



**ADVANCED METERING INFRASTRUCTURE  
REVISED CHARGES APPLICATION 2014**

**30 August 2013**

## **Table of Contents**

<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>1. EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>2. INTRODUCTION.....</b>	<b>4</b>
2.1 BACKGROUND .....	4
2.1.1 AMI project.....	4
2.1.2 Regulatory framework.....	4
2.1.3 Budget and charges applications.....	4
2.1.4 Revised charges determinations .....	5
<b>3. PURPOSE AND STRUCTURE.....</b>	<b>6</b>
<b>4. PERIOD OVER WHICH CHARGES APPLY .....</b>	<b>6</b>
<b>5. ACTUAL EXPENDITURE 2012.....</b>	<b>7</b>
<b>6. ACTUAL REVENUE 2012 .....</b>	<b>7</b>
<b>7. UPDATED FORECASTS OF EXPENDITURE AND REVENUE .....</b>	<b>8</b>
<b>8. WEIGHTED AVERAGE COST OF CAPITAL .....</b>	<b>9</b>
<b>9. INFORMATION AND DOCUMENTS RELIED UPON .....</b>	<b>10</b>
<b>10. 2014 METERING SERVICE CHARGES .....</b>	<b>10</b>
<b>11. CONCLUSION.....</b>	<b>10</b>

## 1. Executive summary

CitiPower is committed to implementing the Victorian Government's Advanced Metering Infrastructure (AMI) policy. Under the AMI program, existing type 5 and 6 accumulation meters of customers consuming less than 160MWh per annum will be replaced with remotely read interval meters. These meters will enable half-hourly consumption measurement and recording, compared to monthly or quarterly meter reading currently available. Remotely read interval meters are designed to allow consumers to better manage their energy use by providing improved price signals and time of use consumption information.

This application sets out revised charges for regulated AMI services for the year commencing 1 January 2014 (**Revised Charges Application**) and is made pursuant to clause 5G.1 of the Order in Council originally gazetted on 28 August 2007 as amended on 12 November 2007, 25 November 2008, 2 April 2009 and 22 December 2011 under sections 15A and 46D of the *Electricity Industry Act 2000* (Vic) (**Revised OIC**). AMI charges are designed to recover actual expenditure that is incurred in response to the Victorian Government's decision to mandate the rollout of AMI to all customers consuming less than 160MWh per annum.

CitiPower detailed its operating and maintenance and capital expenditure for the period 2012-15 in its *Advanced Metering Infrastructure Budget and Charges Application 2012-15* and *Advanced Metering Infrastructure Amended Submitted Budget and Charges Application 2012-15* (**Budget Applications**) made in accordance with clause 5A.1(c) of the Revised OIC. The Budget Applications were submitted to the Australian Energy Regulator (**AER**) on 28 February 2011 and 26 August 2011. The AER detailed its assessment of the Budget Application in the *Final Determination Victorian Advanced Metering Infrastructure Review 2012-15 budget and charges applications October 2011* (**Final Determination**). For the purposes of this Revised Charges Application, CitiPower has used the expenditure forecasts for 2012-15 consistent with the Final Determination.

The table below summarises the proposed charges for 2014.

Real 2010	Metering charges (\$ per NMI p.a.)
Single phase	119.628
Three phase direct connected	156.347
Three phase CT connected	197.477

Table 1: Proposed GST exclusive metering charges for 2014 (\$ per NMI p.a.)

## **2. Introduction**

### **2.1 Background**

#### ***2.1.1 AMI project***

CitiPower is committed to implementing the Victorian Government's AMI policy. Under the AMI program, some 2.9 million new remotely read interval meters will be installed across Victoria by the end of 2013. These meters enable half-hourly consumption measurement and recording, compared to monthly or quarterly meter reading currently available under type 5 and 6 meters. The minimum functionality requirements of AMI meters have been prescribed by the Victorian Government in the *Minimum AMI State-wide Functionality Specification (Victoria) Release 1.1*.

The Victorian Government's overall objective in mandating the AMI rollout is to allow Victorian consumers to better manage their energy use by providing improved price signals and more detailed time of use consumption information.

#### ***2.1.2 Regulatory framework***

The legislative basis for the AMI rollout was established in August 2006 through amendments to the *Electricity Industry Act 2000* (Vic). These amendments also provided powers for the Victorian Government to make Orders in Council.

The Revised OIC establishes the framework for setting prices for regulated metering services. The Revised OIC comprises:

- the Order in Council published on 28 August 2007; and
- the amending Orders in Council published on 12 November 2007, 25 November 2008, 2 April 2009 and 22 December 2011.

made under sections 15A and 46D of the *Electricity Industry Act 2000* (Vic).

The Revised OIC provides that the AER<sup>1</sup> is responsible for ensuring that the metering service charges of each Victorian distributor allow for recovery of actual expenditure that is within 'scope' and is prudent. For CitiPower, an activity is within 'scope' if it is within the scope of activities set out in the notice published pursuant to clause 14B.1 of the Revised OIC on 22 January 2009 (Victoria Government Gazette G4) (**Scope Notice**).

#### ***2.1.3 Budget and charges applications***

As noted, AMI charges are intended to recover actual expenditure that is incurred in response to the Victorian Government's decision to mandate the rollout of AMI to all customers consuming less than 160MWh per annum.

On 28 February 2011 and 26 August 2011 CitiPower submitted its Budget Applications for the subsequent AMI budget period (2012-15) in accordance with

---

<sup>1</sup> From 1 January 2009, the Essential Services Commission's economic regulatory functions and powers were transferred to the AER (see s23 of the *National Electricity (Victoria) Act 2005* (Vic)). This includes responsibility for administering the AMI cost recovery framework established by the Revised OIC. Thus, the references to 'Commission' in the Revised OIC are to be read as references to 'AER'.

clause 5A.1(c) of the Revised OIC. The Budget Applications set out CitiPower's total expenditure for regulated AMI services for each year of the subsequent AMI budget period. The AER released its Final Determination with respect to the Budget Application in October 2011. The expenditure allowances permissible under that Final Determination form the basis of this Revised Charges Application.

This Revised Charges Application, which sets out CitiPower's proposed AMI metering service charges for the year commencing 1 January 2014, is made pursuant to clause 5G of the Revised OIC, which requires each Victorian Distribution Network Service Provider (**DN**SP) to submit their revised charges applications by no later than 31 August for charges commencing the following year.

### **2.1.4 Revised charges determinations**

In making a determination of revised charges, the AER must determine charges in accordance with clauses 4 and 5I of the Revised OIC.

Clause 4.1(o) of the Revised OIC provides that AMI charges shall be designed so that, for the period from 1 January 2009 up to and including the year for which charges are being determined, the net present value of the total costs incurred by the distributor for Regulated Services<sup>2</sup> is equal to the net present value of the total revenue earned by the distributor from the Regulated Services in that same period where:

- costs in any year are the building block costs determined in accordance with clause 4.1(b) to (j); and
- revenue in any year is determined in accordance with clauses 4.1(k) to (m).

Clause 4.1(c) provides that building block costs shall be based on actual expenditure of a distributor or if actual expenditure is not available the distributor's most recent forecast expenditure. Clause 5I.2 provides that, in determining the building blocks for its 2014 revised charges determination, the AER must:

- include actual capital expenditure and actual maintenance and operating expenditure for 2012 where that expenditure:
  - is certified in an audit report under clause 5H.2;
  - is for activities within scope at the time of commitment to or incurring of that expenditure; and
  - is up to 100 per cent of the approved budget for that year; and
- include the expenditure determined pursuant to clause 5D.4.

---

<sup>2</sup> 'Regulated Services' is defined in clause 2.1 of the Revised OIC.

### **3. Purpose and structure**

The purpose of this Revised Charges Application is to:

- detail the charges in respect of AMI regulated services for 2014. These charges are derived based on expenditure set out in the Final Determination and reported 2012 actual expenditure for activities within 'scope' as defined in the Scope Notice; and
- give effect to and be consistent with clauses 4, 5, 5G and 5H of the Revised OIC.

CitiPower confirms that it has complied with the relevant requirements of the Revised OIC in preparing this Revised Charges Application.

The remainder of this Revised Charges Application is structured as follows:

- section 4 sets out the period to which this Revised Charges Application relates, consistent with clause 5H.1(a) of the Revised OIC;
- section 5 sets out actual total maintenance and operating expenditure and capital expenditure in 2012, consistent with the requirement of clause 5H.1(b)(i) of the Revised OIC;
- section 6 sets out CitiPower's revenue from the provision of Regulated Services in 2012 (calculated in accordance with clause 4.1(k)) as required by clause 5H.1(b)(ii) of the Revised OIC;
- section 7 sets out updated forecasts of maintenance and operating expenditure, capital expenditure and revenue from the provision of Regulated Services (calculated in accordance with clause 4.1(k)) for 2013-15 in accordance with clause 5H.1(c) of the Revised OIC;
- section 8 which sets out the weighted average cost of capital assumptions; and
- section 9 which identifies the information and documents on which CitiPower has relied.

Attachment 1 contains an audit report prepared and signed by an external auditor certifying that the actual expenditure incurred is for activities within scope and that the actual expenditure incurred has been incurred in the amount claimed as required under clause 5H.2 of the Revised OIC.

Importantly, the remainder of this Revised Charges Application should be read in conjunction with CitiPower's completed Revised Charges Application Template (issued by the AER on 29 July 2013), provided to the AER pursuant to clause 5.4(b) of the Revised OIC.

### **4. Period over which charges apply**

CitiPower confirms, consistent with the requirements of clause 5H.1(a) of the Revised OIC, that the charges set out in this Revised Charges Application relate to the period 1 January 2014 to 31 December 2014.

## 5. Actual expenditure 2012

CitiPower's actual operating and capital expenditure for the 2012 calendar year is set out in Table 2 below, consistent with the requirements of clause 5H.1(b)(i) of the Revised OIC. The 2012 actual expenditure has been the subject of an audit report prepared and signed by an external auditor (Deloitte Touche Tohmatsu), which certifies that:

- the expenditure incurred is for activities within scope at the time of commitment to or incurring of that expenditure; and
- the expenditure incurred has been incurred in the amount claimed, consistent with the requirements of clause 5H.2 of the Revised OIC.

	Forecast 2012 (\$'000 nominal)	Actual 2012 (\$'000 nominal)
Capital expenditure		
Accumulation meters	10	28
Manually read interval meters	14	47
AMI meters and transformers	38,208	35,578
IT	7,341	6,292
Communications	258	2,341
Other	-	-
Total capital expenditure	45,832	44,285
Operating expenditure	10,487	11,691
Total Opex and Capex	56,319	55,976

Table 2: 2012 actual and forecast expenditure

The 2012 actual Total Opex and Capex is less than the 2012 Approved Budget.

## 6. Actual revenue 2012

CitiPower's actual revenue for the 2012 calendar year is set out in Table 3 below, consistent with the requirements of clause 5H.1(b)(ii) of the Revised OIC. CitiPower confirms that the actual revenue presented has been calculated in accordance with clause 4.1(k).

	Forecast 2012	Actual 2012
Revenue	32,914	32,427

Table 3: 2012 actual and forecast revenue (\$'000 nominal)

## **7. Updated forecasts of expenditure and revenue**

In accordance with clause 5H.1(c) of the Revised OIC, this section sets out CitiPower's forecasts of total maintenance and operating expenditure, capital expenditure and revenue from the provision of Regulated Services (calculated in accordance with clause 4.1(k)) for 2013-15.

The AER is required, by clause 4.1(c) of the Revised OIC, to use these updated forecasts as a basis for determining building block costs for the purpose of setting the 2014 revised charges.

CitiPower has used the current AER approved budget costs and volumes for 2013-15 as set out in the Final Determination.

	2013	2014	2015
Gross capital expenditure	32,896	6,088	5,635
Operating expenditure	9,883	9,363	9,086

Table 4: Forecast 2013-15 expenditure (\$'000 real 2013)

Using the above forecasts for 2013-15 and adjusting for 2012 true up, the forecast revenue requirement for 2013-15 is as follows:

	2013	2014	2015
Revenue	42,301	39,214	38,795

Table 5: Forecast 2013-15 revenues (\$'000 real 2013)



## 8. Weighted average cost of capital

The five Victorian electricity distribution businesses have prepared a joint report<sup>3</sup> (**joint WACC report**) on the WACC for the subsequent AMI WACC period (2014 and 2015). The proposed WACC is based on placeholder values for the market observables and the market return on equity. The following table summarises the WACC parameters proposed by CitiPower. Details of how these values have been derived are provided in the joint WACC report.

Parameter	Value
<b>Market observables</b>	
Nominal risk free rate ( $R_f$ )	3.85%
Debt risk premium (DRP)	2.95%
<b>Non-market observables</b>	
Equity beta ( $\beta_e$ )	0.80
Expected return on the market ( $E(R_m)$ )	12.00%
Market risk premium ( $MRP = E(R_m) - R_f$ )	8.15%
Value of debt as a proportion of the value of equity and debt ( $D/V$ )	60.00%
<b>Nominal WACC</b>	<b>8.23%</b>

Table 6: WACC parameters

The AER has agreed to an averaging period in 2013 when the measurement of the market observables, being the nominal risk free rate and debt risk premium, is to occur for CitiPower. This Revised Charges Application is based on placeholder values for the market observables and for the expected return on the market. Prior to 31 October 2013, CitiPower will provide the AER with its proposed calculation of the market observables for the agreed averaging period. At the same time, CitiPower will provide the AER with an updated market risk premium which will be based on the updated nominal risk free rate and an updated market return on equity.

CitiPower also proposes the following values for 2014 and 2015:

- 0.25 for value of imputation credits;
- 2.47% for forecast inflation; and
- 23 basis points for debt raising costs.

Details of how these values have been derived are provided in the joint WACC report.

The AER final determination on the 2014 AMI charges will necessarily need to update the charges currently proposed by CitiPower to reflect the WACC which must be updated following the agreed averaging period. In doing so, it is requested the AER set the 2014 and 2015 AMI charges to be equal in nominal terms.

---

<sup>3</sup> Victorian Electricity Distribution Businesses AMI WACC Submission, August 2013.

## **9. Information and documents relied upon**

In preparing this Revised Charges Application, CitiPower has relied upon the following documents:

- AER, Final determination, Victorian advanced metering infrastructure review, 2009-11 AMI budget and charges applications, October 2009;
- CitiPower Advanced Metering Infrastructure Budget Application 2009-11, 27 February 2009;
- AER, Final determination, Victorian Advanced Metering Infrastructure Review, 2012-15 budget and charges applications, October 2011;
- CitiPower, Advanced Metering Infrastructure, Budget and Charges Application 2012-15, 28 February 2011;
- CitiPower, Advanced Metering Infrastructure, Amended Submitted Budget and Charges Application 2012-15, 26 August 2011; and
- Submission on the rate of return to apply to the charges revision applications for Advanced Metering Infrastructure, Prepared jointly by the Victorian Electricity Distribution Businesses, 30 August 2013, and all supporting documents listed in Appendix C.

## **10. 2014 metering service charges**

Table below summarises the proposed metering service charges for 2013.

	2014 (\$ per NMI, real 2013)	2014 (NMIs)
Single phase	119.628	260,749
Three phase direct connected	156.347	54,450
Three phase CT connected	197.477	2,412

Table 7: Proposed GST exclusive metering service charges (\$ per NMI p.a.)

## **11. Conclusion**

Clause 5I.1 of the Revised OIC provides that the AER must determine 2014 AMI charges in accordance with clauses 4 and 5I.

CitiPower confirms that in preparing this Revised Charges Application it has given effect to clauses 4, 5, 5G and 5H of the Revised OIC.

CitiPower submits that the AER must approve the revised charges proposed in section 10 of this Revised Charges Application because:

- CitiPower has provided an external audit report consistent with clause 5H.2 of the Revised OIC, which means that actual 2012 expenditure is to be taken by the AER as being within scope;

## **CITIPOWER'S REVISED CHARGES APPLICATION 2014**

---

- the actual expenditure for 2012 is within 100 per cent of the AER's approved budget amount for 2012; and
- the proposed charges result in the expected net present value of costs incurred being greater than the expected net present value of revenues earned.