be modelled into shoulder as the interval data is not available. These have been made 0 so that the peak and off peak still add up to the total.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	Generators from their interval data using Peak and Off Peak using the rule that Peak is 7am – 11pm on weekdays, and all other times are Off Peak.
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	As discussed in point C, the only estimation has been done on the customer PV solar data. The reason why it was estimated is because there is no current method available to be able to process all of the PV solar generator data in interval format; it can only currently be processed at an aggregated level.  An alternative was considered using the interval metering data for every individual customer with PV solar generation, however when this approach was tested it proved to exceed the limitations of reporting systems, and was deemed impracticable.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	Actual data
2015	Actual data

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Peak values have been considered to be 7am – 11pm weekdays with all other times Off Peak. It has been assumed that over the course of the year 5/7 days where solar PV is exporting energy it will be a peak and 2/7 will be off peak. It is expected that most solar PV export energy is during the hours of 7am – 11pm, therefore the split has been performed simply on weekdays vs weekend days.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006

2014	N/A
2015	N/A

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	The selected approach was chosen as there are no other practical alternatives.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	N/A
2015	N/A

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not Applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.2 Customer Numbers	
Table name: 3.4.2.1 Distribution customer numbers by customer type or class	
Table name: 3.4.2.2 Distribution customer numbers by location on the network	
Variable Code	Variable Name
DOPCN0101 – DOPCN0106	(ALL)
DOPCN01	Total customer numbers
DOPCN0201 – DOPCN0204	(ALL)
DOPCN02	Total customer numbers
BOP ID	BMPAL3.4BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Distribution Customers for a Regulatory Year are the average number of active National Meter Identifiers (NMIs) in Powercor's network in that year (except for Unmetered Customer Numbers). Each NMI is counted as a separate customer. The average is calculated as the average of the number of NMIs on the first day of the Regulatory Year and on the last day of the Regulatory Year. Both energised and de-energised NMIs must be counted. Extinct NMIs must not be counted.

For unmetered customers, the Customer Numbers are the sum of connections (excluding public lighting connections) in Powercor's network that do not have a NMI and the energy usage for billing purposes is calculated using an assumed load profile (examples include bus shelters, security lighting and traffic signals where not metered). Public lighting connections must not be counted as unmetered customers.

#### **Table 3.4.2.1 Distribution Customer Numbers by customer type or class**

Powercor must report Customer Numbers in accordance with the categorisation as per the definitions provided in chapter 9.

Powercor must report customers against 'Other Customer Numbers' (DOPCN0106) only when customers cannot be allocated to the other customer classes (DOPCN0101–DOPCN0105).

#### **Table 3.4.2.2 Distribution Customer Numbers by location on the network**

Powercor must report Customer Numbers in accordance with the category definitions provided in chapter 9. The locations are: CBD, urban, short rural and long rural.

#### **Response:**

Powercor's Corporate Finance annual tariff revenue reports the count of NMIs for each customer class (i.e. residential, small commercial, high voltage, sub transmission and unmetered) on the last day of the year. As required by the definition, these numbers were used to obtain an average for the year.

3.4.2.1 – The customer numbers in this table is the count of energised and de-energised NMIs and categorised in accordance to the definitions stated under 'Customer Types' in chapter 9.

3.4.2.2 The numbers reported in this table is the count of energised and de-energised NMIs in accordance to the definitions stated in chapter 9.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For DOPCN0101-106, DOPCN01, and DOPCN0202-204 and DOPCN02

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

Total 2015 customer numbers are obtained from Corporate Finance's end of year reports which are sourced from Powercor's billing system, CIS Open Vision (CISOV) where NMI's are classed as 'Active'.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p>The reported customer numbers for this section assumes the numbers relate to NMIs set up for billing purposes.</p> <p><b>Customer Numbers by customer type or class</b>- Data is obtained by averaging Finance's prior year's end of year customer numbers and the current year's end of year customer numbers and adding estimated 1% of de-energised sites to the total. The totals were then reweighted across all categories. CISOV is the original source and reports based on the number of active sites. This data is then aggregated based on the customer class.</p> <p><b>Customer Numbers by location on the network</b> – Is calculated by obtaining the weighted average from the customer numbers reported in the annual non-financial RINs/Regulatory reports and multiplied by the totals reported under customer numbers by customer class. The annual non-financial RINs/Regulatory reports also use a weighted average using spatial data from GIS and year end customer numbers.</p> <p>Note that Powercor has no CBD network, and hence there are no customers on the CBD networks in Powercor's distribution area. Therefore this variable (DOPCN0201) is zero.</p>
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	<p>Powercor does not hold historical data in regards to the status of the NMI (i.e. De-energisations) therefore an estimate of de-energised NMIs were obtained from 2013's end of year position. The estimated number of (1% of de-energised sites) was then added on to the average year end customer numbers for years 2006-2013.</p> <p><b>Customer Numbers by location on the network</b> – Due to timing differences in operations systems it is not possible to reconcile GIS (spatial data) and CIS (billing data) exactly, therefore a weighted average is applied to determine customer type by location</p>
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006

2015	<p>Powercor does not hold historical data in regards to the status of the NMI (i.e. De-energisations) therefore an estimate of de-energised NMIs were obtained from 2014's end of year position. The estimated number of (1% of de-energised sites) was then added on to the average year end customer numbers for 2015.</p> <p><b>Customer Numbers by location on the network</b> – Due to timing differences in operations systems it is not possible to reconcile GIS (spatial data) and CIS (billing data) exactly, therefore a weighted average is applied to determine customer type by location</p>
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Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<p>Spatial data was originally sourced from Powercor's meter data system. Percentages were then obtained from this data to calculate the percentage differences between Urban, Rural Short and Rural Long which were then applied to the total number reported in Finance's end of year customer numbers.</p> <p>No other option was considered as it would require extensive system changes.</p>
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	Spatial data was sourced from GIS. The same method (i.e. weighted average) used in 2006 was then applied.
2013	as per 2012
2014	As per 2013
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Since Powercor does not hold historical data, weighted average was used to distribute customer numbers by their location.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2014

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

**Tariff Revenue** – Powercor tariff structures do not cater for these categories.

## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.1 Annual system Maximum Demand characteristics at the zone substation level – MW measure	
Table name: 3.4.3.3 Annual system Maximum Demand characteristics at the zone substation level – MVA measure	
Variable Code	Variable Name
DOPSD0101	Non-coincident Summated Raw System Annual Maximum Demand
DOPSD0104	Coincident Raw System Annual Maximum Demand
DOPSD0201	Non-coincident Summated Raw System Annual Maximum Demand
DOPSD0204	Coincident Raw System Annual Maximum Demand
BOP ID	BMPAL3.4BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Tables 3.4.3.1 to 3.4.3.3 must be completed in accordance with the definitions in chapter 9.

#### **Table 3.4.3.1 Annual system Maximum Demand characteristics at the zone substation level – MW measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted).

#### **Table 3.4.3.3 Annual system Maximum Demand characteristics at the zone substation level – MVA measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted).

#### **Response:**

The information provided in tables 3.4.3.1 and 3.4.3.3 is a summation of the *maximum demand* measured at the zone substation for the non-coincident level and a summation of the zone substation demand measured at the time of peak demand of the whole Powercor network (coincident). The measured *maximum demand* complies with the definition in chapter 10 of the National Electricity Rules, version 60.

Note: The raw (or unadjusted) non coincident maximum demand at the zone substation level was annually reported from 2006 to 2012 in the Distribution System Planning Report (DSPR) and in the 2015 Distribution Annual Planning Report (DAPR).

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For DOPSD0101 and DOPSD0104 (MW)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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For DOPSD0201 and DOPSD0204 (MVA)

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

All zone substation raw peak demand source data is collected from Ion power quality meters, located at each individual zone substation. If Ion meter data is unavailable, then TrendScada data is used.  
Historically, Powercor does not record coincident peak demand at the zone substation level. Where information has been previously reported to regulatory bodies, Powercor has used this data for the benchmarking RIN.

**Response:****DOPSD0101 & DOPSD0201: Non-coincident summated Raw System Annual Maximum Demand**

- From 2011 to 2014, is a summation of the zone substation non coincident raw annual maximum demands reported annually in the demand worksheet of the annual RIN Demand templates
- The source data for 2015 was obtained from Powercor Ion meters or TrendScada meter data (where Ion meter data is unavailable) and customer HV metering data, at the time of the zone substation annual peak demand. The source data from 2006 to 2010 was obtained from Table 17 of the demand forecast (6.3) 2010-15 RIN Template.

**DOPSD0104 & DOPSD0204: Coincident summated Raw System Annual Maximum Demand**

- The source data from 2006 to 2010 was obtained from Table 10 of the demand forecast (6.3) 2010-15 RIN Template.
- 2011 was obtained from TrendScada meter data from Powercor zone substations and customer HV metering data at the time of the system annual peak demand.
- 2012 & 2013 was obtained from Ion meter data from Powercor zone substations and customer HV metering data at the time of the system annual peak demand.
- The source data for 2014 and 2015 was obtained from Powercor Ion meters or TrendScada meter data (where Ion meter data is unavailable) and customer HV metering data, at the time of the system annual peak demand.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Each year contains the summation of all Powercor Zone Substations and 66kV HV Customer Substation MW and MVA load at coincident and non-coincident peak demand.
2007	As above
2008	As above
2009	As above
2010	As above
2011	As above
2012	As above
2013	As above
2014	As above
2015	As above

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	This data was estimated as the peak demand had not yet occurred at the time of the submission.
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	The estimate was based on the summation of Powercor zone substation load forecast for 2010
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data



2015	No estimated data
<b>Year</b>	<b>3. the reason(s) for the selected approach and why it is the best estimate.</b>
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	As the 2010 actual peak demand had not yet occurred the zone substation 2010 forecast was used.
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.1 Annual system Maximum Demand characteristics at the zone substation level – MW measure	
Table name: 3.4.3.3 Annual system Maximum Demand characteristics at the zone substation level – MVA measure	
Variable Code	Variable Name
DOPSD0102	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 10% POE
DOPSD0103	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 50% POE
DOPSD0105	Coincident Weather Adjusted System Annual Maximum Demand 10% POE
DOPSD0106	Coincident Weather Adjusted System Annual Maximum Demand 50% POE
DOPSD0202	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 10% POE
DOPSD0203	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 50% POE
DOPSD0205	Coincident Weather Adjusted System Annual Maximum Demand 10% POE
DOPSD0206	Coincident Weather Adjusted System Annual Maximum Demand 50% POE
BOP ID	BMPAL3.4BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Tables 3.4.3.1 to 3.4.3.3 must be completed in accordance with the definitions in chapter 9. Powercor must provide inputs for these cells if it has calculated historical Weather Adjusted Maximum Demand.

Where Powercor does not calculate Weather Adjusted Maximum Demands it may estimate the historical Weather Adjusted data or shade the cells black. For subsequent Regulatory Years Powercor will be required to provide Weather Adjusted Maximum Demand on an ongoing basis in accordance with best regulatory practice weather adjustment methodologies.

**Table 3.4.3.1 Annual system Maximum Demand characteristics at the zone substation level – MW measure** Coincident and non-coincident Maximum Demands must be reported Weather Adjusted at the 10% and 50% Probability of Exceedance (POE) levels.

**Table 3.4.3.3 Annual system Maximum Demand characteristics at the zone substation level – MVA measure** Coincident and non-coincident Maximum Demands must be reported Weather Adjusted at the 10% and 50% POE levels.

#### **Response:**

Historically Powercor did not weather adjust its raw non coincident or coincident maximum demand at zone substation level, until it developed a POE calculator in 2010. All 'actual' data provided in the previous EDPR was raw *maximum demand* as defined in chapter 10 of the National Electricity Rules. To provide an estimate for the historical 10% and 50% POE weather adjusted data, Powercor used a ratio derived by the National Institute of Economic and Industry Research (NIEIR) and applied it to the summation of the non-coincident and coincident maximum demand at zone substation level. From 2011 to 2015, a summation of the weather adjusted non coincident maximum demand at the zone substation using Powercor's POE calculator. Powercor does not weather adjust coincident level zone substation demand, therefore as a best estimate, a ratio of the non-coincident weather adjusted maximum demand was used to calculate the coincident weather adjusted demand.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For variables **DOPSD0102, DOPSD0103, DOPSD0202, DOPSD0203**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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For variables **DOPSD0105, DOPSD0106, DOPSD0205, DOPSD0206**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

All zone substation raw peak demand source data is collected from lon power quality meters, located at each individual zone substation. If lon meter data is unavailable, then TrendScada data is used. Historically, Powercor does not report coincident peak demand at the zone substation level as it is not a regulatory requirement. Where information has been previously reported to regulatory bodies, Powercor has used this data for the benchmarking RIN.

**DOPSD0102, DOPSD0103, DOPSD0202, DOPSD0203: Non coincident weather adjusted system annual maximum demand 10% POE and 50% POE**

- The source data from 2006 to 2010 was not available as Powercor did not commence weather correcting its zone substation peak demands until 2010. Using the Non-Coincident Raw System Peak Demand (from DOPSD0101, DOPSD0201) the weather adjusted 10% & 50% peak demand was calculated using a ratio provided by NIEIR.
- From 2011 to 2015, is a summation of the zone substation non-coincident weather adjusted annual maximum demands reported annually in the demand worksheet of the annual RIN Demand templates.

**DOPSD0105, DOPSD0106, DOPSD0205, DOPSD0206: Coincident weather adjusted system annual maximum demand 10% POE and 50% POE**

- The source data from 2006 to 2010 was not available as Powercor did not commence weather correcting its zone substation peak demands until 2010. Using the Coincident Raw System Annual Peak Demand (from DOPSD0104, DOPSD0204) the weather adjusted 10% & 50% peak demand was calculated using a ratios provided by NIEIR.
- The source data from 2011 to 2015 was obtained from Powercor lon meters or TrendScada meter data (when lon meter data is unavailable) and customer HV metering data, at the time of the system annual peak demand. The ratio of the 2011, 2012, 2013, 2014 and 2015 non-coincident weather adjusted annual peak demand was used to calculate the coincident 10% & 50% weather adjusted annual peak demand for the respective year.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	As Powercor did not commence weather adjusting the non-coincident zone substation raw peak demand until 2010, the National Institute of Economic and Industry Research (NIEIR) derived ratios of 50%POE/actual and 10% POE/actual at the total network level were used to estimate the 10 and 50% POE values. These network ratios were then applied to the raw summated zone substation level values to calculate a weather adjusted value.  10% POE = 1.094 50% POE = 1.026
2007	10% POE = 1.076 50% POE = 1.009
2008	10% POE = 1.005 50% POE = 0.939
2009	10% POE = 0.975 50% POE = 0.907
2010	10% POE = 1.017 50% POE = 0.944

2011	<p>The non-coincident weather adjusted zone substation peak demands were calculated using Powercor's internal weather correction POE calculator. The calculator uses terminal station load sensitivity data based on the latest NIEIR reports. The zone substation raw peak MW demand and average daily temperature on which the peak occurred (temperature data is sourced from the nearest weather station to the zone substation) are entered into the terminal station calculator supplying the zone substation and a weather adjusted 10%, 50% and 90% value is calculated.</p> <p><i>The 2011 coincident weather adjusted peak demands were calculated using the ratios of the non-coincident weather adjusted peak demands:</i></p> <p>10% POE / RAW = 1.0512 50% POE / RAW = 1.0131</p>
2012	<p><i>The 2012 coincident weather adjusted peak demands were calculated using the ratios of the non-coincident weather adjusted peak demands:</i></p> <p>10% POE / RAW = 1.0763 50% POE / RAW = 1.0401</p>
2013	<p><i>The 2013 coincident weather adjusted peak demands were calculated using the ratios of the non-coincident weather adjusted peak demands:</i></p> <p>10% POE / RAW = 1.0671 50% POE / RAW = 1.0111</p>
2014	<p><i>The 2014 coincident weather adjusted peak demands were calculated using the ratios of the non-coincident weather adjusted peak demands:</i></p> <p>10% POE / RAW = 1.0347 50% POE / RAW = 0.95</p>
2015	<p>For variables DOPSD0102, DOPSD0103, DOPSD0202, DOPSD0203 methodology is as per the response section C.</p> <p>For variables DOPSD0105, DOPSD0106, DOPSD0205, DOPSD0206, the 2015 coincident weather adjusted peak demands were calculated using the ratios of the non-coincident weather adjusted peak demands:</p> <p>10% POE / RAW = 1.1714 50% POE / RAW = 1.0737</p>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	<p>From 2006 to 2010, the non-coincident weather adjusted peak demand was calculated using the ratio in section C. Actual data cannot be provided because historically Powercor did not weather correct the non-coincident peak demand until 2010.</p> <p>From 2006 to 2010, the coincident weather adjusted peak demand was calculated using the ratio in section C. Actual data cannot be provided because historically Powercor does not weather correct the coincident peak demand.</p> <p>The 2011, 2012 and 2013 coincident weather adjusted peak demand was calculated using the method outlined in section C.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	<p>The non-coincident weather adjusted peak demand was calculated using the Powercor POE calculator, as outlined in section C.</p> <p>The 2011 coincident weather adjusted peak demand was calculated using the method outlined in section C.</p>

2012	The non-coincident weather adjusted peak demand was calculated using the Powercor POE calculator, as outlined in section C.  The 2012 coincident weather adjusted peak demand was calculated using the method outlined in section C.
2013	The non-coincident weather adjusted peak demand was calculated using the Powercor POE calculator, as outlined in section C.  The 2013 coincident weather adjusted peak demand was calculated using the method outlined in section C.
2014	The non-coincident weather adjusted peak demand was calculated using the Powercor POE calculator, as outlined in section C.  The 2014 coincident weather adjusted peak demand was calculated using the method outlined in section C.
2015	Only the 10/50 POE coincident data was estimated

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Historically Powercor did not weather correct the non-coincident peak demand until 2010. Historically Powercor does not weather correct coincident peak demand
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	Historically, Powercor does not weather adjust the zone substation coincident peak demand as it is not a regulatory requirement. To provide a coincident weather adjusted value, the ratio of the weather adjusted and raw non coincident peak demand was used, as outlined in section C.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	The 2015 coincident weather adjusted peak demand was calculated using the method outlined in section C.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Historically, Powercor did not weather correct the non-coincident peak demand at the zone substation level until it developed its internal weather correction calculator in 2010. To provide an estimate, Powercor used a ratio derived by NIEIR and applied it to the summation of the non-coincident and coincident maximum demand at zone substation level.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	Powercor does not weather adjust coincident level zone substation demand as it is not a regulatory requirement to report zone substation coincident demand. The method chosen is considered the best estimate as it used the ratio defined in section C, where the weather adjusted value was calculated using the Powercor weather correction calculator.
2012	As per 2011
2013	As per 2011
2014	As per 2011
2015	Only the 10/50 POE coincident data was estimated . The method used was deemed the most appropriate to estimate the data.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** There have been no changes in the Business' accounting policies.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable

## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.2 Annual system Maximum Demand characteristics at the transmission connection point – MW measure	
Table name: 3.4.3.4 Annual system Maximum Demand characteristics at the transmission connection point – MVA measure	
Variable Code	Variable Name
DOPSD0107	Non-coincident Summated Raw System Annual Maximum Demand (MW)
DOPSD0110	Coincident Raw System Annual Maximum Demand (MW)
DOPSD0207	Non-coincident Summated Raw System Annual Maximum Demand (MVA)
DOPSD0210	Coincident Raw System Annual Maximum Demand (MVA)
BOP ID	BMPAL3.4BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### *Requirements of the notice:*

Tables 3.4.3.2 to 3.4.3.4 must be completed in accordance with the definitions in chapter 9. Powercor must provide inputs for these cells if it has calculated historical Weather Adjusted Maximum Demand.

Where Powercor does not calculate Weather Adjusted Maximum Demands it may estimate the historical Weather Adjusted data or shade the cells black. For subsequent Regulatory Years Powercor will be required to provide Weather Adjusted Maximum Demand on an ongoing basis in accordance with best regulatory practice weather adjustment methodologies.

#### **Table 3.4.3.2 Annual system Maximum Demand characteristics at the transmission connection point level – MW measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

#### **Table 3.4.3.4 Annual system Maximum Demand characteristics at the transmission connection point – MVA measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

#### **Response:**

The information provided in the variable codes stated above in tables 3.4.3.2 and 3.4.3.4 is a summation of the *maximum demand* measured at the transmission connection point for the non-coincident level and a summation of the transmission connection point demand measured at the time of peak demand of the whole Powercor network (coincident). The measured *maximum demand* complies with the definition in chapter 10 of the National Electricity Rules, version 60. , Note that the summated maximum demand at a transmission level usually occurs in summer. Seasonal summer is used for the purposes of the RIN, hence summer 2015 is considered between the months November 2014 to March 2015. The information provided is consistent with the requirements of the Notice.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

All Terminal station raw peak demand source data is collected from the IEE wholesale meter data for each individual Terminal Station.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<b>DOPSD0107 &amp; DOPSD0207: Non-coincident summated raw system annual peak demand</b> <ul style="list-style-type: none"><li>The source data for 2006 - 2015 was obtained from the summation of the actual raw terminal station maximum demands for each year sourced from IEE database.</li></ul> <b>DOPSD0110 &amp; DOPSD0210: Coincident summated raw system annual peak demand</b> <p>The source data for 2006 - 2015 was obtained from the summation of the actual raw terminal station maximum demands at the date and time of system peak for each year and sourced from IEE database</p> <p>The source of the data is the IEE wholesale metering database accessed through a tool called 'IEE Report Runner'. This data is contained in a load estimate spreadsheet for each terminal station which contains historical actual data.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006 except tool 'IEE Report Runner' replaced with system 'SAP BW on HANA – Production'
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated or derived data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated or derived data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006



2015	As per 2006
------	-------------

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated or derived data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.2 Annual system Maximum Demand characteristics at the transmission connection point – MW measure	
Table name: 3.4.3.4 Annual system Maximum Demand characteristics at the transmission connection point – MVA measure	
Variable Code	Variable Name
DOPSD0108	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 10% POE (MW)
DOPSD0109	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 50% POE (MW)
DOPSD0111	Coincident Weather Adjusted System Annual Maximum Demand 10% POE (MW)
DOPSD0112	Coincident Weather Adjusted System Annual Maximum Demand 50% POE (MW)
DOPSD0208	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 10% POE (MVA)
DOPSD0209	Non-coincident Summated Weather Adjusted System Annual Maximum Demand 50% POE (MVA)
DOPSD0211	Coincident Weather Adjusted System Annual Maximum Demand 10% POE (MVA)
DOPSD0212	Coincident Weather Adjusted System Annual Maximum Demand 50% POE (MVA)
BOP ID	BMPAL3.4BOP8

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Tables 3.4.3.2 to 3.4.3.4 must be completed in accordance with the definitions in chapter 9. Powercor must provide inputs for these cells if it has calculated historical Weather Adjusted Maximum Demand.

Where Powercor does not calculate Weather Adjusted Maximum Demands it may estimate the historical Weather Adjusted data or shade the cells black. For subsequent Regulatory Years Powercor will be required to provide Weather Adjusted Maximum Demand on an ongoing basis in accordance with best regulatory practice weather adjustment methodologies.

#### **Table 3.4.3.2 Annual system Maximum Demand characteristics at the transmission connection point level – MW measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

#### **Table 3.4.3.4 Annual system Maximum Demand characteristics at the transmission connection point – MVA measure**

Coincident and non-coincident Maximum Demands must be reported raw (or unadjusted) and Weather Adjusted at the 10% and 50% POE levels.

#### **Response:**

The information provided in the variable codes stated above in tables 3.4.3.2 and 3.4.3.4 is a summation of the calculated or derived weather adjusted *maximum demand* measured at the transmission connection point for the non-coincident level and a summation of calculated or derived weather adjusted *maximum demand* at the transmission connection point demand measured at the time of peak demand of the whole Powercor network (coincident). The measured *maximum demand* complies with the definition in chapter 10 of the National Electricity Rules, version 60. The information provided is consistent with the requirements of the Notice

Where estimated historical weather adjusted data is provided, Powercor used a ratio derived by the National Institute of Economic and Industry Research (NIEIR) and applied it to the summation of the non-coincident and coincident maximum demand at the transmission connection point to provide the 10% POE (Probability of Exceedance) Level data.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

All Terminal station raw peak demand source data is collected from the IEE whole sale meter data for each individual Terminal station.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p>The POE is the probability that the actual weather circumstances will be such that the actual Maximum Demand experienced will exceed the relevant maximum demand measure adjusted for weather correction. A 50% Probability of Exceedance means that the Maximum Demand measure adjusted for weather correction is expected to be exceeded fifty out of every one hundred years.</p> <p><b>DOPSD0109 &amp; DOPSD0209: Non-coincident summated weather adjusted system annual peak demand 50% POE</b></p> <ul style="list-style-type: none"> <li>The data from 2006 to 2010 was derived from the non-coincident raw maximum demand data by utilising 50% POE/actual ratios provided by the National Institute of Economic and Industry Research (NIEIR) for the whole Powercor network load. Powercor started weather adjusting terminal station connection point raw Maximum Demand data in 2011.</li> </ul> <p>The source data for 2011 - 2013 was obtained from the summation of the weather adjusted 50% terminal station non-coincident maximum demands for each year sourced from various Powercor load estimate spreadsheets. An internal POE calculator was used to calculate these figures.</p> <p><b>DOPSD0108 &amp; DOPSD0208: Non-coincident summated weather adjusted system annual peak demand 10% POE</b></p> <ul style="list-style-type: none"> <li>The data from 2006 to 2010 was derived from the non-coincident raw maximum demand data by utilising 10% POE/actual ratios provided by the National Institute of Economic and Industry Research (NIEIR) for the whole Powercor network load. Powercor started weather adjusting terminal station connection point raw Maximum Demand data in 2011.</li> <li>The source data for 2011 - 2014 was obtained from summation of the weather adjusted 10 % terminal station non-coincident maximum demands for each year sourced from various Powercor load estimate spreadsheets. An internal POE calculator was used to calculate these figures.</li> </ul> <p><b>DOPSD0112 &amp; DOPSD0212: Coincident summated weather adjusted system annual peak demand 50% POE</b></p> <ul style="list-style-type: none"> <li>The data from 2006 to 2013 was derived from the coincident raw maximum demand data by utilising 50% POE/actual ratios provided by the National Institute of Economic and Industry Research (NIEIR) for the whole Powercor network load.</li> </ul> <p><b>DOPSD0111 &amp; DOPSD0211: Coincident summated weather adjusted system annual peak demand 10% POE</b></p> <ul style="list-style-type: none"> <li>The data from 2006 to 2013 was derived from the coincident raw maximum demand data by utilising 10% POE/actual ratios provided by the National Institute of Economic and Industry Research (NIEIR) for the whole Powercor network load.</li> </ul> <p>As Powercor did not commence weather adjusting the non-coincident terminal station connection point maximum demands until 2011, National Institute of Economic and Industry Research (NIEIR) derived ratios of 50%POE/actual and 10% POE/actual at the total network level were used to estimate the 10 and 50% POE values.</p> <p>Powercor does not weather adjust the coincident terminal station connection point maximum demands. NIEIR ratios were used to estimate the 10 and 50% POE values. Hence this is the best estimate that Powercor can provide</p>

2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	For weather adjusted non-coincident terminal station connection point maximum demands, an internal POE calculator was used to calculate the 10 and 50% POE values. Powercor does not weather adjust the coincident terminal station connection point maximum demands and hence NIEIR ratios were used to estimate the 10 and 50% POE values
2012	As per 2011
2013	As per 2011
2014	New POE calculator used for the 10 and 50% POE weather adjusted non-coincident terminal station connection point maximum demands. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2014 coincident terminal station maximum demands to summated raw actual 2014 non-coincident terminal station maximum demands was used.
2015	As per 2014. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2015 coincident terminal station maximum demands to summated raw actual 2015 non-coincident terminal station maximum demands was used as a multiplier with the summated non-coincident terminal station demand.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Powercor did not commence weather adjusting the non-coincident terminal station connection point maximum demands until 2011 and hence NIEIR ratios were used to estimate the non-coincident 10 and 50% POE values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The weather adjusted non-coincident terminal station connection point 10 and 50% POE maximum demands are estimates using a Probability of Exceedance (POE) calculator. They have been labelled as estimates as they are calculated and not metered values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2012	As per 2011. In addition for year 2012 coincident 10 and 50% POE maximum demands, NIEIR provided ratios for an MD day that did not coincide with the Powercor determined MD day. These ratios were used nonetheless and no other data was available.
2013	As per 2011
2014	As per 2011. In addition a new POE calculator was used for the 10 and 50% POE weather adjusted non-coincident terminal station connection point maximum demands. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2014 coincident terminal station maximum demands to summated raw actual 2014 non-coincident terminal station maximum demands was used.
2015	As per 2014. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2015 coincident terminal station maximum demands to summated raw actual 2015 non-coincident terminal station maximum demands was used as a multiplier with the summated non-coincident terminal station demand.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Powercor did not commence weather adjusting the non-coincident terminal station connection point maximum demands until 2011 and hence NIEIR ratios were used to estimate the non-coincident 10 and 50% POE values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2007	As per 2006
2008	As per 2006

2009	As per 2006
2010	As per 2006
2011	The weather adjusted non-coincident terminal station connection point 10 and 50% POE maximum demands are estimates using a Probability of Exceedance (POE) calculator. They have been labelled as estimates as they are calculated and not metered values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2012	As per 2011
2013	As per 2011
2014	As per 2011. In addition a new POE calculator was used for the 10 and 50% POE weather adjusted non-coincident terminal station connection point maximum demands. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2014 coincident terminal station maximum demands to summated raw actual 2014 non-coincident terminal station maximum demands was used.
2015	As per 2014. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2015 coincident terminal station maximum demands to summated raw actual 2015 non-coincident terminal station maximum demands was used as a multiplier with the summated non-coincident terminal station demand.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Powercor did not commence weather adjusting the non-coincident terminal station connection point maximum demands until 2011 and hence NIEIR ratios were used to estimate the non-coincident 10 and 50% POE values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The weather adjusted non-coincident terminal station connection point 10 and 50% POE maximum demands are estimates using a Probability of Exceedance (POE) calculator. They have been labelled as estimates as they are calculated and not metered values. Powercor does not weather adjust the coincident terminal station connection point 10 and 50% POE maximum demands and hence NIEIR ratios were used to estimate the coincident 10 and 50% POE values
2012	As per 2011
2013	As per 2011
2014	As per 2011. In addition a new POE calculator was used for the 10 and 50% POE weather adjusted non-coincident terminal station connection point maximum demands. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2014 coincident terminal station maximum demands to summated raw actual 2014 non-coincident terminal station maximum demands was used
2015	As per 2014. Powercor does not weather adjust the coincident terminal station connection point maximum demands. To estimate the 10 and 50% POE coincident values, a ratio of the summated raw actual 2015 coincident terminal station maximum demands to summated raw actual 2015 non-coincident terminal station maximum demands was used as a multiplier with the summated non-coincident terminal station demand.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blackened out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.5 Power Factor conversion between MVA and MW	
Variable Code	Variable Name
DOPSD0301	Average overall network power factor conversion between MVA and MW
DOPSD0302	Average power factor conversion for low voltage distribution lines
DOPSD0303	Average power factor conversion for 3.3 kV lines = 0
DOPSD0304	Average power factor conversion for 6.6 kV lines = 0
DOPSD0305	Average power factor conversion for 7.6 kV lines = 0
DOPSD0306	Average power factor conversion for 11 kV lines
DOPSD0307	Average power factor conversion for SWER lines
DOPSD0308	Average power factor conversion for 22 kV lines
DOPSD0309	Average power factor conversion for 33 kV lines = 0
DOPSD0310	Average power factor conversion for 44 kV lines = 0
DOPSD0311	Average power factor conversion for 66 kV lines
DOPSD0312	Average power factor conversion for 110 kV lines = 0
DOPSD0313	Average power factor conversion for 132 kV lines = 0
DOPSD0314	Average power factor conversion for 220kV lines = 0
BOP ID	BMPAL3.4BOP9

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

#### **Table 3.4.3.5 Power factor conversion between MVA and MW**

Table 3.4.3.5 must be completed in accordance with the definitions in chapter 9. Powercor must report the power factor to allow for conversion between MVA and MW measures for each voltage. If both MVA and MW throughput for a network are available then the power factor is the total MW divided by the total MVA. Powercor must provide a power factor for each voltage level and for the network as a whole. The average overall power factor conversion (DOPSD0301) is the total MW divided by the total MVA.

If either the MW or MVA measure is unavailable the average power factor conversion can be calculated as an approximation based on best engineering estimates.

#### **Response:**

Data used to calculate the average overall network power factor was sourced from the measured transmission connection point data in sections DOPSD0110 and DOPSD0210.

As the data for the remaining voltage levels is not readily stored or available, as best engineering estimates, Powercor refers to the values defined in Table 2, of section 4.3 of the 'Electricity Distribution Code' version 7, May 2012. The values used were for customer maximum demand over 2MVA, minimum lagging.



**B. Actual vs. Estimated Data colour coding\**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

For **DOPSD0302, DOPSD0306, DOPSD0307, DOPSD0308, DOPSD0311:**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the *Economic Benchmarking Instructions and Definitions* document that 'some variables are inherently estimated or may continue to be estimated.'

For **DOPSD0301, DOPSD0303, DOPSD0304, DOPSD0305, DOPSD0309, DOPSD0310, DOPSD0312, DOPSD0313 and DOPSD0314**

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response: DOPSD0301:**

Data used to calculate the power factor was sourced from DOPSD0110 and DOPSD0210.

**DOPSD0302, DOPSD0306, DOPSD0307, DOPSD0308, DOPSD0311:**

The data used to populate the above sections was sourced from Table 2, of section 4.3 of the 'Electricity Distribution Code' version 7, May 2012. The values used were for customer maximum demand over 2MVA, minimum lagging.

**DOPSD0303, DOPSD0304, DOPSD0305, DOPSD0309, DOPSD0310, DOPSD0312, DOPSD0313 and DOPSD0314:**

Powercor do not have these voltage lines and so are zero

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions																																																
2006	<p><b>DOPSD0301:</b> Overall network power factor is calculated by dividing the transmission connection point coincident Raw system annual maximum demand MW by the transmission connection point coincident Raw system annual maximum demand MVA.</p> <p><b>DOPSD0302, DOPSD0306, DOPSD0307, DOPSD0308, DOPSD0311:</b> Table 2, of section 4.3 of the 'Electricity Distribution Code is as follows:</p> <p>Table 2</p> <table><tr><th colspan="7">POWER FACTOR LIMITS</th></tr><tr><th rowspan="2">Supply Voltage in kV</th><th colspan="6">Power Factor Range for Customer Maximum Demand and Voltage</th></tr><tr><th colspan="2">Up to 100 kVA</th><th colspan="2">Between 100 kVA - 2 MVA</th><th colspan="2">Over 2 MVA</th></tr><tr><th></th><th>Minimum Lagging</th><th>Minimum Leading</th><th>Minimum Lagging</th><th>Minimum Leading</th><th>Minimum Lagging</th><th>Minimum Leading</th></tr><tr><td>&lt; 6.6</td><td>0.75</td><td>0.8</td><td>0.8</td><td>0.8</td><td>0.85</td><td>0.85</td></tr><tr><td>6.6 11 22</td><td>0.8</td><td>0.8</td><td>0.85</td><td>0.85</td><td>0.9</td><td>0.9</td></tr><tr><td>66</td><td>0.85</td><td>0.85</td><td>0.9</td><td>0.9</td><td>0.95</td><td>0.98</td></tr></table> <p>The values used were for customer maximum demand over 2MVA, minimum lagging. This is the best engineering estimates as the data is not readily stored or available at these voltage levels.</p>	POWER FACTOR LIMITS							Supply Voltage in kV	Power Factor Range for Customer Maximum Demand and Voltage						Up to 100 kVA		Between 100 kVA - 2 MVA		Over 2 MVA			Minimum Lagging	Minimum Leading	Minimum Lagging	Minimum Leading	Minimum Lagging	Minimum Leading	< 6.6	0.75	0.8	0.8	0.8	0.85	0.85	6.6 11 22	0.8	0.8	0.85	0.85	0.9	0.9	66	0.85	0.85	0.9	0.9	0.95	0.98
POWER FACTOR LIMITS																																																	
Supply Voltage in kV	Power Factor Range for Customer Maximum Demand and Voltage																																																
	Up to 100 kVA		Between 100 kVA - 2 MVA		Over 2 MVA																																												
	Minimum Lagging	Minimum Leading	Minimum Lagging	Minimum Leading	Minimum Lagging	Minimum Leading																																											
< 6.6	0.75	0.8	0.8	0.8	0.85	0.85																																											
6.6 11 22	0.8	0.8	0.85	0.85	0.9	0.9																																											
66	0.85	0.85	0.9	0.9	0.95	0.98																																											
2007	Same as above																																																
2008	Same as above																																																
2009	Same as above																																																
2010	Same as above																																																



2011	Same as above
2012	Same as above
2013	Same as above
2014	Same as above
2015	Same as above

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	DOPSD0302, DOPSD0306, DOPSD0307, DOPSD0308, DOPSD0311 The data for the above voltage levels is not readily stored or available; therefore Powercor refers to the values defined in Table 2, as a reference point for any calculations where the power factor is required.
2007	Same as above
2008	Same as above
2009	Same as above
2010	Same as above
2011	Same as above
2012	Same as above
2013	Same as above
2014	Same as above
2015	Same as above

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Powercor refers to the values defined in Table 2, as a reference point for any calculations where the power factor is required.
2007	Same as above
2008	Same as above
2009	Same as above
2010	Same as above
2011	Same as above
2012	Same as above
2013	Same as above
2014	Same as above
2015	Same as above

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	The values defined in Table 2, of section 4.3 of the 'Electricity Distribution Code' version 6, January 2011, are standard reference values which are readily available for industry to use for any calculations where the power factor is required.
2007	Same as above
2008	Same as above
2009	Same as above
2010	Same as above
2011	Same as above
2012	Same as above
2013	Same as above
2014	Same as above
2015	The values defined in Table 2, of section 4.3 of the 'Electricity Distribution Code' version 7, May 2012, are standard

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.4 Operational Data	
Table name: 3.4.3 System demand	
Table name: 3.4.3.6 Demand supplied (for customers charged on this basis) – MW measure	
Table name: 3.4.3.7 Demand supplied (for customers charged on this basis) – MVA measure	
Variable Code	Variable Name
DOPSD0401	Summated Chargeable Contracted Maximum Demand
DOPSD0402	Summated Chargeable Measured Maximum Demand
DOPSD0403	Summated Chargeable Contracted Maximum Demand
DOPSD0404	Summated Chargeable Measured Maximum Demand
BOP ID	BMPAL3.4BOP10

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

Requirements of the notice:

#### **Table 3.4.3.6 Demand supplied (for customers charged on this basis) – MW measure**

Powercor is only required to complete this table if it charges customers for Maximum Demand supplied. If Powercor does not charge customers on this basis then should enter '0'. Powercor must report Maximum Demand amounts for customers that are charged based upon their Maximum Demand as measured in MW. Where Powercor cannot distinguish between contracted and measured Maximum Demand, demand supplied must be allocated to contracted Maximum Demand.

#### **Table 3.4.3.7 Demand supplied (for customers charged on this basis) – MVA measure**

Powercor is only required to complete this table if it charges customers for demand supplied. If Powercor does not charge customers on this basis then Powercor must enter '0'. Powercor must report Maximum Demand amounts for customers that are charged based upon their Maximum Demand as measured in MVA. Where Powercor cannot distinguish between contracted and measured Maximum Demand, demand supplied must be allocated to contracted Maximum Demand.

#### **Response:**

Powercor's tariff structure charges demand on a unit of measure of kW. To comply with the definition of 'MW measure', the quantity is converted to MW. Powercor cannot distinguish between contracted and measured Maximum Demand, therefore demand supplied has been allocated to Contracted Maximum Demand in accordance with the RIN requirements'.

Customers are not charged on a MVA basis therefore the variable codes DOPSD0403 and DOPSD0404 have not been reported' to explain why these are zero.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

2015 contracted demand data contains actual billed quantities and accruals. Actual contracted demand charge quantities and accruals are sourced from Powercor's billing system, CIS Open Vision (CISOV) and billing adjustments (if any) are sourced from the Billing department.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<b>Assumptions</b> - Individual customer demand is billed on a monthly basis. Based on the description 'Summated Chargeable Contracted Maximum Demand', it is assumed the summated quantities by tariff code are to be aggregated by month and the maximum quantity recorded within a given year is populated in the benchmarking RIN.  <b>Methodology</b> - Contracted demand charged quantities are sourced from Finance's end of year reports which are originally sourced from the billing system, CISOV and can include billing adjustments obtained from the Billing department. Billing adjustments occur due to pending approval for re-billing, retailer disputes etc. This adjustment is incorporated in the total demand quantities as they are known adjustments that have not been processed into CISOV.
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006
2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	as per 2006
2008	as per 2006
2009	as per 2006
2010	as per 2006
2011	as per 2006

2012	as per 2006
2013	as per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Powercor tariff structures only cater for chargeable contracted demand in kW only and do not cater for these categories.

## **3.5 Physical Assets**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described, as it will be audited and provided to the AER.

Please use plain English, complete sentences, and avoid acronyms.

Tab name: 3.5 Physical Assets	
Table name: 3.5.1 Network Capacities Variables: Circuit Length	
Table name: 3.5.1.1 Overhead network length of circuit at each voltage	
Variable Code	Variable Name
DPA0101	Overhead low voltage distribution
DPA0105	Overhead 11 kV
DPA0106	Overhead SWER
DPA0107	Overhead 22 kV
DPA0108	Overhead 33 kV
DPA0110	Overhead 66 kV
DPA0112	Overhead 132 kV
DPA0114	22kV subtransmission (other)
DPA01	Total overhead circuit km
BOP ID	BMPAL3.5BOP1

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

DNSP must report against the capacity variables for its whole network. In this context the network includes overhead power lines and towers, underground cables and pilot cables that transfer electricity from the regional bulk supply points supplying areas of consumption to individual zone substations, to distribution substations and to customers. Network also includes distribution feeders and the low voltage distribution system but excludes the final connection from the mains to the customer and also wires or cables for public lighting, communication, protection or control and for connection to unmetered loads.

For 'Other overhead voltages' and 'Other underground voltages' DNSP must add additional rows for voltages other than: low voltage distribution, 11 kV, SWER (single wire earth return) (applicable to overhead only); 22 kV; 33 kV; 66 kV; 132 kV and other (DNSP must specify the voltage for each 'other' voltage level.)

In relation to Table 3.5.1.1 'Overhead network length of circuit at each voltage' and Table 3.5.1.2 'Underground network circuit length at each voltage', circuit length is calculated from the Route length (measured in kilometres) of lines in service (the total length of feeders including all spurs), where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as two lines. The length does not take into account vertical components such as sag.

#### **Response:**

For the year 2015 the data was obtained utilising a GIS (Geographical Information System) query that traces the in - service network connectivity model in GIS, to determine the circuit line length, which includes all spurs. Each circuit element was evaluated in its own right, for example:

- SWER lines, single-phase lines, and three-phase lines counted as one line
- Double circuit lines counted as two lines

#### **Note:-**

- Although this methodology does not use the suggested Route Length methodology it does deliver the network circuit length using the criteria specified in this Information Notice
- An overhead 22kV Subtransmission component was included as an additional line item for completeness
- Overhead elements associated with communication, protection & control and unmetered loads were excluded

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL** data green; and **ESTIMATED/derived** data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

For Powercor, GIS was, and still is, the originating data source (i.e. from where the data is obtained).

However, since GIS records are not continuously archived, for previous years' data it was necessary to refer to historical reports that provided consolidated overhead line length information. In this case:

- For years 2006 to 2010 inclusive, historical consolidated overhead line length data was provided by the Annual Regulatory Performance Reports, tab "National Reporting"
- For years 2011 to 2013 inclusive, the records used were the Annual RIN Reports (non-Financial), tab "3. Asset Installation" and tab "5. General Information"
- For 2014 and 2015 the data from GIS is made available to Powercor through a BI (Business Intelligence) report called the "Asset Installation Report".

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006 to 2010 inclusive	<p><b><u>Standardising the Data to align all years with section AA of this Information Notice</u></b></p> <p>Reporting specifications and templates have changed over the specified reporting period, so it has been necessary to standardise historical reporting to more closely align with the requirements of this Information Notice. As such, the (previously) reported data for years 2006 &amp; 2010, inclusive, has been modified to exclude the particular overhead components specified in this Information Notice</p> <p><b><u>Modelling Methodology of historical data to align with section AA of this Information Notice</u></b></p> <p>Reporting specifications and templates have changed over the specified reporting period, so it has been necessary to model the data for years 2006 to 2010, inclusive, to align with the requirements of this Information Notice. This has been achieved by:</p> <ul style="list-style-type: none"><li>• Using the standardised data set for years 2011 to 2012 inclusive (see note for year 2011) to derive an average ratio/percentage of the total overhead circuit length for each voltage category.</li><li>• This derived average ratio/percentage was then applied to the modified total Overhead Line Lengths reported for the years 2006 to 2010, inclusive, to obtain an estimate of the line length in each voltage category.</li></ul> <p><b><u>The assumptions made were</u></b></p> <ul style="list-style-type: none"><li>• The Overhead Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are reasonably consistent with those currently used</li><li>• It is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li></ul>
2007	As per 2006 to 2010
2008	As per 2006 to 2010
2009	As per 2006 to 2010
2010	As per 2006 to 2010
2011	The overhead line length data as reported in the 2011 AER Annual RIN for POWERCOR has been modified to exclude particular overhead components, as specified in this Information Notice
2012	As per 2011



2013	<p>For the year 2013 the data was obtained utilising a GIS (Geographical Information System) query that traces the in-service network connectivity model in GIS, to determine the circuit line length, which includes all spurs. Each circuit element was evaluated in its own right, for example:</p> <ul style="list-style-type: none"> <li>• SWER lines, single-phase lines, and three-phase lines counted as one line</li> <li>• Double circuit lines counted as two lines</li> </ul> <p>Note:-</p> <ul style="list-style-type: none"> <li>• Although this methodology does not use the suggested Route Length methodology it does deliver the network circuit length using the criteria specified in this Information Notice</li> <li>• An overhead 22kV Subtransmission component was included as an additional line item for completeness</li> <li>• Overhead elements associated with communication, protection &amp; control and unmetered loads were excluded</li> </ul> <p>Overhead elements in the DNSP's area that are owned by another DNSP were excluded</p>
2014	<p>For the year 2014 the data was obtained utilising a GIS (Geographical Information System) query that traces the In-Service network connectivity model in GIS, to determine the circuit line length, which includes all spurs. Each circuit element was evaluated in its own right, for example:</p> <ul style="list-style-type: none"> <li>• SWER lines, single-phase lines, and three-phase lines counted as one line</li> <li>• Double circuit lines counted as two lines</li> </ul> <p>Note:-</p> <ul style="list-style-type: none"> <li>• Although this methodology does not use the suggested Route Length methodology it does deliver the network circuit length using the criteria specified in this Information Notice</li> <li>• An overhead 22kV Subtransmission component was included as an additional line item for completeness</li> <li>• Overhead elements associated with communication, protection &amp; control and unmetered loads were excluded</li> </ul> <p>In 2014 the data from GIS is made available to Powercor through a new BI (Business Intelligence) report called the "Asset Installation Report".</p>
2015	As for 2014

**E. Methodology Estimated or Derived Data (refer AER Instructions document, Section 1.1.2. item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate required, including why it is not possible to use actual data;
2006	The available data for Years 2006 to 2010 in Powercor was not in the form specified in this Information Notice. Since no originating source data was available, it was necessary to estimate/derive the requested historical data utilising other data sources, in this case the Annual Regulatory Performance Reports.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<ul style="list-style-type: none"> <li>• The Overhead Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2011 to 2013 reporting years</li> <li>• Therefore, it is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li> </ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006

2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	<ul style="list-style-type: none"> <li>The approach utilises existing reported data</li> <li>The Overhead Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2011 to 2013 reporting years</li> <li>Therefore, it is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li> </ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

**F. Methodology Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to the Notice.

**Response:**  
Not applicable

**G. Methodology data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blackened out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Data has not been provided for the variables DPA0102, DPA0103, DPA0104, DPA0109, DPA0111 and DPA0113 as Powercor does not have overhead assets at these voltages.

## AER ECONOMIC BENCH MARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5 Physical Assets	
Table name: 3.5.1 Network Capacities Variables: Circuit Length	
Table name: 3.5.1.2 Underground network circuit length at each voltage	
Variable Code	Variable Name
DPA0201	Underground low voltage distribution
DPA0205	Underground 11 kV
DPA0206	Underground SWER
DPA0207	Underground 22 kV
DPA0208	Underground 33 kV
DPA0209	Underground 66 kV
DPA0211	Underground 132 kV
DPA0212	22kV Subtransmission (other)
DPA02	Total underground circuit km
BOP ID	BMPAL3.5BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

DNBP must report against the capacity variables for its whole network. In this context the network includes overhead power lines and towers, underground cables and pilot cables that transfer electricity from the regional bulk supply points supplying areas of consumption to individual zone substations, to distribution substations and to customers. Network also includes distribution feeders and the low voltage distribution system but excludes the final connection from the mains to the customer and also wires or cables for public lighting, communication, protection or control and for connection to unmetered loads.

For 'Other overhead voltages' and 'Other underground voltages' DNBP must add additional rows for voltages other than: low voltage distribution, 11 kV, SWER (single wire earth return) (applicable to overhead only); 22 kV; 33 kV; 66 kV; 132 kV and other (DNBP must specify the voltage for each 'other' voltage level.)

In relation to Table 3.5.1.1 'Overhead network length of circuit at each voltage' and Table 3.5.1.2 'Underground network circuit length at each voltage', circuit length is calculated from the Route length (measured in kilometres) of lines in service (the total length of feeders including all spurs), where each SWER line, single-phase line, and three-phase line counts as one line. A double circuit line counts as two lines. The length does not take into account vertical components such as sag.

#### **Response:**

For the year 2015 the data was obtained utilising a GIS (Geographical Information System) query that traces the in - service network connectivity model in GIS, to determine the circuit line length, which includes all spurs. Each circuit element was evaluated in its own right, for example:

- SWER lines, single-phase lines, and three-phase lines counted as one line
- Double circuit lines counted as two lines

Note:-

- Although this methodology does not use the suggested Route Length methodology it does deliver the network circuit length using the criteria specified in this Information Notice
- An Underground 22kV Subtransmission component was included as an additional line item for completeness
- Underground elements associated with communication, protection & control and unmetered loads were excluded

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

For Powercor, GIS was, and still is, the originating data source (i.e. from where the data is obtained).

However, since GIS records are not continuously archived, for previous years' data it was necessary to refer to historical reports that provided consolidated underground line length information. In this case:

- For years 2006 to 2010 inclusive, historical consolidated underground line length data was provided by the Annual Regulatory Performance Reports, tab "National Reporting"
- For years 2011 to 2013 inclusive, the records used were the Annual RIN Reports (non-Financial), tab "3.Asset Installation" and tab "5. General Information"
- For 2014 and 2015 the data from GIS is made available to Powercor through a BI (Business Intelligence) report called the "Asset Installation Report".

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006 to 2010 inclusive	<p><b><u>Standardising the Data to align all years with section AA of this Information Notice</u></b> Reporting specifications and templates have changed over the specified reporting period, so it has been necessary to standardise historical reporting to more closely align with the requirements of this Information Notice. As such, the (previously) reported data for years 2006 &amp; 2010, inclusive, has been modified to exclude the particular underground components specified in this Information Notice</p> <p><b><u>Modelling Methodology of historical data to align with section AA of this Information Notice</u></b> Reporting specifications and templates have changed over the specified reporting period, so it has been necessary to model the data for years 2006 to 2010, inclusive, to align with the requirements of this Information Notice. This has been achieved by: Using the standardised data set for years 2011 to 2012 inclusive (see note for year 2011) to derive an average ratio/percentage of the total underground circuit length for each voltage category.  <ul style="list-style-type: none"> <li>• This derived average ratio/percentage was then applied to the modified total Underground Line Lengths reported for the years 2006 to 2010, inclusive, to obtain an estimate of the line length in each voltage category.</li> </ul> </p> <p><b><u>The assumptions made were</u></b>  <ul style="list-style-type: none"> <li>• The Underground Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are reasonably consistent with those currently used</li> <li>• It is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li> </ul> </p>
2007	As per 2006 to 2010
2008	As per 2006 to 2010
2009	As per 2006 to 2010
2010	As per 2006 to 2010
2011	The underground line length data as reported in the 2011 AER Annual RIN for Powercor has been modified to exclude particular underground components, as specified in this Information Notice
2012	As per 2011
2013	Year 2013 for Powercor complies with this Information Notice (see section A)
2014	In 2014 the data from GIS is made available to Powercor through a new BI (Business Intelligence) report called the "Asset Installation Report".
2015	As for 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate required, including why it is not possible to use actual data;
2006	The available data for Years 2006 to 2010 in Powercor was not in the form specified in this Information Notice. Since no originating source data was available, it was necessary to estimate/derive the requested historical data utilising other data sources, in this case the Annual Regulatory Performance Reports.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The underground line length data in Powercor, as reported in the 2011 AER Annual RIN, had to be modified to exclude certain underground components to comply with this Information Notice
2012	As per 2011
2013	Year 2013 for Powercor complies with this Information Notice
2014	As per 2013
2015	As per 2013

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<ul style="list-style-type: none"><li>• The Underground Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2011 to 2013 reporting years</li><li>• Therefore, it is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li></ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The underground line length data in Powercor, as reported in the 2011 AER Annual RIN, had to be modified to exclude certain underground components to comply with this Information Notice. No assumptions were made.
2012	As per 2011
2013	Year 2013 for Powercor complies with this Information Notice
2014	As per 2013
2015	As per 2013

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	<ul style="list-style-type: none"><li>• The approach utilises existing reported data</li><li>• The Underground Line Lengths reported in the 2006 to 2010 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2011 to 2013 reporting years</li><li>• Therefore, it is reasonable to use the ratio/percentage derived from the individual voltage category lengths for the years 2011 &amp; 2012 to estimate the individual voltage category lengths for the years 2006 to 2010 inclusive</li></ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	The underground line length data in Powercor, as reported in the 2011 AER Annual RIN, had to be modified to exclude certain underground components to comply with this Information Notice. No assumptions were made.
2012	As per 2011
2013	Year 2013 for Powercor complies with this Information Notice
2014	As per 2013
2015	As per 2013

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by this Information Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to this Information Notice.

**Response:**  
Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Data has not been provided for the variables DPA0202, DPA0203, DPA0204 and DPA0210 as Powercor does not have underground assets at these voltages.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5 Physical Assets	
Table name: 3.5.1 Network Capacities Variables	
Table name: 3.5.1.3 Estimated overhead network weighted average MVA capacity by voltage class:	
Table name: 3.5.1.4 Estimated underground network weighted average MVA capacity by voltage class	
Variable Code	Variable Name
DPA0301	Overhead low voltage distribution
DPA0304	Overhead 11 kV
DPA0305	Overhead SWER
DPA0306	Overhead 22 kV
DPA0309	Overhead 66 kV
DPA0401	Underground low voltage distribution
DPA0405	Underground 11 kV
DPA0406	Underground SWER
DPA0408	Underground 22 kV
DPA0410	Underground 66 kV
BOP ID	BMPAL3.5BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Tables 3.5.1.3 and 3.5.1.4 must be completed in accordance with the definitions in chapter 9.

Powercor must report against the capacity variables for its whole network. In this context the network includes overhead power lines and towers, underground cables and pilot cables that transfer electricity from the regional bulk supply points supplying areas of consumption to individual zone substations, to distribution substations and to customers. Network also includes distribution feeders and the low voltage distribution system but excludes the final connection from the mains to the customer and also wires or cables for public lighting, communication, protection or control and for connection to unmetered loads.

For 'Other overhead voltages' and 'Other underground voltages' Powercor must add additional rows for voltages other than:

- low voltage distribution
- 11 kV
- SWER (single wire earth return) (applicable to overhead only)
- 22 kV
- 33 kV
- 66 kV
- 132 kV

Powercor must specify the voltage for each 'other' voltage level.

In relation to Table 3.5.1.3 'Estimated overhead network weighted average MVA capacity by voltage class' and Table 3.5.1.4 'Estimated underground network weighted average MVA capacity by voltage class', Powercor must provide estimated typical or weighted average capacities for each of the listed voltage classes under normal circumstances taking account of limits imposed by thermal or by voltage drop considerations as relevant.

This information will be used to calculate an overall MVA x km 'carrying capacity' for each voltage class under normal circumstances. DNSPs are required to provide summer Maximum Demands for summer peaking assets and winter Maximum Demands for winter peaking assets. If Powercor's peak has changed from winter to summer (or vice versa) over the time period, winter ratings should be applied for those years where there was a winter peak and summer ratings for those years where there was a summer peak.

Where circuits travel both overhead and underground and the capacity of the overhead and underground components is not available separately, Powercor may split the circuit capacity by the ratio of the network that is overhead and underground to form estimates of the overhead capacity and underground capacity components.

From the 2015 Regulatory Year onwards Powercor is required to report actual overhead and underground capacity.

**Response:**

Powercor has provided estimated overhead and underground weighted average capacity based on network planning guidelines for typical ratings per voltage class. For the SWER network the capacity was based on the summated average capacity of the SWER isolation transformers. The estimated data is in accordance with the definitions in chapter 9.

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data source for the estimated overhead and underground network weighted average MVA capacity come from the Electricity Network Planning policy & guidelines.

DPA0305

Source data from 2006 to 2015, was used from SAP reports on installed Isolating transformer capacity.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The weighted average MVA capacity are estimates relating to the typical augmentation capacity constructed while allowing for planning policy. For example the 22 kV rating of 8MVA is the planning rating for new construction rated at 12MVA but allowing for transfers to adjacent feeders of 1/3 of capacity.  DPA0303 Using the isolation transformer capacity from the SAP reports, the summated average capacity was calculated. All non-standard size capacity transformers from the report were ignored and assumed as incorrect data.
2007	Same as 2006
2008	Same as 2006
2009	Same as 2006
2010	Same as 2006
2011	Same as 2006
2012	Same as 2006
2013	Same as 2006
2014	Same as 2006
2015	Same as 2006



**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Estimation was provided by the AER – therefore applying this estimate ensures method calculation is in line with AER policy.
2007	Same as 2006
2008	Same as 2006
2009	Same as 2006
2010	Same as 2006
2011	Same as 2006
2012	Same as 2006
2013	Same as 2006
2014	Same as 2006
2015	Same as 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	As per the methodology & assumptions.
2007	Same as 2006
2008	Same as 2006
2009	Same as 2006
2010	Same as 2006
2011	Same as 2006
2012	Same as 2006
2013	Same as 2006
2014	Same as 2006
2015	Same as 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	To keep it consistent with the AER
2007	Same as 2006
2008	Same as 2006
2009	Same as 2006
2010	Same as 2006
2011	Same as 2006
2012	Same as 2006
2013	Same as 2006
2014	Same as 2006
2015	Same as 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:** Data not provided for DPA0302, DPA0303, DPA0307, DPA0308, DPA0310, DPA0311, DPA0312, DPA0313, DPA0402, DPA0403, DPA0404, DPA0407, DPA0409, DPA0411, DPA0412, DPA0413 as Powercor does not have assets at these voltages.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.5. Physical Assets	
Table name: 3.5.2 Transformer Capacities Variables	
Table name: 3.5.2.1 Distribution transformer total installed capacity	
Variable Code	Variable Name
DPA0501	Distribution transformer capacity owned by utility
BOP ID	BMPAL3.5BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

DNSP must report total installed Distribution Transformer capacity in this table. The total installed Distribution Transformer capacity is 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. It does not include intermediate transformation capacity (eg 132 kV or 66 kV to the 22 kV or 11 kV distribution level). The capacity measure is the normal nameplate continuous capacity / rating (including forced cooling and other factors used to improve capacity).

This measure includes Cold Spare Capacity of Distribution Transformers and excludes the capacity of all zone substation transformers, voltage transformers (potential transformers) and current transformers.

For Distribution transformer capacity owned by utility, report transformer capacity owned by DNSP; give nameplate continuous rating including forced cooling.

#### **Response:**

For the year 2015 the data was obtained utilising a GIS (Geographical Information System) query that traces via the installed network connectivity model in GIS the distribution transformer connected

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

For Powercor, the data sources for years 2006 to 2013 inclusive are the Annual Regulatory Performance Reports [National Reporting tab] and the AER Annual RINs [General Information tab].

The originating source was - the Geographical Information System (GIS). A GIS query was used to determine the in-service distribution transformer metrics.

This process was used to determine this metric for years 2006 to 2013 inclusive, however as historical GIS queries are not routinely archived it was necessary to refer to annual regulatory reports for the data for years 2006 to 2013 inclusive.

For the year 2014 and 2015 the data was obtained utilising a GIS (Geographical Information System) query that determines the total In-Service distribution transformer metrics. The data from GIS is made available to Powercor through a BI (Business Intelligence) report called the "Asset Installation Report".

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	A GIS query is used to determine the in-service total distribution transformer MVA. It is this MVA value that is used to populate this metric in the Annual Regulatory Performance Reports [National Reporting tab]
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	A GIS query is used to determine the in-service total distribution transformer MVA. It is this MVA value in the AER Annual RIN [General Information tab]
2012	As per 2011
2013	As per 2011
2014	GIS provides the data for a new BI (Business Intelligence) report that provides the installed total distribution transformer MVA.
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	As per 2013
2007	On review the data reported for this year indicated a significant increase in total distribution transformer capacity and inconsistent to all other years. Hence it is assumed that the reported data for this year was incorrect. The original data of 5,613 MVA which was reported to the AER as per the Annual Regulatory Performance Reporting, was amended to 5,261 MVA using a simple linear regression of data provided for other years
2008	As per 2013
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	No estimation or derivation was used
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	As per 2013
2007	Analysis of historical total distribution MVA indicates a linear growth trend which supports the view that the data for 2007 was incorrect. A simple linear regression was used as it best reflects the annual change in this metric. This was deemed management's best estimate.
2008	As per 2013
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	No estimation or derivation was used
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	As per 2013
2007	Analysis of historical total distribution MVA indicates a linear growth trend which supports the view that the data for 2007 was incorrect. A simple linear regression was used as it best reflects the annual change in this metric. This approach utilised existing reported data, and was deemed management's best estimate.

2008	As per 2013
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	No estimation or derivation was used
2014	No estimation or derivation was used
2015	No estimation or derivation was used

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided.

Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Not applicable.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5. Physical Assets	
Table name: 3.5.2 Transformer Capacities Variables	
Table name: 3.5.2.1 Distribution transformer total installed capacity	
Variable Code	Variable Name
DPA0502	Distribution transformer capacity owned by High Voltage Customers
BOP ID	BMPAL3.5BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

#### ***Distribution Transformer capacity owned by High Voltage Customers***

Report the transformation capacity from high voltage to customer utilisation voltage that is owned by customers connected at high voltage.

If the transformer capacity owned by customers connected at high voltage is not available, report summation of individual Maximum Demands of high voltage customers whenever they occur (ie the summation of single annual Maximum Demand for each customer) as a proxy for delivery capacity within the high voltage customers.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for Distribution Transformer capacity owned by High Voltage Customers it must do so; otherwise Powercor must provide Estimated Information.

#### **Response:**

Powercor has provided an estimated distribution transformer capacity owned by High Voltage Customers as a record of HV Customer installed capacity is not registered or maintained for accurate information to be recalled.

The estimated data are in accordance with the definitions in chapter 9.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:** For 2006-2010 HV customer maximum demands: CISOV was used by using the HV customer NMI's. For 2011-13 IEE was used to get HV customer maximum demands.  
2014-15 SAP Hana

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p><b>DPA0502: Distribution transformer capacity owned by High Voltage Customers</b></p> <ul style="list-style-type: none"> <li>To calculate the summation of transformer capacity, a unity Power Factor (PF) was assumed due to its ease of assessment and applied to the summated HV customer maximum demand.</li> </ul> <p>It is standard practice in the industry to assume a unity PF when calculating MVA to determine the minimum transformer rating required for a customer's demand.</p> <p>Note: The values in that sheet are netted, that is derived from subtraction export energy from consumption. This will affect the accuracy of the maximum demand for the customers that have generators that may have been running during their maximum demand interval.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	Report obtained from SAP Hana summing HV customer MD's(Used HV customer NMI's)
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	An estimate was required as there was no customer transformer MVA capacity data available. As Powercor do not own the customer's transformer, the MVA capacity information is not required and has not been documented.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	The summation of customer maximum demand is used as an estimate of transformer capacity as proposed by the AER. There is no other alternate data available that can be used to calculate a customer's transformer capacity.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	Report obtained from SAP Hana summing HV customer MD's(Used HV customer NMI's)
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	This is the only data available that provides an estimate of their transformer capacity based on their demand.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006

2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
All data provided



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5. Physical Assets	
Table name: 3.5.2 Transformer Capacities Variables	
Table name: 3.5.2.1 Distribution transformer total installed capacity	
Variable Code	Variable Name
DPA0503	Cold spare capacity included in DPA0501
BOP ID	BMPAL3.5BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

DNBP must report total installed Distribution Transformer capacity in this table. The total installed Distribution Transformer capacity is 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. It does not include intermediate transformation capacity (eg 132 kV or 66 kV to the 22 kV or 11 kV distribution level). The capacity measure is the normal nameplate continuous capacity / rating (including forced cooling and other factors used to improve capacity).

This measure includes Cold Spare Capacity of Distribution Transformers and excludes the capacity of all zone substation transformers, voltage transformers (potential transformers) and current transformers.

For Cold Spare Capacity included in DPA0501, report the total capacity of spare transformers owned by DNBP but not currently in use.

#### **Response:**

Electronic stores inventory records in SAP where accessed, queried and evaluated to determine the number and ratings of distribution transformers held in stock at the year ending for the reporting period as detailed in this Information Notice.

The queries and evaluations excluded the number and capacity of all zone substation transformers, voltage transformers (potential transformers) and current transformers.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

It is not current policy in Powercor to operate the electricity distribution network with "cold spare" distribution transformer capacity (in the form of actual transformers).

However, it is policy to operate the electricity distribution network with a strategic level of spare distribution transformers held in store.

For the year 2015 a SAP inventory query was used to determine the year ending stock position for this metric. This query was also used to review SAP historical end-of-year stock holdings for the years 2006 to 2015 inclusive. The originating data source is SAP

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	For the year 2014 a SAP inventory query was developed to determine the year ending stock position for this metric
2015	As per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	No estimation or derivation was used
2015	No estimation or derivation was used

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**  
Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Data has been provided for all the years requested

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.5 Physical Assets	
Table name: 3.5.2 Transformer Capacities Variables	
Table name: 3.5.2.2 Zone substation transformer capacity	
Variable Code	Variable Name
DPA0601 to DPA0605	Total zone substation transformer capacity
BOP ID	BMPAL3.5BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Report transformer capacity used for intermediate level transformation capacity in either one or two steps. For example, high voltages such as 132 kV, 66 kV or 33kV at the zone substation level to the distribution level of 22 kV, 11 kV or 6kV.

These measures must be the summation of normal assigned continuous capacity / rating (with forced cooling or other capacity improving factors included) and include both energised transformers and Cold Spare Capacity. Assigned rating must be, if available the rating determined from results of temperature rise calculations from testing. Otherwise report the nameplate rating. For those zone substations where the thermal capacity of exit feeders is a constraint, thermal capacity of exit feeders should be reported instead of transformer capacity.

For 'Total zone substation transformer capacity' (DPA0604) report the overall total zone substation capacity regardless of whether one or two steps are used to reach the distribution voltage (for example DPA0604 will be the sum of DPA0601, DPA0602, DPA0603 and DPA0605).

#### **Response:**

For Powercor this metric comprises the sum of two variables; the "Total zone substation transformer capacity where there is only a single step of transformation to reach the distribution voltage (DPA 0603) and the cold spare capacity of zone substation transformers (DPA0605) as specified in this Information Notice, hence

DPA0601, 1<sup>st</sup> step of transformation = 0 as Powercor do not have these  
DPA0602, 2<sup>nd</sup> step of transformation = 0 as Powercor do not have these  
DPA0603, Single step of transformation to reach the distribution voltage = the reported value  
DPA0604 is the sum of DPA0601-0603 & DPA0605  
DPA0605, Cold spare capacity = the reported value

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

For Powercor, the data sources for years 2006 to 2013 inclusive are the Annual Regulatory Performance Reports [National Reporting tab] and the AER Annual RINs [General Information tab].

The originating sources were/are:

- SAP

- The Condition Based Reliability Maintenance (CBRM) System

A SAP query is used to determine the zone substation transformer metrics the output of which is compared to the data in the CBRM database to provide the final data

This process was used to determine this metric for years 2006 to 2013 inclusive, however as historical SAP queries are not routinely archived it was necessary to refer to annual regulatory reports for the data for years 2006 to 2012 inclusive.

For the year 2014 and 2015 the data was obtained utilizing:

- GIS (Geographical Information System) query that determines the total In-Service Zone Substation Transformer metrics. The data from GIS is made available to Powercor through a new BI (Business Intelligence) report called the "Asset Installation Report".
- SAP
- The Condition Based Reliability Maintenance (CBRM) System

The "Asset Installation Report" was used to determine this metric which was compared to the data in SAP and the CBRM database to provide the final data.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	An end-of-year SAP query was used to determine the zone substation transformer metrics the output of which was compared to the data in the CBRM database to provide the final data. It is this data that has been used to populate the MVA value in the Powercor Annual Regulatory Performance Reports [National Reporting tab]
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	An end-of-year SAP query was used to determine the zone substation transformer metrics the output of which was compared to the data in the CBRM database to provide the final data. It is this data that has been used to populate the MVA value in the Powercor AER Annual RIN [General Information tab]
2012	As per 2011
2013	As per 2011
2014	GIS provides the data for a new BI (Business Intelligence) report that provides the installed Total Zone Substation Transformer MVA.
2015	As per 2014.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014

2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	No estimation or derivation was used
2014	No estimation or derivation was used
2015	No estimation or derivation was used

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	As per 2014
2007	As per 2014
2008	As per 2014
2009	As per 2014
2010	As per 2014
2011	As per 2014
2012	As per 2014
2013	As per 2014
2014	No estimation or derivation was used
2015	No estimation or derivation was used

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**  
Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Data has been provided for all the years requested

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5. Physical Assets	
Table name: 3.5.3 Public Lighting	
Variable Code	Variable Name
DPA0701	Public Lighting luminaires
BOP ID	BMPAL3.5BoP8

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Report the number of public lighting luminaires and public lighting poles. For both Variables report numbers that include both assets owned by Powercor and assets operated and maintained by Powercor but not owned by Powercor. Count only poles that are used exclusively for public lighting.

#### **Response:**

With regard to the Final RIN for Economic Benchmarking – Definitions and Instructions provided, 3.5.3 Public Lighting we have reported the number of public lighting luminaires and public lighting poles. We have provided numbers of assets owned by Powercor and assets operated and maintained by Powercor.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

2006 – 2013: The source data was extracted from GIS system into MS Excel listing all billable lights on the last day of the reportable year. All lights were multiplied by a 'k' factor (cost sharing) to ensure that luminaires were only counted once. This data was obtained from the Powercor RIN Appendix C (Non-Financial) FINAL to AER statement submitted. '3. Asset Installation – Total Number of Public Lighting Luminaires submitted for each year from 2006 – 2013.

2014 – Onwards : Based on the extract of billable lights extracted from GIS on the last day of the reportable year and provided in the Draft 2014 Final Powercor DNSP Category Analysis RIN – 3.5. Physical Assets (DPA0701) Public Lighting Luminaires.

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Source data was extracted from the GIS system into MS Excel listing all billable lights on the last day of the reportable year. All lights were multiplied by a 'k' factor (cost sharing) to ensure that luminaires were only counted once.
2007	As per 2006
2008	As per 2006
2009	As per 2006

2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No data was estimated.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No data was estimated.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No data was estimated.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blackened out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'



Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.5 Physical Assets	
Table name: 3.5.3 Public Lighting	
Variable Code	Variable Name
DPA0702	Public Lighting Poles
BOP ID	BMPAL3.5BOP9

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Report the number of public lighting luminaires and public lighting poles. For both Variables report numbers that include both assets owned by Powercor and assets operated and maintained by Powercor but not owned by Powercor. Count only poles that are used exclusively for public lighting.

#### **Response:**

With regard to the Final RIN for Economic Benchmarking – Definitions and Instructions provided, 3.5.2 Public Lighting we have reported the number of public lighting poles. We have provided numbers of assets owned by Powercor and assets operated and maintained by Powercor. Only poles used exclusively to public lighting were counted.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

2006 – 2012: Original source data was from GIS. Data was obtained from the audited '2012 Powercor RIN Appendix C (Non-Financial) FINAL to AER statement'. Template 3. Asset Installation – Public Lighting Poles'.

2013- Onwards : Source data was obtained from GIS

### **D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p>Assumptions:</p> <ul style="list-style-type: none"> <li>Public lighting pole records have been utilised as an indication of when most assets were initially installed as part of network expansion (Greenfield expansion).</li> <li>For 'Age Adjusted Profiles', public lighting poles are replaced once they have reached their design life. Replacement of assets with design lives significantly shorter than the design life of poles (where the asset may be replaced multiple times within one pole's life) has been considered.</li> <li>The difference between data provided as part of the 2009 RIN asset age profiling and the 2012 asset data provided by CitiPower/Powercor was used to calculate the number of <u>new</u> public lighting poles installed during the 2010-2012 period. <ul style="list-style-type: none"> <li>Where fewer assets were identified in 2012 than in 2009, it was assumed that these assets had been removed from the existing profile and none had been installed during the 2010-2012 period.</li> <li>When adjusting for asset design life to create the 'Age Adjusted Profile', assets were allowed to be replaced in the 2010-2012 period.</li> </ul> </li> </ul> <p>Methodology:</p> <ul style="list-style-type: none"> <li>The public lighting pole profile was assessed for any anomalous data. The years 1970 and 1999 were used as default dates for assets with unknown installation dates. The number of public lighting poles installed in these years was replaced with the average of the assets installed in the preceding and following years.</li> <li>Add the remainder of the data to the 'unknown' public lighting poles (Assets without a known or default installation date recorded)</li> <li>Allocate the total unknown public lighting poles on a pro-rata basis across the known profile.</li> <li>Due to rounding, there may be a number of public lighting poles which are left over (the sum of those allocated is less than or greater than the total number of assets)</li> <li>This is corrected by adding the difference to the year with the greatest number of assets.</li> <li>Where there are a small number of public lighting poles, or there will be a significant effect to the profile, the 2009 profile was used to most appropriately provide an installation date.</li> </ul> <p>Develop the profile using the known profile supplied in 2009 and the pole profile for 2010 to 2012.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	Source data was extracted from GIS system into Excel listing all public lighting poles on the last day of the reportable year.
2013	As per 2012
2014	As per 2012
2015	As per 2012

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	A complete list of asset age data is not currently available for most assets.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	No data was estimated
2013	As per 2012
2014	As per 2012
2015	As per 2012

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<p>Refer to the above section 'C. Methodology and Assumptions' which details the basis of the estimate, used to list the total number of poles installed each year.</p> <ul style="list-style-type: none"> <li>The method of proportionally spreading the public lighting poles with unknown ages (approx.6% for Powercor and 26% for CitiPower of pole ages are unknown) across the existing profile does not account for times where a large group of public lighting poles were installed at the same time without recording dates</li> <li>Does not easily account for public lighting poles which were replaced early due to vehicle impact, rather than age related condition deterioration. This may result in the asset profile appearing older than it actually is, refer above.</li> </ul> <p>Although the 2009 data has been used for profiling, the public lighting pole age profiles calculated in 2012 may show some differences to those calculated in 2009 due to changes in asset quantities through asset installation, newly discovered data, asset decommissioning and the extrapolation required to create the profiles.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	No data was estimated
2013	As per 2012
2014	As per 2012
2015	As per 2012

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	A complete list of asset age data is not currently available for most assets.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	No data was estimated
2013	As per 2012
2014	As per 2012
2015	As per 2012

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2.item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blackened out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not Applicable

## **3.6 Quality of Services**

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.6 Quality of Services		
Table name: 3.6.1 Reliability		
Table name	Variable Code	Variable Name
3.6.1.1 Inclusive of MEDs	DQS0101	Whole of network unplanned SAIDI
3.6.1.1 Inclusive of MEDs	DQS0102	Whole of network unplanned SAIDI excluding excluded outages
3.6.1.1 Inclusive of MEDs	DQS0103	Whole of network unplanned SAIFI
3.6.1.1 Inclusive of MEDs	DQS0104	Whole of network unplanned SAIFI excluding excluded outages
3.6.1.2 Exclusive of MEDs	DQS0105	Whole of network unplanned SAIDI
3.6.1.2 Exclusive of MEDs	DQS0106	Whole of network unplanned SAIDI excluding excluded outages
3.6.1.2 Exclusive of MEDs	DQS0107	Whole of network unplanned SAIFI
3.6.1.2 Exclusive of MEDs	DQS0108	Whole of network unplanned SAIFI excluding excluded outages
BOP ID	BMPAL3.6BOP1	

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Reliability information in tables 7.1.1 and 7.1.2 is only to be reported for unplanned interruptions. Unplanned interruptions are as defined in the STPIS.

Whole of network SAIDI and SAIFI is the system wide SAIDI and SAIFI. We do not require SAIDI and SAIFI for individual feeder categories within DNSP's network.

#### **Table 7.1.1 Inclusive of MEDs**

Report SAIDI and SAIFI in accordance with the definitions provided in chapter 9.

#### **Table 7.1.2 Exclusive of MEDs**

Report SAIDI and SAIFI in accordance with the definitions provided in chapter 9.

The MED threshold must be calculated for the 2014 Regulatory Year in accordance with the requirements in the STPIS. The MED threshold calculated for 2014 must then be applied as the MED threshold for Regulatory Years prior to 2014 for the purpose of calculating SAIDI and SAIFI exclusive of MEDs as per the STPIS.

#### **Response:**

- The application of a single MED Threshold value as specified in this Information Notice together with the application of the current STPIS exclusion criteria to the historical data (2006 to 2013 inclusive) has been consistently applied, thereby standardising all the reporting for all the years with 2014.
- This means that the 2010-2015 AER STPIS exclusion criteria has been applied to years 2006 to 2009 unplanned data to align the reporting to the current period
- As a result of the above the metrics reported for 2006 to 2015 inclusive in this Benchmarking RIN may be different to those reported for those years in the Annual performance Reports and AER Annual RINs since
- The actual MED Thresholds applicable for years 2010 to 2012 inclusive used to determine these metrics in the annual reports are different to the single MED value as applied in this Information Notice
- The exclusion criteria applicable for the years 2006 to 2009 inclusive used to determine these metrics in the annual reports are different to the exclusion criteria as applicable in this Information Notice

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The sources for Powercor for the years 2006 to 2015 inclusive are the Annual Regulatory Performance Reports and the AER Annual RINs

The originating sources were/are the

- Years 2006 to mid-2008 inclusive Outage Management System & Business Objects
- Years mid-2008 to 2015 inclusive Outage Management System & Business Intelligence
- AER outage exclusions as per the AER STPIS Scheme dated November 2009

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The current STPIS scheme exclusion methodology and MED Threshold value of 9.36min were applied to the outage order history data for the year 2006 to determine the <ul style="list-style-type: none"><li>• “Inclusive of MED’s” data</li><li>• “Exclusive of MED’s” data</li></ul>
2007	As per 2006, but for 2007 outage data
2008	As per 2006, but for 2008 outage data
2009	As per 2006, but for 2009 outage data
2010	As per 2006, but for 2010 outage data
2011	As per 2006, but for 2011 outage data
2012	As per 2006, but for 2012 outage data
2013	As per 2006, but for 2013 outage data
2014	As per 2006, but for 2014 outage data
2015	As per 2006, but for 2015 outage data

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimation or derivation was used as it was based on actual data.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimation or derivation was used as it was based on actual data.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimation or derivation was used as it was based on actual data.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has been provided for all the years requested



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.6. Quality of Services	
Table name: 3.6.2 Energy not supplied	
Variable Code	Variable Name
DQS0201	Energy Not Supplied (planned)
DQS0202	Energy Not Supplied (unplanned)
DQS02	Energy Not Supplied - Total
BOP ID	BMPAL3.6BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Energy not supplied is an estimate of the energy that was not supplied as a result of customer interruptions.

DNSP must estimate the raw (not normalized) energy not supplied due to unplanned customer interruptions based on average customer demand (multiplied by the number of customers interrupted and the duration of the interruption). Average customer demand must be determined from (in order of preference):

1. average consumption of the customers interrupted based on their billing history;
2. feeder demand at the time of the interruption divided by the number of customers on the feeder;
3. average consumption of customers on the feeder based on their billing history;
4. average feeder demand derived from feeder Maximum Demand and estimated load factor, divided by the number of customers on the feeder.

Energy not supplied should be reported exclusive of the effect of Excluded Outages as defined in chapter 9.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if DNSP can provide Actual Information for energy not supplied it must do so; otherwise DNSP must provide Estimated Information.

#### **Response:**

The raw energy not supplied was determined using the third method (average consumption of customers on the feeder based on their billing history) utilising customer consumption aggregated at the feeder level in place of the billing data as stated. This aggregated consumption was applied to the planned and unplanned supply duration parameters exclusive of the excluded outages as specified in this Information Notice.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The planned and unplanned supply duration parameter data sources for Powercor are

- Years 2006 to 2010 inclusive are the Annual Regulatory Performance Reports [Feeder Reliability (6 mth & Annual) tab]
- Years 2011 to 2015 inclusive the AER Annual Non-Financial RINs [4a. Annual feeder Reliability tab]

The originating outage data sources and reference documents were/are the

- Outage Management System, Business Objects & Business Intelligence
- Electricity distribution network service providers AER Service Target Performance Incentive Scheme (STPIS), November 2009, particularly section 3.3 Exclusions

The annual customer aggregated consumption data were obtained from the feeder electrical energy meters

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	i. The planned energy component is the sum across all the feeders in the STPIS scheme ii. The unplanned energy component is the sum across all the feeders in the STPIS scheme iii. The total energy component is the sum of item i and item ii above  For Methodology for Powercor is as follows: <ul style="list-style-type: none"> <li>• The individual feeder total aggregated annual energy consumed is used together with the planned &amp; unplanned supply duration parameters exclusive of the excluded outages as specified in this Information Notice</li> </ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Energy not supplied is an estimate of the energy that was not supplied as a result of customer interruptions. The energy not supplied was determined using the third method utilising customer consumption aggregated at the feeder level in place of the billing data.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	The basis for the estimate was the third method (average consumption of customers on the feeder based on their billing history) as per the requirements of the Notice.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006

2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	The approach selected is deemed management's best estimate.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has been provided for all the years requested.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.6. Quality of services worksheet	
Table name: 3.6.3 System Losses	
Variable Code	Variable Name
DQS03	System Losses
BOP ID	BMPAL3.6BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Table 3.6.3 must be completed in accordance with the definitions in chapter 9.

#### **Table 3.6.3 System losses**

System losses is the proportion of energy that is lost in distribution of electricity from the transmission network to Powercor customers. Powercor must report distribution losses calculated as per Equation 2.

#### **Equation 2 Calculation of system losses**

$$\text{system losses} = \frac{\text{electricity imported} - \text{electricity delivered}}{\text{electricity imported}} \times 100$$

Where:

Electricity imported is the total electricity inflow into Powercor's distribution network (including from Embedded Generation) minus the total electricity outflow into the networks of the adjacent connected distribution network service providers or the transmission network(s).

Electricity delivered is the amount of electricity transported out of Powercor's network to its customers as metered (or otherwise calculated) at the customer's connection.

This is a system wide figure not a feeder level figure.

#### **Response:**

The data is based on annual regulatory year losses from 2009 to 2015. Prior to 2009 financial year losses have been used as submitted to the AER as part of the annual Distribution Loss Factor submissions. Powercor have used the financial year losses for 2006 – 2009 due to having not archived the source data therefore unable to split/ disclose the data by regulatory year.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:****DQS03:**

- The source data to calculate annual year losses comprises of purchases data from the IEE database and sales data is from CIS. Please note that the data for 2006-2008 is for financial years not calendar years, and data for 2009-2015 is for regulatory years.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	The data used was the purchases and sales for the <u>financial</u> year in question and then using formula $\%Loss = (purchases - sales) / purchases * 100$ . Financial year data was used because it is readily available for those years as submitted to the AER as part of the annual Distribution Loss Factor submissions.
2007	Same as 2006
2008	Same as 2006
2009	The data used was the purchases and sales for the <u>regulatory</u> year in question and then using formula $\%Loss = (purchases - sales) / purchases * 100$
2010	Same as 2009
2011	Same as 2009
2012	Same as 2009
2013	Same as 2009
2014	Same as 2009
2015	Same as 2009

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	No estimated data
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	No estimated data
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	No estimated data
2011	No estimated data

2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.6 Quality of services worksheet	
Table name: 3.6.4 Capacity utilisation	
Variable Code	Variable Name
DQS04	Overall utilization
BOP ID	BMPAL3.6BOP4

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Table 7.4 must be completed in accordance with the definitions in chapter 9.

#### **Table 7.4 Capacity utilisation**

Capacity utilisation is a measure of the capacity of zone substation transformers that is utilized each year. Powercor must report the sum of non-coincident Maximum Demand at the zone substation level divided by summation of zone substation thermal capacity.

For the purpose of this measure, thermal capacity is the rated continuous load capacity of the zone substation (with forced cooling or other capacity improving factors included if relevant). This must be the lowest of either the transformer capacity or feeder exit capacity of the zone substation. Feeder exit capacity should similarly be the continuous rating.

#### **Response:**

The capacity utilisation is calculated automatically in the table, where the measured non-coincident summated raw zone substation maximum demand (DOPSD0201) is divided by the summation of Powercor Zone Substation transformer thermal nameplate ratings (DPA0604).

The thermal nameplate ratings of the zone substations are reported annually from 2006 to 2012 in the Distribution System Planning Report (DSPR) and from 2013 - 2015 Distribution Annual Planning Report (DAPR) and are in accordance of the definitions in chapter 9.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, Item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

#### **DQS04: Overall Utilisation**

Refer to the Non-coincident Summated Raw System Annual Peak Demand (DOPSD0201) and Total zone substation transformer capacity (DPA0604).

The source of Non-coincident Summated Raw System Annual Peak Demand (DOPSD0201) is:

- 2007, 2008, 2009, 2011, 2012, 2013, 2014 and 2015 was obtained from TrendScada meter data for Powercor zone substations. For a few Zone Substations MDS was used.
- 2010 was estimated

Total zone substation transformer capacity (DPA0604) is a summation of DPA0601-0603. There is no installed capacity for DPA0601 & DPA0602. For DPA0603 the data sources for years 2006 to 2015 inclusive are the Annual Regulatory

Performance Reports [National Reporting tab] and the AER Annual RINs [General Information tab]. The originating sources were/are:

- Plant & Stations Condition Based Reliability System
- Planners Planning Distribution Reports

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Each year, the Non-coincident Summated Raw System Annual Peak Demand is divided by the summation of Powercor Zone Substation transformer thermal nameplate ratings.
2007	As stated above
2008	As stated above
2009	As stated above
2010	As stated above
2011	As stated above
2012	As stated above
2013	As stated above
2014	As stated above
2015	As stated above

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	Data for DOPSD0201 was estimated as the peak demand had not yet occurred at the time of the submission.
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	The estimate for DOPSD0201 was based on the summation of Powercor zone substation load forecast for 2010
2011	No estimated data
2012	No estimated data
2013	No estimated data
2014	No estimated data
2015	No estimated data

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimated data
2007	No estimated data
2008	No estimated data
2009	No estimated data
2010	The selected approach was used as the 2010 actual peak demand had not yet occurred the zone substation 2010 forecast was used.
2011	No estimated data
2012	No estimated data



2013	No estimated data
2014	No estimated data
2015	No estimated data

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

### **3.7      Operating Environment Factors**

## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.7 Operating environment factors	
Table name: 3.7.1 Density Factors	
Variable Code	Variable Name
DOEF0101	Customer density
DOEF0102	Energy density
DOEF0103	Demand density
BOP ID	BMPAL3.7BOP1

### A. Demonstrate how the information provided is consistent with the requirements of the Notice

Requirements of the notice:

Complete the table in accordance with the definitions provided in chapter 9.

- 'Customer density' (DOEF0101) is the total number of customers divided by the *route Line Length of the network*.
- 'Energy Density' (DOEF0102) is the total MWh divided by the total number of customers *of the network*.
- 'Demand Density' (DOEF0103) is the kVA non-coincident Maximum Demand (at zone substation level) divided by the total number of customers *of the network*

#### Response:

The customer, energy and demand density were calculated using the variables as stipulated in the requirements of the notice.

That is, the 'Customer density' (DOEF0101) has been calculated as the total number of customers divided by the *route Line Length of the network*; the 'Energy Density' (DOEF0102) has been calculated as the total MWh divided by the total number of customers *of the network*; and the 'Demand Density' (DOEF0103) has been calculated as the kVA non-coincident Maximum Demand (at zone substation level) divided by the total number of customers *of the network*.

### B. Actual vs. Estimated Data colour coding

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### C. Source (refer AER Instructions document, Section 1.1.2, item (2))

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### Response:

There is no source for these variables as they are ratios derived from variables already in the Benchmarking RIN.

The original source of the variables required for the ratios have already been stipulated in the relevant Basis of Preparation documents for that particular variable.

'Customer density' (DOEF0101) - variables used were:

3.4.2.1 Total customer numbers by type or class (DOPCNO1) and 3.7.3 route line length (DOEF0301)

'Energy Density' (DOEF0102) – variables used were:

3.4.2.2 Total customer numbers by location (DOPCNO2) and 3.4.1 total energy delivered (DOPED01)

'Demand Density' (DOEF0103) – variables used were:

3.4.2.2 Total customer numbers by location (DOPCNO2) and 3.4.3.3 Non-coincident Summated Raw System Annual Maximum Demand (DOPSD0201)

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p>'Customer density' (DOEF0101) – calculated by: 3.4.2.1 Total customer numbers by type or class (DOPCNO1) divided by 3.7.3 route line length (DOEF0301)</p> <p>'Energy Density' (DOEF0102) – calculated by: 3.4.1 Total energy delivered (DOPED01) divided by 3.4.2.2 Total customer numbers by location (DOPCNO2) multiplied by 1000</p> <p>'Demand Density' (DOEF0103) – calculated by: 3.4.3.3 Non-coincident Summated Raw System Annual Maximum Demand (DOPSD0201) divided by 3.4.2.2 Total customer numbers by location (DOPCNO2) multiplied by 1000</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	These variables are ratios and are therefore dependent upon whether the variable used in the ratio is an actual figure or an estimate. As at least one variable is an estimate, this ratio has been considered as an estimate too.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	These variables are ratios and are therefore dependent upon whether the variable used in the ratio is an actual figure or an estimate. As at least one variable is an estimate, this ratio has been considered as an estimate too.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	These variables are ratios and are therefore dependent upon whether the variable used in the ratio is an actual figure or an estimate. As at least one variable is an estimate, this ratio has been considered as an estimate too.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable.

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Not applicable

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0201	Rural proportion
BOP ID	BMPAL3.7BOP2

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If DNSP has Actual Information, DNSP must report all years of available data. If DNSP does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

#### **Response:**

##### **With respect to Overhead Conductors**

- For the year 2015 the source data was obtained utilising a GIS (Geographical Information System) query that summates the total of the network span lengths to determine the total overhead conductor route line length
- Each portion of the network is defined by categories as either being in the Transmission, Urban, Rural Short or Rural Long category
- The rural component was then obtained by summing the Transmission, Rural Short and Rural Long overhead route line lengths

##### **Note:-**

- The route length includes all spans of high and low voltage greater than 10 metres
- Multiple circuit lines within spans have been counted as one line
- Overhead elements associated with communication, protection & control and unmetered loads were excluded
- Overhead elements in the DNSP's area that are owned by another DNSP were excluded

##### **With respect to Underground Cables**

- For the year 2015 the data could not be obtained utilising a GIS (Geographical Information System) query that summates the total of the underground cable network section lengths to determine the total underground route line length, hence an estimate for this metric is included.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

For the year 2015 GIS was the originating data source (i.e. from where the data is obtained).

**With respect to historical Overhead Conductors and Underground Cables circuit lengths**

- For years 2006 to 2010 inclusive, historical consolidated overhead conductor circuit line length data was obtained from the Annual Regulatory Performance Reports [National Reporting tab]
- For years 2011 to 2012 inclusive the historical overhead conductor circuit line length data was obtained from the AER Annual RINs [Asset Installation tab & General Information tab]

Note:-

- For years 2013-2015 the circuit length and route line length of the overhead conductors was obtained from GIS
- For years 2013-2015 only the circuit length of the underground cables was obtained from GIS

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p><b><u>With respect to Overhead Conductors</u></b></p> <p><b><u>Utilising Standardised Circuit Line Length the Data to align all years with section A of this Information Notice</u></b></p> <p>Reporting specifications and templates have changed over the specified reporting period, so it has been necessary to standardise historical reporting to more closely align with the requirements of this Information Notice. The historical circuit line lengths for years 2006 to 2012 as reported in this Benchmarking RIN have been used as a basis to estimate the historical overhead conductor route line lengths.</p> <p><b><u>Modelling Methodology of historical data to align with section A of this Information Notice</u></b></p> <ul style="list-style-type: none"> <li>• Using the 2013 data for the circuit length and route length a percentage/ratio was evaluated as the relationship between circuit line length and route line length. This relationship was applied to the circuit data for the years 2006 to 2012 inclusive.</li> </ul> <p><b><u>The assumptions made were</u></b></p> <ul style="list-style-type: none"> <li>• That the overhead circuit lengths reported in the 2006 to 2012 Annual Regulatory Reports were derived from GIS queries that are reasonably consistent with those currently used</li> <li>• That it is reasonable to use the ratio/percentage derived from the circuit lengths for the year 2013 to estimate the circuit lengths for the years 2006 to 2012 inclusive</li> </ul> <p><b><u>With respect to Underground Cables</u></b></p> <ul style="list-style-type: none"> <li>• For the year 2013 the data could not be obtained utilising a GIS (Geographical Information System) query that summates the total of the underground network section lengths, to determine the total underground route line length</li> <li>• Assumptions made to estimate the underground route line length were as follows <ul style="list-style-type: none"> <li>• That the underground cable circuit lengths reported in the 2006 to 2012 Annual Regulatory Reports were derived from GIS queries that are reasonably consistent with those currently used</li> <li>• For Powercor Urban the ratio of underground route length to circuit length is 0.90</li> <li>• For Powercor Rural Short the ratio of underground route length to circuit length is 1.00</li> <li>• For Powercor Rural Long the ratio of underground route length to circuit length is 1.00</li> </ul> </li> </ul>
2007	Refer to Methodology & Assumptions used for 2006
2008	Refer to Methodology & Assumptions used for 2006
2009	Refer to Methodology & Assumptions used for 2006
2010	Refer to Methodology & Assumptions used for 2006
2011	Refer to Methodology & Assumptions used for 2006
2012	Refer to Methodology & Assumptions used for 2006
2013	<p><b><u>With respect to Overhead Conductors</u></b></p> <p>No modelling was necessary; the data was obtained utilising a GIS query that summates the total of the overhead span lengths to determine the route line length.</p> <p><b><u>With respect of Underground cables</u></b></p> <p>The underground route length was estimated using the same methodology as for years 2006 to 2013</p>
2014	As per 2013.
2015	As per 2013

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	The available data for Years 2006 to 2012 for Powercor was not in the form specified in this Information Notice. Since no originating source data was available, it was necessary to estimate/derive the requested historical data utilising other data sources, in this case the Annual Regulatory Performance Reports.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	No estimation or derivation was necessary for the overhead conductors An estimation was necessary for the underground cables as no data from GIS was available
2014	As per 2013.
2015	As per 2013.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	The Overhead Circuit Lengths reported in the 2006 to 2012 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2013 reporting years. Therefore, it is reasonable for the percentage/ratio derived from the circuit lengths and route lengths for the year 2013 to be used to estimate route lengths for the years 2006 to 2012 inclusive.  The derived route lengths of the underground cables utilises the known underground circuit lengths modified by an engineering estimate of the relationship between the circuit and route line lengths that has been assumed to be constant over the reporting period
2007	Refer to Methodology & Assumptions used for 2006
2008	Refer to Methodology & Assumptions used for 2006
2009	Refer to Methodology & Assumptions used for 2006
2010	Refer to Methodology & Assumptions used for 2006
2011	Refer to Methodology & Assumptions used for 2006
2012	Refer to Methodology & Assumptions used for 2006
2013	No estimation or derivation was necessary for the overhead conductors An estimation was necessary for the underground cables as no data from GIS was available
2014	As per 2013.
2015	As per 2013.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	<ul style="list-style-type: none"> <li>The approach utilises existing reported data</li> <li>The Overhead and Underground circuit lengths reported in the 2006 to 2012 Annual Regulatory Reports were derived from GIS queries that are in line with those used for the 2013 reporting year</li> </ul>
2007	Refer to Methodology & Assumptions used for 2006
2008	Refer to Methodology & Assumptions used for 2006
2009	Refer to Methodology & Assumptions used for 2006
2010	Refer to Methodology & Assumptions used for 2006
2011	Refer to Methodology & Assumptions used for 2006
2012	Refer to Methodology & Assumptions used for 2006
2013	Refer to Methodology & Assumptions used for 2006
2014	As per 2013.
2015	As per 2013.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by this Information Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to this Information Notice.



**Response:**  
Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
Data has been provided for all the years requested

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0202	Urban and CBD vegetation maintenance spans
DOEF0203	Rural vegetation maintenance spans
DOEF0204	Total vegetation maintenance spans
DOEF0205	Total number of spans
BOP ID	BMPAL3.7BOP3

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If Powercor records poles rather than spans, the number of spans is the number of poles less one.

AER require five years of back cast data for the terrain factors and the following variables have the most recent Regulatory Year shaded yellow and the remaining four years shaded orange:

- number of vegetation Maintenance Spans (DOEF0202, DOEF0203 and DOEF0204)

If Powercor has Actual Information, Powercor must report all years of available data. If Powercor does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

#### **Response:**

Powercor records vegetation against a span, so the count is as required by definition.

The spans counted to report “vegetation management spans” are those that are recorded as having had cutting of vegetation in the relevant year and so meets definition “A span in Powercor’s network that is subject to active vegetation management practices in the relevant year. Active vegetation management practices do not include Inspection of vegetation Maintenance Spans”

Total number of spans is a simple count of the total spans contained in the data file from the Vegetation Work Bench out of SAP. Feeder categorisation for each year has been linked from relevant annual RIN data for the year therefore categorisation to Rural and CBD/Urban is compliant.

Powercor no longer report poles without overhead conductor as part of Vegetation, This is the reason for the total number of poles significantly reducing in 2015

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data base of reference for vegetation is found in SAP and named the Vegetation Work Bench. SAP is also linked to our GIS data system where pole information and span link equipment number is sourced and transferred to SAP. The vegetation database records current status of vegetation spans for last inspection and last cut data and also contains historic records from the previous contractor for data they held in 2015. Data that the contractor held for 2015 was imported into the new system from 29.07.2015 till 05.11.2015. July data imports included 2015 year to date data. When data ceased to be provided by our previous contractor who have entered administration, inspection and cutting information was maintained directly in SAP. A full year of data was then extracted from SAP including the imported data from contractors and the internally updated data. Data files from the contractor for past years have been received and are stored on the Vegetation management common drive on //corp/Netw/Dept/Vegetation Management/VDB /year since 2012, Prior to 2012 files were received in various ways over time and so receipt date is unable to be verified. They have also been received by various officers in the vegetation management area of Powercor over time.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Not required
2007	Not required
2008	Not required
2009	<p>Methodology</p> <p>DOEF0202, DOEF0203, DOEF0204</p> <ul style="list-style-type: none"> <li>A pivot table was run on the composite data to count the number of spans which have a cut activity by year and by feeder category per definitions.</li> </ul> <p>DOEF0205</p> <ul style="list-style-type: none"> <li>To derive the total number of spans records in the relevant data files were counted as these represent the span information which was provided to vegetation management contractor to inspect and maintain.</li> <li>The same process was used for all years, however it is anticipated that data accuracy in the source data has improved over time but this is not verifiable.</li> <li>Data exists for CitiPower and Powercor in the same data base record. The relevant company was extracted by using a region code. CTP is CitiPower and was filtered out for Powercor data.</li> </ul> <p>Assumptions</p> <ul style="list-style-type: none"> <li>The data file from the contractor for each year contains all spans on the network.</li> <li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeders categories were allocated to urban.</li> </ul>
2010	As per 2009
2011	As per 2009
2012	As per 2009
2013	As per 2009
2014	As per 2009
2015	<p>Methodology</p> <p>DOEF0202, DOEF0203, DOEF0204      SAP notification type VW &amp; VX with a CUT notification code using company code 4550 for Powercor were extracted from SAP with cut year of 2015 by feeder category per definitions. Notifications for 2015 were all counted regardless of span link status (AVLB or DLFL)</p> <ul style="list-style-type: none"> <li>DOEF0205 <ul style="list-style-type: none"> <li>To derive the total number of span records an extract of span links was exported from SAP via BI reporting using company code 4550. Only spans that are status AVLB are included, Spans with status DLFL are excluded from span count as are no longer active.</li> </ul> </li> </ul> <p>Assumptions</p> <ul style="list-style-type: none"> <li>SAP contains all spans on the network</li> </ul> <p>Feeder categories for Subtransmission feeders (which do not meet the definition of rural long or rural short) were classified as Rural. All other assets contain feeder classification of Rural Long, Rural Short and Urban by feeder as defined in SAP. Feeder classifications are provided in SAP report from Network Business Reporting Manager and were vlook up against feeders in the SAP via BI report on all span links</p>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Not applicable

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

All data provided.

## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0206	Average urban and CBD vegetation maintenance span cycle
DOEF0207	Average rural vegetation maintenance span cycle
BOP ID	BMPAL3.7BOP4

### A. Demonstrate how the information provided is consistent with the requirements of the Notice

#### Requirements of the notice:

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If Powercor records poles rather than spans, the number of spans is the number of poles less one.

If Powercor has Actual Information, Powercor must report all years of available data. If Powercor does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

If there is no available data for the 'average vegetation Maintenance Span Cycle' Variables (DOEF0206 and DOEF0207), Powercor is nevertheless required to estimate five years of back cast data. The average vegetation Maintenance Span Cycle can be calculated based on a simple average of all the Maintenance Span Cycles.

#### Response:

Powercor records vegetation against a span, so the count is as required by definition.

Feeder categorisation for each year has been linked from relevant annual RIN data for the year therefore categorisation to Rural and CBD/Urban is compliant.

Powercor does not have specific cycles for areas but rather the interval for pruning action is based on the particular circumstances of each span and the code allocated indicates the number of years before intervention is expected to be required. This can be more than once per year or periods greater than 5 years. To meet the AER definition we have interpreted area to be the span and have calculated the simple average for all spans in the Feeder classification areas therefore meeting the definition "The planned number of years (including fractions of years) between which cyclic vegetation maintenance is performed for the relevant area

### B. Actual vs. Estimated Data colour coding

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2009	2010	2011	2012	2013	2014	2015
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Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### C. Source (refer AER Instructions document, Section 1.1.2, item (2))

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data base of reference for vegetation is found in SAP and named the Vegetation Work Bench. SAP is also linked to our GIS data system where pole information and span link equipment number is sourced and transferred to SAP. The vegetation database records current status of vegetation spans for last inspection and last cut data and also contains historic records from the previous contractor held data for year 2015. Data import was conducted from 29.07.2015 till 05.11.2015 when data ceased to be provided by our previous contractor who has entered administration. Data files past used have been received and are stored on the Vegetation management common drive on //corp/Netw/Dept/Vegetation Management/VDB /year since 2012, Prior to 2012 files were received in various ways over time and so receipt date is unable to be verified. They have also been received by various officers in the vegetation management area of Powercor over time.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Not required
2007	Not required
2008	Not required
2009	<p>Methodology</p> <p>DOEF0206, DOEF0207</p> <ul style="list-style-type: none"> <li>The data file contains a code which represents the year vegetation is expected to encroach the regulated clearance space.</li> <li>Powercor is currently working through a transition program to full compliance. Spans being managed to full compliance are recorded as "transitioned", and full compliance is maintained by attending to the span in the year prior to the expected encroachment year.</li> <li>For a non-transitioned span the clearance cycle was calculated as the period between the cut date and the database code. For transitioned spans the clearance cycle was calculated as above minus 1.</li> <li>A simple average of spans was then derived in a pivot table. <ul style="list-style-type: none"> <li>The same process was used for all years, however it is anticipated that data accuracy in the source data has improved over time but this is not verifiable. Data exists for CitiPower and Powercor in the same data base record. The relevant company was extracted by using a region code. CTP is CitiPower and was filtered out for Powercor data.</li> </ul> </li> </ul> <p>Assumptions</p> <ul style="list-style-type: none"> <li>The data file from the contractor for each year contains all spans on the network.</li> <li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeders categories were allocated to urban.</li> </ul>
2010	As per 2009
2011	As per 2009
2012	As per 2009
2013	As per 2009
2014	As per 2009
2015	<p>Methodology</p> <p>DOEF0206, DOEF0207</p> <ul style="list-style-type: none"> <li>The data file contains a code which represents the year vegetation is expected to encroach the regulated clearance space</li> <li>Full compliance is maintained by attending to the span in the year prior to the expected encroachment year.</li> </ul> <p>An average of past two years has been used to estimate the results as previous contractor entered administration and data can no longer be sourced</p>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable

2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Estimate - previous contractor went into administration and data can no longer be sourced

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Estimate - previous contractor went into administration and data can no longer be sourced, average of past two years is the most logical method to determine reported result.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Not applicable
2014	Not applicable
2015	Estimate - previous contractor went into administration and data can no longer be sourced, estimation is thus the only method available and average of past two years deemed the most systematic/logical approach

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**  
All data provided.



## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0208	Average number of trees per urban and CBD vegetation maintenance span
DOEF0209	Average number of trees per rural vegetation maintenance span
BOP ID	BMPAL3.7BOP5

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If Powercor records poles rather than spans, the number of spans is the number of poles less one.

We require five years of back cast data for the terrain factors and the following variables have the most recent Regulatory Year shaded yellow and the remaining four years shaded orange:

- Average Number Of Trees Per Maintenance Span (DOEF0208 and DOEF0209)

If Powercor has Actual Information, Powercor must report all years of available data. If Powercor does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

#### **Average number of trees per vegetation maintenance span**

Powercor must report the average number of trees per vegetation maintenance span. If Powercor does not have Actual Information for the Average number of trees per vegetation Maintenance Span it must, estimate this variable using one or a combination of the following data sources:

- Encroachment Defects (e.g. ground or aerial Inspections, LiDAR) and/or records of vegetation works scoping, or GIS vegetation density data;
- Field surveys using a sample of Maintenance Spans within each vegetation management zone to assess the number of mature trees within the maintenance corridor. Sampling must provide a reasonable estimate and consider the nature of Maintenance Spans in urban versus rural environments in determining reasonable sample sizes.
- Vegetation data such as:
  - the Normalised Difference Vegetation Index (NDVI) grids and maps available from the Bureau of Meteorology (BOM);
  - data from the National Vegetation Information System (VIS data) overlaid on network GIS data to assess the density of vegetation in the direct vicinity of the Maintenance Spans; or
  - similar data from other sources such as Geoscience Australia or commercial suppliers of satellite imagery overlaid on network GIS data records.
- Any other data source based on expert advice.

Powercor must outline its estimation approach for the Average Number of Trees per Vegetation Maintenance Span in its Basis of Preparation.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for the average number of trees per vegetation management span it must do so; otherwise Powercor must provide Estimated Information.

**Response:**

Powercor records vegetation against a span, so the count is as required by definition.

Feeder categorisation for each year has been linked from relevant annual RIN data for the year therefore categorisation to Rural and CBD/Urban is compliant.

Powercor's contract inspectors do record the work volumes they expect to be carried out, however this is made up of categories for removal, trims, and scrub by square metre. This is not data that is routinely utilised by Powercor and is not subject to any verification process by Powercor. This also may vary from the actual work carried out by cutting crews. The number of trees needing action within a span may change between cutting cycles where trees have different clearances and/or growth rates.

Powercor's contractor entered administration during 2015; the data normally provided for this response cannot be sourced, Estimation of past two years results has been utilized

The data source for estimation is reported information from Ground Inspection recording those trees for which some cutting action is expected, therefor meeting the AER option for data being "records of vegetation works scoping" and meeting the definition "includes only trees that require active vegetation management to meet its vegetation management obligations".

**B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data base of reference for vegetation is found in SAP and named the Vegetation Work Bench. SAP is also linked to our GIS data system where pole information and span link equipment number is sourced and transferred to SAP. The vegetation database records current status of vegetation spans for last inspection and last cut data and also contains historic records from the previous contractor held data for year 2015. Data import was conducted from 29.07.2015 till 05.11.2015 when data ceased to be provided by our previous contractor who has entered administration. Tree cut data was not provided by the previous contractor as they entered administration and cannot be sourced. Data files past used have been received and are stored on the Vegetation management common drive on //corp/Netw/Dept/Vegetation Management/VDB /year since 2012, Prior to 2012 files were received in various ways over time and so receipt date is unable to be verified. They have also been received by various officers in the vegetation management area of Powercor over time.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Not required
2007	Not required
2008	Not required
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable

2013	<p>Methodology DOEF0208, DOEF0209</p> <ul style="list-style-type: none"> <li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li> <li>Scrub is used for vegetation with stems less the 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER. Inclusion of allowance for trees over 3 metres in scrub can increase the tree count by 300%, however it has been decided to exclude scrub from the tree count for the Benchmark RIN as there is no basis to estimate the number of trees to include.</li> <li>Availability of, and confidence in, historical data on trees is uncertain and so only 2013 data has been reported. Assumptions need to be made on how many trees over 3 metres may exist in areas only recorded as scrub. Assumptions of 1 or more would be as valid as the assumption of zero that we have used.</li> <li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeders categories were allocated to urban.</li> </ul>
2014	<p>Methodology DOEF0208, DOEF0209</p> <ul style="list-style-type: none"> <li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li> <li>Scrub is used for vegetation with stems less the 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER. Inclusion of allowance for trees over 3 metres in scrub can increase the tree count by 300%, however it has been decided to exclude scrub from the tree count for the Benchmark RIN as there is no basis to estimate the number of trees to include.</li> <li>Assumptions need to be made on how many trees over 3 metres may exist in areas only recorded as scrub. Assumptions of 1 or more would be as valid as the assumption of zero that we have used.</li> <li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeder's categories were allocated to urban.</li> </ul>
2015	<p>Methodology DOEF0208, DOEF0209</p> <p>An average of past two years has been used to estimate the results as previous contractor entered administration and data can no longer be sourced</p>

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Availability of, and confidence in, historical data on trees is uncertain and so only 2013 data has been reported. Assumptions need to be made on how many trees over 3 metres may exist in areas only recorded as scrub. Assumptions of 1 or more would be as valid as the assumption of zero that we have used.
2014	Assumptions need to be made on how many trees over 3 metres may exist in areas only recorded as scrub. Assumptions of 1 or more would be as valid as the assumption of zero that we have used.
2015	Estimate - previous contractor went into administration and data can no longer be sourced

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable

2012	Not applicable
2013	DOEF0208, DOEF0209 <ul style="list-style-type: none"> <li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li> <li>Scrub is used for vegetation with stems less than 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER.</li> <li>Inclusion of allowance for trees over 3 metres in scrub can increase the tree count by 300%, however it has been decided to exclude scrub from the tree count for the Benchmark RIN as there is no basis to estimate the number of trees to include.</li> <li>Tree numbers actioned per span were linked to maintenance spans through a lookup function and pivot table used to generate averages for required businesses and categories.</li> </ul>
2014	DOEF0208, DOEF0209 <ul style="list-style-type: none"> <li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li> <li>Scrub is used for vegetation with stems less than 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER.</li> </ul>
2015	Estimate - previous contractor went into administration and data can no longer be sourced, average of past two years is the most logical method to determine reported result.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	The approach taken counts only identified trees and avoids escalation of these numbers by using an assumption of trees existing in scrub areas that could not be validated. This will however lead to our trees per span being substantially lower than those who report per the AER guidance of a tree being vegetation over 3 metres.
2014	The approach taken counts only identified trees and avoids escalation of these numbers by using an assumption of trees existing in scrub areas that could not be validated. This will however lead to our trees per span being substantially lower than those who report per the AER guidance of a tree being vegetation over 3 metres.
2015	Estimate - previous contractor went into administration and data can no longer be sourced, estimation is thus the only method available and average of past two years deemed the most systematic/logical approach

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

- the nature of the change; and
- the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has only been provided from 2013 onwards, as Powercor does not currently measure the information in accordance with the variable requirement, it is unnecessarily burdensome to estimate and it is illogical to enter '0'.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0210	Average number of defects per urban and CBD vegetation maintenance span
DOEF0211	Average number of defects per rural vegetation maintenance span
BOP ID	BMPAL3.7BOP6

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

*Requirements of the notice:*

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If Powercor records poles rather than spans, the number of spans is the number of poles less one.

We require five years of back cast data for the terrain factors and the following variables have the most recent Regulatory Year shaded yellow and the remaining four years shaded orange:

- average number of Defects per vegetation Maintenance Span (DOEF0210 and DOEF0211)

If Powercor has Actual Information, Powercor must report all years of available data. If Powercor does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

#### ***Average number of Defects per vegetation maintenance span***

Powercor must report the average number of vegetation related Defects that are recorded per Maintenance Span in the relevant year.

In its basis of preparation, Powercor must specify whether it records the total number of Defects for each vegetation Maintenance Span, or whether it records Defects on a vegetation Maintenance Span as one, regardless of the number of Defects on the span.

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if Powercor can provide Actual Information for the average number of Defects per vegetation maintenance span it must do so; otherwise Powercor must provide Estimated Information.

#### **Response:**

Powercor records vegetation against a span, so the count is as required by definition.

Powercor records Defects on a vegetation Maintenance Span as one, regardless of the number of Defects on the span.

Feeder categorisation for each year has been linked from relevant annual RIN data for the year therefore categorisation to Rural and CBD/Urban is compliant.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL data green**; and **ESTIMATED/derived data red**

2009	2010	2011	2012	2013	2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'*

**C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

The data base of reference for vegetation is found in SAP and named the Vegetation Work Bench. SAP is also linked to our GIS data system where pole information and span link equipment number is sourced and transferred to SAP. The vegetation database records current status of vegetation spans for last inspection and last cut data and also contains historic records from the previous contractor held data for year 2015. Data import was conducted from 29.07.2015 till 05.11.2015 when data ceased to be provided by our previous contractor who has entered administration. Data files past used have been received and are stored on the Vegetation management common drive on //corp/Netw/Dept/Vegetation Management/VDB /year since 2012, Prior to 2012 files were received in various ways over time and so receipt date is unable to be verified. They have also been received by various officers in the vegetation management area of Powercor over time.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	Not required
2007	Not required
2008	Not required
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Methodology DOEF0210, DOEF0211 <ul style="list-style-type: none"><li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li><li>Scrub is used by the vegetation contractor for vegetation with stems less the 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER. For calculation of this variable it was assumed that scrub contained no trees.</li><li>As no better proxy could be determined, and 2013 data has to be provided, for each span with a code of 55 or 56 that was actioned in 2013 a count of 1 was applied where there was a single tree recorded, and where the tree count was more than 1, 50% of the total trees were assumed to be defects.</li><li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeders categories were allocated to urban.</li></ul>
2014	Methodology DOEF0210, DOEF0211 <ul style="list-style-type: none"><li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li><li>Scrub is used by the vegetation contractor for vegetation with stems less the 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER. For calculation of this variable it was assumed that scrub contained no trees.</li><li>As no better proxy could be determined, and 2014 data has to be provided, for each span with a code of 55 or 56 that was actioned in 2014 a count of 1 was applied where there was a single tree recorded, and where the tree count was more than 1, 50% of the total trees were assumed to be defects.</li><li>Feeder categories Rural Long, Rural Short and subtransmission lines (which appear as N/A in spreadsheet used to derive the data for these variable codes) were classified as Rural while feeder categories and Urban feeders categories were allocated to urban.</li></ul>
2015	Methodology DOEF0210, DOEF0211 An average of past two years results has been used to estimate the results as previous contractor entered administration and data can no longer be sourced



**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	Availability of, and confidence in, historical data on trees is uncertain and so only 2013 data has been reported. Vegetation code is only recorded for the closest vegetation in the span not for each tree in the span and as such it is not possible to determine historically how many trees were non-compliant from any source data. An estimate therefore has to be made on how many of the trees in a maintenance span may have been non-compliant with the regulatory requirements at the time of recording.
2014	Availability of, and confidence in, historical data on trees is uncertain and so 2013 and 2014 data has been reported. Vegetation code is only recorded for the closest vegetation in the span not for each tree in the span and as such it is not possible to determine historically how many trees were non-compliant from any source data. An estimate therefore has to be made on how many of the trees in a maintenance span may have been non-compliant with the regulatory requirements at the time of recording.
2015	Estimate - previous contractor went into administration and data can no longer be sourced

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	DOEF0210, DOEF0211 <ul style="list-style-type: none"><li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li><li>This data also records the code allocated to the span by the inspector. A code of 55 or 56 represents vegetation in the regulated clearance space and so is taken as a defect.</li><li>A code is only applied to a span, and so there is no method to determine how many defects exist, although it must be at least one for a span and cannot be more than the total trees for that span.</li><li>Scrub is used for vegetation with stems less than 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER.</li><li>As no better proxy could be determined, and 2013 data has to be provided, for each span with a code of 55 or 56 that was actioned in 2013 a count of 1 was applied where there was a single tree recorded, and where the tree count was more than 1, 50% of the total trees were assumed to be defects.</li><li>Tree numbers actioned per span were linked to maintenance spans through a lookup function and pivot table used to generate averages for required businesses and categories.</li></ul>
2014	DOEF0210, DOEF0211 <ul style="list-style-type: none"><li>Records were provided by Vegetation management contractor that recorded the number of trees and amount of scrub reported as needing action by their inspector. This may not be the same as actual work carried out, but is believed to be very close.</li><li>This data also records the code allocated to the span by the inspector. A code of 55 or 56 represents vegetation in the regulated clearance space and so is taken as a defect.</li><li>A code is only applied to a span, and so there is no method to determine how many defects exist, although it must be at least one for a span and cannot be more than the total trees for that span.</li><li>Scrub is used for vegetation with stems less than 4 inches in diameter, and may or may not include vegetation of 3 metres in height as suggested for tree count by AER.</li><li>As no better proxy could be determined, and 2014 data has to be provided, for each span with a code of 55 or 56 that was actioned in 2014 a count of 1 was applied where there was a single tree recorded, and where the tree count was more than 1, 50% of the total trees were assumed to be defects.</li></ul> Tree numbers actioned per span were linked to maintenance spans through a lookup function and pivot table used to generate averages for required businesses and categories.



2015	Estimate - previous contractor went into administration and data can no longer be sourced, average of past two years is the most logical method to determine reported result.
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Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	Not applicable
2007	Not applicable
2008	Not applicable
2009	Not applicable
2010	Not applicable
2011	Not applicable
2012	Not applicable
2013	If a span has a code of 55 or 56 it is known that at least one tree was in the clearance space at the time of that record. The total number of trees in the maintenance span is known with some certainty (see relevant explanatory sheet for number of trees per span) and it is known that not all of these are within the clearance space. Therefore it is known that the number of defects is somewhere between the number of 55 and 56 codes spans and the total number of trees in those spans – but not equal to either of these. A figure of 50 % was chosen on the basis it is the mid-point between the known limits.
2014	If a span has a code of 55 or 56 it is known that at least one tree was in the clearance space at the time of that record. The total number of trees in the maintenance span is known with some certainty (see relevant explanatory sheet for number of trees per span) and it is known that not all of these are within the clearance space. Therefore it is known that the number of defects is somewhere between the number of 55 and 56 codes spans and the total number of trees in those spans – but not equal to either of these. A figure of 50 % was chosen on the basis it is the mid-point between the known limits.
2015	Estimate - previous contractor went into administration and data can no longer be sourced, estimation is thus the only method available and average of past two years deemed the most systematic/logical approach

**E. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:** Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has only been provided from 2013 onwards, as Powercor does not currently measure the information in accordance with the variable requirement, it is unnecessarily burdensome to estimate and it is illogical to enter '0'.

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

<b>Tab name:</b> 3.7 Operating environment factors	
<b>Table name:</b> 3.7.2 Terrain Factors	
<b>Variable Code</b>	<b>Variable Name</b>
DOEF0212	Tropical proportion
BOP ID	BMPAL3.7BOP7

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If DNSP has Actual Information, DNSP must report all years of available data. If DNSP does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

The tropical proportion is the approximate total number of urban and Rural Maintenance Spans in the Hot Humid Summer and Warm Humid Summer regions as defined by the Australian Bureau of Meteorology Australian Climatic Zones map (based on temperature and humidity).

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if DNSP can provide Actual Information for the number of spans in tropical areas it must do so; otherwise DNSP must provide Estimated Information.

#### **Response:**

There is no part of the Powercor electricity distribution area that falls into a geographical region defined as Hot Humid Summer and Warm Humid Summer regions as defined by the Australian Bureau of Meteorology.

#### **Note:-**

- The AER has verified & approved that no part of the Powercor distribution network falls into a geographical region defined as Tropical.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

Reference to Hot Humid Summer and Warm Humid Summer regions as defined by the Australian Bureau of Meteorology Australian Climatic Zones map (based on temperature and humidity) was used to identify that there is no 'Tropical Proportion' of the Powercor electricity distribution area as mapped in Powercor's Geographical Information System (GIS).

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p><b><u>Modelling Methodology to align with section AA of this Information Notice</u></b>  The Australian Bureau of Meteorology Australian Climatic Zones map (based on temperature and humidity) was used to verify that there is no part of the Powercor (electricity distribution area as mapped in the Powercor GIS that falls into a geographical region defined as Hot Humid Summer and Warm Humid Summer regions as defined by the Australian Bureau of Meteorology</p> <p><b><u>The assumptions made were</u></b>  That the Hot Humid Summer and Warm Humid Summer regions defined have not changed since 2006, and therefore can be applied across all years from 2006.</p>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006.
2015	As per 2006.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	No estimation or derivation was used
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	No estimation or derivation was used
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006
2014	As per 2006
2015	As per 2006.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	No estimation or derivation was used
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	As per 2006

2014	As per 2006
2015	As per 2006.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have materially changed during any of the Regulatory Years covered by this Information Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to this Information Notice.

**Response:**

Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.

Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.

Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has been provided for all the years requested

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

*The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.*

*This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.*

*Please use plain English, complete sentences and avoid acronyms.*

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0213	Standard vehicle access
BOP ID	BMPAL3.7BOP8

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If DNSP has Actual Information, DNSP must report all years of available data. If DNSP does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

#### **Response:**

The data required to meet the requirements of this Information Notice has been estimated for 2015 based on the revised set of assumption developed by Powercor for the 2014 Benchmarking RIN. It has not been retrospectively applied to earlier years (prior to 2014) covered by this Information Notice.

The 2015 estimate is derived from information within Powercor's Graphical Information System (GIS), and provides an estimate of the route length of the Powercor distribution network that is inaccessible by a standard vehicle, as defined in section 9 of AER's Instruction and Definitions document "Economic Benchmarking RIN For Distribution Network Service Providers" dated November 2013.

A Standard vehicle for the purpose of this metric is defined by Powercor as a 2 wheel drive vehicle which can access the line 365 days a year, 24 hrs a day via normal access means.

This methodology meets the requirements of this Information Notice to the best of our abilities.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade **ACTUAL data green**; and **ESTIMATED/derived data red**

2009	2010	2011	2012	2013	2014	2015
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*Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated'*

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

For the year 2015 GIS was the originating data source (i.e. from where the data is obtained).

As no specific data exists in relation to the accessibility of poles and spans, the actual percentage of the Powercor distribution network that is inaccessible by a standard vehicle is unknown.

The estimated route length is based on the assumption listed in section D below.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2009	<p><b><u>Modelling Methodology of historical data to align with section AA of this Information Notice</u></b> The estimate is derived from the knowledge that there exists a small part of the Powercor distribution network that is inaccessible by a standard vehicle, as defined under chapter 9.</p> <p>Note:-</p> <ul style="list-style-type: none"> <li>The total amount of the Powercor distribution network that is inaccessible by a standard vehicle is of an unknown quantity therefore an estimated figure of 0.10% of the route line length has been used.</li> </ul>
2010	As per 2009
2011	As per 2009
2012	As per 2009
2013	As per 2009
2014	<p>Powercor's Geographical Information System (GIS) does not specifically contain detail about standard vehicle accessibility to our assets.</p> <p>The exact percentage of these poles that do not have standard vehicle access is unknown. Some will have access via 2WD vehicle all year round while others may only have access via 2WD vehicle for a very short period over summer (e.g. Otway Ranges). Some poles could be located close to roads and would have access from a 2WD vehicle. Our systems do not record this information.</p> <p>Against each pole we record attributes which include Pole Classification, Pole Site Access and Pole Sites Characteristics. Utilising this information allows us to provide an estimate of the number of Poles where it could reasonably be assumed that we do not have vehicle access 24hr/365 day a year via a two wheel drive (2WD) vehicle.</p> <p>To calculate the number of poles which may not have standard vehicle access we apply the following assumptions to the GIS pole data:-</p> <ul style="list-style-type: none"> <li>All LV poles have Standard Vehicle Access.</li> <li>Poles in Non-Fire Area have Standard Vehicle Access.</li> <li>Poles where Site Access = Paddock or Unknown could have restricted standard vehicle access</li> <li>Poles where Site Characteristics = Grass, Soil, Water or Unknown could have restricted standard vehicle access.</li> <li>It is assumed that 40% of the Poles identified do not have 2WD access all year round. This percentage estimate is based on local network knowledge of the Powercor network.</li> </ul> <p>Non Standard Vehicle Poles = Poles With Possible Site Access Issues X 40%</p> <p>We then convert this into an overall % of poles which do not have standard vehicle access. By multiplying this % poles by the overhead Route length we obtain the length of line with Non Standard vehicle Access.</p> <p>Non Standard Vehicle Access (km) = <math display="block">\frac{\text{Non Standard Vehicle Poles} \times \text{Overhead Line Route length}}{\text{Total Number of Powercor Poles}}</math></p>
2015	AS per 2014

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	For Powercor it is estimated that less than 0.10% of the route line length fall within this category. A nominal value of 100 km has been entered into the template across all years covered by this Information Notice.
2014	Powercor does not record in its GIS system specific details of accessibility of its assets via a standard vehicle. Following a review of its data an updated estimate has been developed

2015	As per 2014
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Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	The assumption is that the indicated proportion of 0.10% of route line length that is deemed as inaccessible is reasonably consistent over the period 2009 to 2013 inclusive
2014	<p>To calculate the number of poles which may not have standard vehicle access we apply the following assumptions to the GIS pole data:-</p> <ul style="list-style-type: none"> <li>• All LV poles have Standard Vehicle Access.</li> <li>• Poles in Non-Fire Area have Standard Vehicle Access.</li> <li>• Poles where Site Access = Paddock or Unknown could have restricted standard vehicle access</li> <li>• Poles where Site Characteristics = Grass, Soil, Water or Unknown could have restricted standard vehicle access.</li> <li>• It is assumed that 40% of the Poles identified do not have 2WD access all year round. This percentage estimate is based on local network knowledge of the Powercor network.</li> </ul> <p>Non Standard Vehicle Poles = Poles With Possible Site Access Issues X 40%</p> <p>We then convert this into an overall % of poles which do not have standard vehicle access. By multiplying this % poles by the overhead Route length we obtain the length of line with Non Standard vehicle Access.</p> <p>Non Standard Vehicle Access (km) = <math display="block">\frac{\text{Non Standard Vehicle Poles X Overhead Line Route length}}{\text{Total Number of Powercor Poles.}}</math></p>
2015	As per 2014

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2009	As per 2013
2010	As per 2013
2011	As per 2013
2012	As per 2013
2013	As no specific data exists in relation to the accessibility of poles and span utilizing local and engineering knowledge was considered the most suitable approach
2014	As no specific data exists in relation to the accessibility of poles, this estimate utilises data which is currently available within Powercor GIS to produce the estimated route length of line which does not have standard vehicle access and is considered to be a suitable approach.
2015	As per 2014.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

<b>Response:</b> Not Applicable
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**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has been provided for all the years requested



## AER ECONOMIC BENCHMARKING RIN

### Basis of Preparation Template

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.7 Operating environment factors	
Table name: 3.7.2 Terrain Factors	
Variable Code	Variable Name
DOEF0214	Bushfire risk
BOP ID	BMPAL3.7BOP9

### A. Demonstrate how the information provided is consistent with the requirements of the Notice

#### Requirements of the notice:

Complete Table 3.7.2 in accordance with the definitions provided in chapter 9.

If DNSP has Actual Information, DNSP must report all years of available data. If DNSP does not have Actual Information on these variables, then it must estimate data for the most recent Regulatory Year.

The bushfire risk variable is the number of Maintenance Spans in high bushfire risk areas as classified by a person or organisation with appropriate expertise on fire risk. This includes but is not limited to:

- DNSP's jurisdictional fire authority
- local councils
- insurance companies
- DNSP's consultants
- Local fire experts

When completing the templates for Regulatory Years subsequent to the 2013 Regulatory Year, if DNSP can provide Actual Information for the asset value roll forward variables it must do so; otherwise DNSP must provide Estimated Information.

#### Response:

For the year 2015 the data was obtained utilising a GIS (Geographical Information System) query that traces the in-service network connectivity model in GIS, to determine the circuit line length, which includes all spurs. Each circuit element was evaluated in its own right, for example:

- SWER lines, single-phase lines, and three-phase lines counted as one line
- Double circuit lines counted as two lines

Note:-

Although this methodology does not use the suggested Route Length methodology it does deliver the network circuit length using the criteria specified in this Information Notice

- An overhead 22kV Subtransmission component was included as an additional line item for completeness
- Overhead elements associated with communication, protection & control and unmetered loads were excluded
- Overhead elements in the DNSP's area that are owned by another DNSP were excluded

Each individual span in this query is coded as being in either a high or low bushfire fire area. Areas of high and low fire risk areas are reviewed and defined annually by the relevant authorities

### B. Actual vs. Estimated Data colour coding

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2009	2010	2011	2012	2013	2014	2015
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### C. Source (refer AER Instructions document, Section 1.1.2, item (2))

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

**Response:**

Powercor has a significant number of spans that are in areas designated as high bushfire risk areas. To determine this number a special GIS query (span data) needed to be developed and tested as no current business standard report was available for this metric

Data only exists for 2013–2015 as no historical data is available from GIS for the years 2006 to 2012 inclusive

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	This is estimated by determining the relationships between the 2013 line length and the corresponding 2013 span data and applying those derived relationships to the historical line length data
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	The principal assumptions are that this data request <ul style="list-style-type: none"> <li>Is limited to the Overhead distribution network</li> <li>Encompasses the High Voltage and Low Voltage conductors</li> <li>Utilises the specially developed query to provide the required segmentation, that is, designation of each span as being in either a high or low bushfire risk area</li> </ul>
2014	The principal assumptions are that this data request <ul style="list-style-type: none"> <li>Is limited to the Overhead distribution network</li> <li>Encompasses the High Voltage and Low Voltage conductors</li> <li>Utilises the specially developed query to provide the required segmentation, that is, designation of each span as being in either a high or low bushfire risk area</li> </ul>
2015	As per 2014.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	As per 2012 but using the 2006 data
2007	As per 2012 but using the 2007 data
2008	As per 2012 but using the 2008 data
2009	As per 2012 but using the 2009 data
2010	As per 2012 but using the 2010 data
2011	As per 2012 but using the 2011 data
2012	Using the known data for 2013 the relationships between circuit line length, route line length and number of spans at each voltage level were determined. <ul style="list-style-type: none"> <li>These relationships were then applied to the reported circuit line lengths and route line lengths to estimate the number of spans for the year in question, 2012 in this instance</li> </ul>
2013	The spans designated HBRA in the special query (span data) are summed to calculate this metric
2014	The spans designated HBRA in the special query (span data) are summed to calculate this metric
2015	As per 2014.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	As per 2012
2007	As per 2012
2008	As per 2012
2009	As per 2012
2010	As per 2012
2011	As per 2012

2012	The assumption is that it is reasonable to assume the relationships between the 2013 line length and the corresponding 2013 span data can be applied across all the years where historical data is not available
2013	No estimation was used
2014	No estimation was used
2015	As per 2014.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	As per 2012
2007	As per 2012
2008	As per 2012
2009	As per 2012
2010	As per 2012
2011	As per 2012
2012	2013 actual findings are deemed the best estimate to be applied across each year, as there is no historical data available.
2013	No estimation was used
2014	No estimation was used
2015	As per 2014.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data is provided for all the years requested

## AER ECONOMIC BENCHMARKING RIN

### **Basis of Preparation Template**

The purpose of this template is to explain, for each Variable, the basis upon which the Businesses prepared information to populate the input cells. It is used to demonstrate to the AER that the information provided is consistent with the requirements of the RIN Notice.

This information must be provided for each variable and must be accurately described as it will be audited and provided to the AER.

Please use plain English, complete sentences and avoid acronyms.

Tab name: 3.7 Operating environment factors	
Table name: 3.7.3 Service factor areas	
Variable Code	Variable Name
DOEF0301	Route Line length
BOP ID	BMPAL3.7BOP10

### **A. Demonstrate how the information provided is consistent with the requirements of the Notice**

#### **Requirements of the notice:**

DNISP must input the route Line Length of lines for *DNISP's network*. This is based on the distance between line segments and does not include vertical components such as line sag. The route Line Length does not necessarily equate to the circuit length as the circuit length may include multiple circuits.

#### **Response:**

##### **With respect to Overhead Conductors**

For the year 2015 the data was obtained utilising a GIS (Geographical Information System) query that summates the total of the overhead network span lengths, to determine the total Overhead Route Line Length.

- Spans less than or equal to 10 metres in length were excluded
- Multiple circuit lines within spans were counted as one

##### **line Note:-**

- The Overhead Route Line Length includes all spans of high and low voltage greater than 10 metres in length
- Overhead elements associated with communication, protection & control and unmetered loads were excluded
- Overhead elements in the DNISP's area that are owned by another DNISP were excluded

##### **With respect to Underground Cables**

For the year 2015 the data could not be obtained utilising a GIS (Geographical Information System) query that summates the total of the underground network section lengths to determine the total Underground Route Line Length, hence an estimate for this metric was used. Actual data cannot be obtained because historically it has never been recorded.

### **B. Actual vs. Estimated Data colour coding**

For each year, please shade ACTUAL data green; and ESTIMATED/derived data red

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
------	------	------	------	------	------	------	------	------	------

Powercor identifies this data as inherently estimated data in that actual data can never be provided or it has been identified by the AER that it may continue to be estimated. This is in line with the AER's statement in the Economic Benchmarking Instructions and Definitions document that 'some variables are inherently estimated or may continue to be estimated.'

### **C. Source (refer AER Instructions document, Section 1.1.2, item (2))**

Please explain the source from where the data has been obtained for each year (i.e. systems such as GIS, SAP, OAS, Audited financial statements etc.). If the data is not being obtained from the *originating source* (i.e. it was sourced from a report such as the Annual Regulatory Performance report, RINs, etc.), the originating source for the data in the performance report/RIN will need to be provided as well.

#### **Response:**

##### **With respect to Overhead Conductors**

For Powercor, GIS was the originating data source (i.e. from where the data is obtained).

However, as 2013 was the first year that the Route Line Length variable was required to be evaluated, and since

GIS records are not continuously archived, no earlier historical data is available.

In this case:

- For year's 2006 to 2012 inclusive, historical consolidated overhead conductor circuit length data, provided by the Annual Regulatory Performance Reports [National Reporting (Annual) tab] and AER Non-Financial RINs [3. Asset Installation tab & 5. General Information tab], were used as the starting point for estimating route lengths.
- For the years 2013-2015 the overhead conductor Circuit Lengths and Route Lengths were both obtained from GIS

**With respect to Underground Cables**

- For the years 2006 to 2012 inclusive, historical consolidated underground cable circuit length data, provided by the Annual Regulatory Performance Reports [National Reporting (Annual) tab] and AER Non-Financial RINs [3. Asset Installation tab & 5. General Information tab], was used as the starting point for estimating route lengths
- For years 2013-2015, only the underground cable circuit length was obtained from GIS.

**D. Methodology & Assumptions (refer AER Instructions document, Section 1.1.2, item (3))**

Please explain for each year, the methodology applied including any assumptions made to determine the final value populated in the RIN. Where applicable please reference the relevant processes and procedures used. If the same explanation applies over other years, just refer to the applicable year.

Year	Methodology & Assumptions
2006	<p><b><u>Methodology used to derive historical Route Line Length estimate to align with section A of this Information Notice</u></b></p> <p><b><u>With respect to Overhead Conductors</u></b></p> <ul style="list-style-type: none"> <li>• For this year, the Overhead Route Line Length was estimated using the ratio/percentage derived from the known 2013 data of overhead <u>circuit</u> line length and <u>route</u> line length, at each voltage level.</li> <li>• These derived ratios/percentages were applied to the overhead circuit line length data available for this year, to obtain Route Line Length data for this year.</li> </ul> <p><b><u>The assumptions made were</u></b></p> <ul style="list-style-type: none"> <li>• The overhead circuit lengths reported in the 2006 Annual Regulatory Report were derived from GIS queries that are reasonably consistent with those currently used</li> <li>• Therefore, it is reasonable to use the ratios/percentages derived from the overhead circuit line lengths and overhead route line lengths for the year 2013 to estimate the overhead route line lengths for the year 2006, based on the reported circuit line length data</li> </ul> <p><b><u>With respect to Underground Cables</u></b></p> <ul style="list-style-type: none"> <li>• Data for the year 2013 could not be obtained utilising a GIS query to determine the total Underground Route Line Length</li> <li>• Assumptions made to estimate the Underground Route Line Length were as follows: <ul style="list-style-type: none"> <li>○ For Powercor Urban the ratio of underground route length to circuit length is 0.90</li> <li>○ For Powercor Rural Short the ratio of underground route length to circuit length is 1.00</li> <li>○ For Powercor Rural Long the ratio of underground route length to circuit length is 1.00</li> </ul> </li> </ul>
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	<p><b><u>With respect to Overhead Conductors</u></b></p> <p>The Overhead Route Line Length data was obtained utilising a query that summates the total of the overhead span lengths in GIS, to determine the Route Line Length.</p> <ul style="list-style-type: none"> <li>• Spans less than or equal to 10 metres in length were excluded</li> <li>• Multiple circuit lines within spans were counted as one line</li> </ul> <p><b><u>With respect to Underground Cables</u></b></p> <p>The Underground Route Line Length was estimated using the same methodology as for years 2006 to 2012 inclusive.</p>

2014	<p><b><u>With respect to Overhead Conductors</u></b>  The Overhead Route Line Length data was obtained utilising a query that summates the total of the overhead span lengths in GIS, to determine the Route Line Length.</p> <ul style="list-style-type: none"> <li>Spans less than or equal to 10 metres in length were excluded</li> <li>Multiple circuit lines within spans were counted as one line</li> </ul> <p><b><u>With respect to Underground Cables</u></b>  The Underground Route Line Length was estimated using the same methodology as for years 2006 to 2013 inclusive.</p>
2015	As per 2014.

**E. Estimated or Derived Data (refer AER Instructions document, Section 1.1.2, item (4))**

For those years where data has been estimated or derived from other data, please explain:

Year	1. why is an estimate was required, including why it is not possible to use actual data;
2006	For both overhead conductors and underground cables the data for Years 2006 to 2012 in Powercor was not available in the form specified in this Information Notice, hence it was necessary to estimate/derive the requested historical data utilising other data sources, in this case the Annual Regulatory Performance Reports and the 2013 AER Annual RIN report.
2007	As per 2006
2008	As per 2006
2009	As per 2006
2010	As per 2006
2011	As per 2006
2012	As per 2006
2013	For year 2013 the overhead conductor data complies with this Information Notice (see Response in section A)
	For underground cables the data is estimated/derived as previously described
2014	For year 2013 the overhead conductor data complies with this Information Notice (see Response in section A)
	For underground cables the data is estimated/derived as previously described
2015	As per 2014.

Year	2. the basis for the estimate, including the approach used, options considered and assumptions made; and
2006	<p><b><u>With respect to Overhead Conductors</u></b>  The Overhead Circuit Lengths reported in the 2006 to 2012 Annual Regulatory Reports were derived from GIS queries that are reasonably consistent with those used for the 2013 reporting year  Therefore, it is reasonable for the percentages/ratios derived from the circuit lengths and route lengths for the year 2013 to be used to estimate route lengths for the years 2006 to 2012 inclusive</p> <p><b><u>With respect to Underground Cables</u></b>  The ratios of route length to circuit length are based on experience and network installation knowledge to provide a value, as there is no historical context for a more accurate assessment</p>
2007	Refer to Methodology & Assumptions used for 2006
2008	Refer to Methodology & Assumptions used for 2006
2009	Refer to Methodology & Assumptions used for 2006
2010	Refer to Methodology & Assumptions used for 2006
2011	Refer to Methodology & Assumptions used for 2006
2012	Refer to Methodology & Assumptions used for 2006
2013	For overhead conductors no estimation or derivation was used
	For underground cables the data is estimated/derived as previously described
2014	For overhead conductors no estimation or derivation was used
	For underground cables the data is estimated/derived as previously described
2015	As per 2014.

Year	3. the reason(s) for the selected approach and why it is the best estimate.
2006	The approach utilises existing reported data for the overhead component. The approach utilises the described approach for the underground component, as no corresponding route line length data is available
2007	Refer to Methodology & Assumptions used for 2006
2008	Refer to Methodology & Assumptions used for 2006
2009	Refer to Methodology & Assumptions used for 2006
2010	Refer to Methodology & Assumptions used for 2006
2011	Refer to Methodology & Assumptions used for 2006
2012	Refer to Methodology & Assumptions used for 2006
2013	The approach utilises existing reported data for the overhead component. The approach utilises the described approach for the underground component, as no corresponding route line length data is available
2014	The approach utilises existing reported data for the overhead component. The approach utilises the described approach for the underground component, as no corresponding route line length data is available
2015	As per 2014.

**F. Financial Information Variables (Actual or Estimated) (refer AER Instructions document, Section 1.1.2, item (5))**

Please explain if the accounting policies adopted by the Business have Materially changed during any of the Regulatory Years covered by the Notice:

1. the nature of the change; and
2. the impact of the change on the information provided in response to the Notice.

**Response:**

Not applicable

**G. No data provided**

For data that is not being provided (actual, estimated, derived) please provide the reason/s as to why it cannot be provided. Note that the AER will only allow for 'blacked out' inputs for orange and blue shaded cells. If a yellow shaded cell is not applicable, the input will be '0'

Yellow cells require input, with no exceptions. If a yellow cell is not applicable to CitiPower in accordance with this document, the input will be '0'.
Orange cells allow a blacked out input if CitiPower does not currently measure the information in accordance with the variable requirement, it would be unnecessarily burdensome to estimate and it is illogical to enter '0'.
Blue cells allow a blacked out input only where there has been no Material (as defined in chapter 9) change in CitiPower's Cost Allocation Approach, basis of preparation for Regulatory Accounting Statements or the Annual Reporting Requirements.

**Response:**

Data has been provided for all the years requested