

SPI Electricity Pty Ltd
Advanced Metering Infrastructure
2014 Charges Revision Application

30 August 2013

PUBLIC VERSION

AMI 2014 Charges Revision Application

About SP AusNet

SP AusNet is a major energy network business that owns and operates key regulated electricity transmission and electricity and gas distribution assets located in Victoria, Australia. These assets include:

- A 6,574 kilometre electricity transmission network indirectly servicing all electricity consumers across Victoria;
- An electricity distribution network delivering electricity to approximately 620,000 customer connection points in an area of more than 80,000 square kilometres of eastern Victoria; and
- A gas distribution network delivering gas to approximately 572,000 customer supply points in an area of more than 60,000 square kilometres in central and western Victoria.

SP AusNet's purpose is 'to provide our customers with superior network and energy solutions.' The SP AusNet company values are:

- **Safety:** to work together safely. Protect and respect our community and our people.
- **Passion:** to bring energy and excitement to what we do. Be innovative by continually applying creative solutions to problems.
- **Teamwork:** to support, respect and trust each other. Continually learn and share ideas and knowledge.
- **Integrity:** to act with honesty and to practise the highest ethical standards.
- **Excellence:** to take pride and ownership in what we do. Deliver results and continually strive for the highest quality.

For more information visit: www.sp-ausnet.com.au.

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Executive Summary

The Cost Recovery Order-in-Council as amended (the **Order**) provides for the setting and recovery of prices, fees and charges in regard to the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems. Under the Order a prudent cost pass through methodology is to be applied.

Clause 5 of the Order sets out the requirements for distributors in making an application to the Commission in respect of budgets, charges and fees. This submission is made under Clause 5G and represents SP AusNet's 'Advanced Metering Infrastructure 2014 Charges Revision Application' (the **Charges Revision Application**).

Under the Order SP AusNet is required to update the 2012 to 2015 building blocks components with a combination of actual costs and current forecasts.

Total Revenue Requirement

SP AusNet's total revenue requirement as determined using the methodology as set out in the Order is summarised below. In order to smooth the transition in charges, SP AusNet has proposed to under-recover the net present value of total costs to 2012, with the under-recovery being carried forward to the 2014–2015 period.

Table E.1: Total Revenue Requirement

(\$m, nominal)

	2012 Actual	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	28.2	32.3	32.0	29.7
Return of Capital (Depreciation)	34.4	51.0	45.7	47.8
Operating & Maintenance	40.2	39.5	32.1	30.4
Carry forward from 2009–2011	10.6			
Building Blocks Revenue Requirement	113.4	122.8	109.8	107.9
Tariff Revenue	94.6	98.8	120.9	148.0

Regulated Services Charges

SP AusNet considers that the proposed charges for Regulated Services for the period 2014–2015 as set out in Table 6.4 of this Charges Revision Application are determined in accordance with the methodology required in the Order.

1 Introduction

1.1 Background

The Victorian State Government policy decision in 2006 to mandate the rollout of advanced metering infrastructure (**AMI**) to all Victorian electricity customers required the Regulator (then the Essential Services Commission of Victoria (**ESC**)) to re-determine a distributors' metering services revenue requirement and establish a new price control to take effect from 1 January 2009. The framework for this determination, based on a 'forecasts and incentive regime', was set out in the Order in Council¹ gazetted in August 2007 (the original Order).

An amending Order in Council² was published in November 2008, again requiring revision to the approach to setting prices for regulated metering services. A number of amendments have since been made.

In January 2009, the Australian Energy Regulator (**AER**) published its '*Final Decision – Framework and Approach paper – Advanced metering infrastructure review 2009–2011*', setting out the approach to be followed in making a determination on the prices distributors can charge for the prescribed metering services specified in the Order.

1.2 This application

1.2.1 Purpose

Clause 5G.1 of the Order requires:

*'A revised charges application ("**Charges Revision Application**") must be made to set revised charges in respect of Regulated Services for each of the years commencing 1 January 2012, 2013, 2014 and 2015.'*

Clause 5G.2 requires:

'The application shall be made not later than 31 August in the year ('year t') immediately preceding the year that the revised charges are to take effect ('year t+1').'

For the purposes of this application 'year t' is the calendar year 2013 and 'year t+1' is the calendar year 2014.

1.2.2 Period covered by this application

Clause 5H.1(a) requires that the application state the period to which the application relates. This Charges Revision Application covers the period 1 January 2014 to 31 December 2015 inclusive.

1.2.3 Format

Section 2: sets out the regulatory framework and timetable for the AMI program and identifies the requirements of the Order in respect of this Charges Revision Application.

¹ Victorian Government Gazette, 'Order in Council No S 200', 28 August 2007.

² Victorian Government Gazette, 'Order in Council No S 314', 25 November 2008.

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- Section 3: sets out SP AusNet's recoverable expenditure requirements in terms of operating and maintenance expenditure and capital expenditure requirements.
- Section 4: provides an update on SP AusNet's AMI rollout.
- Section 5: sets out SP AusNet's forecast revenue requirement.
- Section 6: sets out SP AusNet's proposed charges for prescribed metering services.

1.2.4 Other documentation relied upon

The following documents have previously been submitted to the ESC or AER, as provided for under clause 5.3 of the Order and where appropriate they may be relied upon in support of this Charges Application:

- 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, and including all documents listed in Appendix C to that submission.
- Various responses to AER questions in relation to SP AusNet's AMI Subsequent Budget and Charges Applications;
- Various responses to AER questions in relation to SP AusNet's 2009–2011 Revised Budget Application and the AER's Draft and Final Determination thereon;
- Response to the Draft Determination on the 2009–2011 Revised Budget Application – SP AusNet, 18 April 2011;
- AMI Subsequent Budget and Charges Application 2012–2015 – SP AusNet, 28 February 2011;
- 2009–2011 Revised Budget Application – SP AusNet, 28 February 2011;
- 2011 Charges Revision Application – SP AusNet, 31 August 2010;
- EDPR 2011–15, Related Party Arrangements – SP AusNet, November 2009;
- EDPR 2011–15, Revised Related Party Arrangements – SP AusNet, July 2010.
- Various SP AusNet responses to the AER and the ESC questions both pre and post the Draft Determination³, July 2009;
- AMI Revised Budget Application – SP AusNet, 28 August 2009;
- AMI Initial Budget Application – SP AusNet, 27 February 2009 (initial) and 3 March 2009 (revision);
- AMI Consultation Paper: Revised Framework & Approach (December 2008) Response – SP AusNet, December 2008;
- AMI Revised Pricing Proposal – SP AusNet, September 2008;
- AMI Reference Documentation – SP AusNet, September 2008; and
- AMI Pricing Proposal – SP AusNet, December 2007.

³ AER, 'Draft Determination Victorian AMI Review 2012-15 budget and charges applications', 28 July 2011.

2 Regulatory requirements and timetable

2.1 Regulatory framework

Sections 15A and 46D of the Electricity Industry Act 2000 (the **Act**) enable the making of orders for the development and roll out of AMI infrastructure within Victoria. The relevant orders under the Act are the AMI Specifications Order made on 12 November 2007 (as subsequently amended) (**Specification Order**) and the AMI Cost Recovery Order initially made on 28 August 2007 and subsequently amended on 25 November 2008, 31 March 2009, 19 October 2010 and 21 December 2011 (the **Order**).

Under the Specifications Order, two specifications setting out the minimum functionality, performance and service level requirements for AMI infrastructure deployed in Victoria have been developed, namely the:

- Minimum AMI State-wide Functionality Specification (Victoria) Release 1.1; and
- Minimum AMI Service Levels Specification (Victoria) Release 1.1.

The purpose of the Order (as amended) states⁴:

'The purpose of this Order is to:

- (a) provide for the setting and regulation of the prices, fees and charges that a relevant licensee who is a distribution company may charge for or in connection with the costs of, or in relation to, the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems;*
- (b) empower the recovery of those prices, fees and charges from a retailer who is a relevant licensee or a class or classes of retailers who are relevant licensees supplied electricity by the distribution company;*
- (b)(b) provide for side constraints; and*
- (c) confer powers and functions on, and leave matters to be decided by, the Commission.'*

2.2 AER Framework and Approach

The AER published its Final Decision – Framework and Approach paper – Advanced metering infrastructure review 2009–2011 in January 2009. SP AusNet has complied with the requirements of that paper in preparing this Charges Revision Application.

2.3 The Cost Pass Through Approach

The Order provides for the cost pass through of efficient costs. Under this approach budgets are established at the beginning of a period, with annual charges adjusted based on actual expenditure.

⁴ Government Gazette No S314, 'AMI Order in Council, 2008', Part A, Clause 1A.

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The methodology used to determine regulatory charges is based on a building block approach where the building blocks for a year are:

- (i) a return on capital;
- (ii) depreciation;
- (iii) maintenance and operating expenditure;
- (iv) a benchmark allowance for corporate income tax; and
- (v) any other building block required by clauses 5D, 5E and 5I,

*in each case determined subject to this clause 4 and clauses 5D, 5E and 5I.*⁵

Building block costs shall be based on actual expenditure, or if actual expenditure is not available, a distributor's most recent forecast expenditure or where there is some actual expenditure available, that actual expenditure and a distributor's forecast expenditure.

There is no scope for the AER to use expenditure forecasts other than those of the distributor. Whilst the Order was amended in December 2011 to allow the AER a discretion in relation to forecast quantities, a similar amendment was not made in relation to forecast costs. This can be understood by the cost recovery nature of the Order – prices are ultimately a function of actual costs, in relation to which the AER has limited discretion, not forecast costs where no discretion is necessary.

2014 charges are set out according to Clause 4.1 Note 5:

- '5. Then in 2012 the initial charges for 2013 will be revised to take account of actual expenditure and revenues known to 2011 and revised forecasts for the period to 2015. This process of revising charges is then repeated for 2014 and 2015 to take account of actual expenditure and revenues for 2012 and 2013 as they become known. Then a charge is to be applied in the years 2016 and 2017 to take account of actual expenditure and revenues for 2014 and 2015 as they too become known.'*

Clause 4.1(o) requires that:

'The charges of a distributor for every year in the period from 1 January 2010 to the End Date, shall be designed so that, for the period from the Start Date 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 is equal to the net present value of the total revenue earned by the distributor from Regulated Services in that same period where:

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

while sub-clause (p) provides for a distributor to propose a 'reduced charge' in any year, subject to approval by the Commission.

The AER's Final Determination⁶ of October 2009, October 2011 and February 2013 set out SP AusNet's Approved Budget and Charges for the initial and subsequent budget periods.

⁵ Government Gazette No S314, 'AMI Order in Council, 2008', Part A, Clause 4.1(b).

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2.4 Charges Revision Application

Clause 5G.1 of the Order requires that SP AusNet make a Charges Revision Application in respect of the charges that are to apply in the year commencing 1 January 2014. The application is to be submitted by 31 August 2013.

Clause 5H of the Order sets out the information to be included in this application. For the year commencing 1 January 2014, the information includes:

- actual Total Opex and Capex and revenue for the years 2009–2012;
- updated forecasts of Total Opex and Capex and revenue for the years 2013 (year t), 2014 and 2015 – the remaining years of the subsequent budget period; and
- an audit report on actual expenditure for the year 2012 which complies with the requirements of clause 5H.2.

In making a determination on the revised charges to apply in 2014, the AER must determine charges in accordance with clause 4 and clause 5I.

Clause 5H.2 sets out specific requirements in relation to the audit report in regard to actual expenditure for the year 2012.

Clause 5.5(b) of the Order requires SP AusNet to provide a forecast of the number of metering installations that SP AusNet propose to install for each year of the period.

⁶ AER, *Final Determination Victorian AMI Review 2009-11 AMI budget and charges application*, October 2009.
AER, *Final Determination Victorian AMI Review 2012-15 budget and charges application*, October 2011, Table 2.23, p. 119.
AER, *Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal's Orders*, 4 February 2013, p. 108.

3 Recoverable expenditure

3.1 Introduction

Clause 5I.1 of the Order requires that the AER make a ‘Revised Charges Determination’ for the year 2014 in accordance with clause 4 and clause 5I. Clause 4 is the building block methodology used for both SP AusNet’s Budget Application and the Charges Application Determinations, where the building blocks comprise:

- a return on capital;
- depreciation;
- maintenance and operating expenditure;
- a benchmark allowance for corporate income tax; and
- any other building block required by clauses 5D, 5E and 5I.

Clause 5I.2 of the Order requires:

‘In determining the building blocks the Commission must:

(a) *include actual capital expenditure and actual maintenance and operating expenditure for year t-1 where actual Total Opex and Capex for that year:*

(i) *is certified in an audit report under clause 5H.2;*

Note: An audit report provided for the purposes of this clause is not conclusive as to whether expenditure is for activities that are within scope.

(ii) *is for activities within scope at the time of commitment to or incurring of that expenditure; and*

(iii) *... in the case of the subsequent AMI budget period, does not exceed the Approved Budget for that year...; and*

For the purposes of this Charges Revision Application:

Period	Year
Year ‘t-1’	2012
Year ‘t’	2013
Year ‘t+1’	2014

3.2 Audit report for 2012 actual expenditure

In accordance with clauses 5I.2 and 5H.2, SP AusNet engaged KPMG to undertake the audit of the 2012 expenditure. KPMG are members of the Institute of Chartered Accountants in Australia and hold a current Public Practice Certificate.

KPMG’s audit report in Attachment 1 certifies that the expenditure incurred is for activities within scope and the expenditure incurred has been incurred in the amount claimed.

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3.3 Metering installation forecast

In accordance with Clause 5.5(b), Table 3.1 below provides the actual meter rollout for 2012 and forecast meter rollout for 2013–2015.

Table 3.1: Meter Rollout (2012–2015)

Meter Configuration	Roll-out		New Connections	
	2012	2013	2014	2015
Single phase single element	153,986	85,790	7,735	7,563
Single phase two element with contactor	47,722	85,256	1,204	1,155
Multiphase	44,783	58,514	1,108	1,073
Multiphase with contactor	8,284	24,685	25	23
Multiphase CT connected	0	3,841	40	38
Total	254,775	258,086	10,112	9,852

3.4 Operating and maintenance expenditure

3.4.1 Introduction

Operating and maintenance expenditure is considered to comprise the costs of activities reasonably required for the provision of regulated metering services under the Order and to comply with a metering regulatory obligation or requirement. Schedule S2.6 of the Order sets out the activities considered within scope for SP AusNet.

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3.4.2 Components of operating and maintenance expenditure

The table below maps the relationship between the AER Budget Application template categories, the scope activities under Schedule 2 of the Order and the scope of activities detailed in SP AusNet's Subsequent Budget and Charges Application 2012–2015, 28 February 2011.

Table 3.2: Operating & Maintenance Expenditure – Scope Relationship Map

Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Functional Technology Response per Functional Element (excludes hardware & 'platform' software)		
(a) Asset Management	s.2.6(b)(1)(iii), s.2.6(b)(2) (vii)(A)(1)	3.5
(b) Workforce Scheduling & Mobility	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(2)	3.5
(c) Connection Point Management	s.2.6(b)(1)(ii), s.2.6 (b)(2)(vii)(C)(1)	3.5
(d) Outage Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(2)	3.5
(e) Network Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(1)	3.5
(f) Meter Data Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	3.5
(g) Performance & Regulatory Reporting	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)(C)(2)	3.5
(h) Revenue Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	3.5
(i) Geospatial Information	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)(E)	3.5
(j) Program Support		
1(j)(i) Program Management & Architecture	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
1(j)(ii) Testing	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
1(j)(iii) Change Management	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5

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Template Category	Schedule 2 Reference	SP AusNet Reference
1(j)(iv) Release Management	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
2. IT Infrastructure (incl middleware, B2B & B2M)		
<i>Platform' software is not specific to a single functional element - it supports multiple elements</i>		
2.1 Hardware	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.2 'Platform' software licences & maintenance	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.3 Hardware support & 'platform' software support	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.4 System integration / software customisation	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)	3.5
2.5 Other (please specify)	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)	3.5

Non-Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Other Metering & Communication Costs		
a) Meter reading	S2.6(a)(ii), S2.6(b)(1)(i) and (ii), S2.6(b)(2)(viii), (ix) and (x)	3.3
b) Meter data management	S2.6(a)(ii), S2.6(b)(1)(i),, S2.6(b)(2)(i)(B)	3.3
c) Meter maintenance	S2.6(a)(ii), S2.6(b)(1)(i)	3.2
d) Customer service	S2.6(b)(2)(iii)	3.6
e) Communication Infrastructure Maintenance	S2.6(b)(1)(i)	3.4
f) Backhaul communication	S2.6(b)(2)(iv) S2.6(b)(2)(vii)(B)(1)	3.4

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Template Category	Schedule 2 Reference	SP AusNet Reference
2. Project & Administrative Costs		
a) <i>Technology trials</i>	S2.6(b)(2)(iv)	3.7
b) <i>Customer response trials</i>	S2.6(b)(2)(vi)	3.7
c) <i>Project management</i>	S2.6(b)(2)(x) S2.6(b)(2)(xi)	3.7
d) <i>Training</i>	S2.6(b)(2)(x)	3.7
f) <i>AMIPO & AMI ISC costs</i>	S2.6(b)(2)(xi)(A)	3.7
g) <i>Audit & quality assurance</i>	S2.6(b)(2)(xi)(D)	3.7
h) <i>AMI budget & charges applications</i>	S2.6(b)(2)(xi)(G)	3.7
i) <i>Legal costs</i>	S2.6(b)(2)(xi)(G)	3.7
j) <i>Equity raising costs</i>	S2.6(b)(2)(xii)	3.7
k) <i>Finance & administration incl. treasury</i>	S2.6(b)(2)(xii)	3.7
l) <i>Management fees or overhead</i>	S2.6(b)(2)(xiii)	3.7

3.4.3 2012–2015 operating and maintenance expenditure

Clause 5H.1 of the Order requires that an application:

- (b) *set out the actual:*
- (i) *Total Opex and Capex (broken down into actual capital expenditure and actual maintenance and operating expenditure); and*
 - (ii) *revenue (calculated in accordance with clause 4.1(k)) of the distributor from the provision of Regulated Services*
- in the year ('year t-1')[2012] immediately preceding year t [2013]; and*
- (c) *contain an updated forecast of the:*
- (i) *Total Opex and Capex (broken down into forecast capital expenditure and forecast maintenance and operating expenditure); and*
 - (ii) *revenue (calculated in accordance with clause 4.1(k)) of the distributor from the provision of Regulated Services*
- for:*
- (iii) *year t [2013]; and*
 - (iv) *the remaining year or years of the initial AMI budget period or the subsequent AMI budget period (as the case may be) [2014 to 2015 in this instance].'*

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Table 3.3 sets out SP AusNet's total actual and forecast operating and maintenance expenditure for Regulated Services for the period 2012–2015 against the Approved Budget set out in the AMI Budget Final Determinations.⁷

Table 3.3: Total Operating and Maintenance Expenditure (2012–2015)

(\$m, real 2013)⁸

Operating and Maintenance Expenditure	2012	2013	2014	2015
Approved Budget	38.9	31.7	18.9	17.4
Actual / Forecast	41.0	39.5	31.3	28.9

3.4.4 2012 actual operating and maintenance expenditure

SP AusNet's 2012 operating and maintenance expenditure was \$2.1 million (real 2013 dollars) greater than the approved budget.

3.4.5 2013 forecast operating and maintenance expenditure

The 2013 forecasts are based on actual costs incurred for five months of the year and the forecast for the remaining seven months has been informed by contracts, timing differentials, regulatory requirements and 2012 actual costs.

3.4.6 2014–2015 forecast operating and maintenance expenditure

The 2014–2015 forecasts are informed by contracts, timing differentials and regulatory requirement costs which are forecast to be incurred.

3.5 Capital expenditure

3.5.1 Introduction

Capital expenditure is considered to comprise the costs of activities reasonably required for the provision of regulated metering services under the Order and to comply with a metering regulatory obligation or requirement. Schedule S2.6 of the Order sets out the activities considered in scope.

⁷ AER, 'Final Determination Victorian AMI Review 2012-15 budget and charges application', October 2011, Table 2.23, p. 119.

AER, 'Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal's Orders', 4 February 2013, p. 108.

⁸ The 'approved budget' figures in this table are obtained from the AER's AMI 2012-15 Charges Application Remittal Decision model, February 2013. The 'approved budget' figures include inflation and WACC parameters as per the AER's model. The 'actual/forecast' figures include inflation and WACC parameters as per the Victorian Electricity Distribution Businesses' AMI WACC submission, August 2013.

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3.5.2 Components of capital expenditure

The table below maps the relationship between the AER's Budget Application template categories, the scope activities under Schedule 2 of the Order and the scope of activities detailed in SP AusNet's Subsequent Budget and Charges Application 2012–2015, 28 February 2011.

Table 3.4: Capital Expenditure – Scope Relationship Map

Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Functional Technology Response per Functional Element (excludes hardware & 'platform' software)		
(a) Asset Management	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(1)	3.5
(b) Workforce Scheduling & Mobility	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(2)	3.5
(c) Connection Point Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	3.5
(d) Outage Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(2)	3.5
(e) Network Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(1)	3.5
(f) Meter Data Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	3.5
(g) Performance & Regulatory Reporting	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)(C)(2)	3.5
(h) Revenue Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	3.5
(i) Geospatial Information	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)(E)	3.5
(j) Program Support		
1(j)(i) Program Management & Architecture	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
1(j)(ii) Testing	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5

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Template Category	Schedule 2 Reference	SP AusNet Reference
1(j)(iii) Change Management	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
1(j)(iv) Release Management	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(xi)	3.5
2. IT Infrastructure (incl middleware, B2B & B2M)		
<i>Platform' software is not specific to a single functional element - it supports multiple elements</i>		
2.1 Hardware	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.2 'Platform' software licences & maintenance	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.3 Hardware support & 'platform' software support	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	3.5
2.4 System integration / software customisation	s.2.6(b)(1)(ii) and (iii), s.2.6(b)(2)(vii)	3.5
2.5 Other (please specify)	s.2.6(b)(1)(ii) and(iii), s.2.6(b)(2)(vii)	3.5

Non-Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Metering & Communications Equipment Purchase		
a) Meters	S2.6(a)(ii), S2.6(b)(1)(i) and (ii) S2.6(b)(2)(viii), (ix) and (x)	3.2
c) WAN	S2.6(b)(2)(iv) S2.6(b)(2)(vii)(B)(1)	3.5.1
e) Communication Infrastructure	S2.6(b)(1)(i), S2.6(b)(2)(i)(A)	3.4
2. AMI Installation Services		
a) Meters	S2.6(b)(1)(i), S2.6(b)(2)(i)(A)	3.2
c) WAN	S2.6(b)(1)(i)	3.5.1
e) Communication Infrastructure	S2.6(b)(1)(i), S2.6(b)(2)(i)	3.4

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3.5.3 2012–2015 capital expenditure

Clause 5H.1 of the Order requires actual and forecast capital expenditure for the period 2012–2015.

Table 3.5 sets out SP AusNet’s total capital expenditure for Regulated Services for the period 2012–2015 against the Approved Budget set out in the AMI Budget Final Determination.⁹

Table 3.5: Total Capital Expenditure (2012–2015)

(\$m, real 2013)¹⁰

AMI Capital Expenditure	2012	2013	2014	2015
Approved Budget	150.6	76.3	5.5	2.1
Actual / Forecast	143.7	132.9	17.1	18.0

3.5.4 2012 actual capital expenditure

SP AusNet’s 2012 capital expenditure was \$6.9 million (real 2013 dollars) less than the approved budget.

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3.5.5 2013 forecast capital expenditure

The 2013 forecasts are based on actual costs incurred for five months of the year and the forecast for the remaining seven months has been informed by contracts, timing differentials, regulatory requirements and 2012 actual costs.

3.5.6 2014–2015 forecast capital expenditure

The 2014–2015 forecasts are informed by contracts, timing differentials and regulatory requirement costs which are forecast to be incurred.

⁹ AER, *Final Determination Victorian AMI Review 2012-15 budget and charges application*, October 2011, Table 2.23, p. 119.

AER, *Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal’s Orders*, 4 February 2013, p. 108.

¹⁰ The 'approved budget' figures in this table are obtained from the AER’s AMI 2012-15 Charges Application Remittal Decision model, February 2013. The 'approved budget' figures include inflation and WACC parameters as per the AER’s model. The 'actual/forecast' figures include inflation and WACC parameters as per the Victorian Electricity Distribution Businesses’ AMI WACC submission, August 2013.

3.6 Cost of capital parameters

The cost of capital represents the financial return that an investor seeks when making an investment decision and is determined by the market based on the availability of finance and the risk of the investment proposed.

Clause 4.1(d) of the Order requires that the return on capital is to be calculated using the Weighted Average Cost of Capital (**WACC**) as defined by clause 6.5.2 (b) of the NER.

Clause 5E.3 requires that the AER in determining its building block costs:

(b) provide a return on capital for 2012 and 2013 using a WACC calculated in accordance with clauses 4.1(h) and (i);

(c) provide a return on capital for 2014 and 2015 using a WACC calculated in accordance with clause 4.1(j);

The WACC for the initial AMI WACC period was determined as part of the AER's October 2009 Budget and Charges Determination and parameters set are shown in Table 3.6 below.

Table 3.6: WACC – Capital Asset Pricing Model Parameters (2009–2013)

Parameter	2009–2013
Nominal risk free rate	4.63%
Inflation	2.56%
Debt margin	4.13%
Gearing	60.0%
Equity beta	1.0
Market risk premium	6.0%
Nominal cost of debt	8.76%
After tax nominal cost of equity	10.63%
Real post-tax WACC	6.77%

Note: Debt margin includes debt raising costs of 12.5 basis points.

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The WACC for the period 1 January 2014 to 31 December 2015 (subsequent AMI WACC period) is calculated under clause 4.1(j) of the Order which requires that:

‘(j) The input parameters used to calculate the WACC for the subsequent AMI WACC period must be calculated with:

(i) measurement of the market observables to occur in a period in 2013 proposed by the distributor and agreed by the Commission (such agreement not to be unreasonably withheld); and

(ii) market observables and non-market observables determined in accordance with the Statement of Regulatory Intent issued by the AER pursuant to clause 6.5.4 of the National Electricity Rules and as if clause 6.5.4(g) of the National Electricity Rules applied.’

SP AusNet has nominated a future period for the measurement of market observables which has been agreed to by the AER. The proposed calculation of the market observables will be provided to the AER shortly after this averaging period has ended. The agreed averaging period is 20 business days from 16 September 2013 to 11 October 2013 (inclusive).¹¹

For the purposes of this proposal, placeholder market observables have been calculated using the 20 business days from 24 June 2013 to 19 July 2013.

The Victorian Electricity Distribution Businesses’ submission on the *‘Rate of Return to apply to the Charges Revision Applications for AMI’* lodged with the AER on 30 August 2013, outlines SP AusNet’s proposed WACC parameters. These are reproduced in Table 3.7 below.

Table 3.7 Proposed WACC – Capital Asset Pricing Model Parameters (2014–2015)

Parameter	2014–2015
Nominal risk free rate	3.85%
Inflation	2.47%
Debt margin	2.95%
Gearing	60.0%
Equity beta	0.8
Market risk premium	8.15%
Nominal cost of debt	6.80%
After tax nominal cost of equity	10.37%
Real post-tax WACC	5.62%
Nominal post-tax WACC	8.23%

¹¹ Letter to Julie Buckland from Chris Pattas, *‘Accepting Averaging Period for 2014-15 WACC – SP AusNet’*, 22 July 2013.

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3.7 Debt Raising Costs

The Order establishes a value for debt raising costs for the initial AMI WACC period but does not provide guidance on how to determine debt raising costs for the subsequent AMI WACC period. SP AusNet proposes to include an allowance of 23 basis points per annum for debt raising costs for 2014 and 2015. This is based on the most recent evidence presented by PwC in a report for the ENA. The rationale for this is set out in the Victorian Electricity Distribution Businesses' submission on the *'Rate of Return to apply to the Charges Revision Applications for AMI'*.

3.8 Cost of capital financing

The cost of capital financing comprises a return on capital (WACC) to be applied to the Regulatory Asset Base and a return of capital allowance (depreciation). Depreciation for 2012 is required to be recalculated in line with actual capital expenditure and both these categories affect the metering asset base which in turn will affect the actual calculation of return on capital.

3.8.1 Regulatory depreciation (Return of capital)

Regulatory depreciation enables the recovery of the capital invested and is a function of the assets forming the asset base and the period over which the investment in those assets is to be recovered.

For the period 1 January 2006 to the Start Date actual depreciation costs have been used as required by clause 5D.2 of the Order.

Post the Start Date, Clause 4.1(g) stipulates that asset lives of 15 years for metering assets and 7 years for telecommunications and IT systems are to be used in the calculation of regulatory depreciation, while Clause 4.1(g)(v) requires that in respect of accumulation meters and manually read interval meters, the asset lives must end no later than 31 December 2013.

2012 Actual depreciation

Changes to the type and the timing of capital expenditure incurred affect the depreciation calculation. The 2012 actual depreciation of \$35.1 million (real 2013) is \$0.3 million higher than the 2012 Approved Budget.

Table 3.8 sets out SP AusNet's total depreciation attributable to Regulated Services for the period 2012–2015 against the Approved Budget.¹²

¹² AER, *'Final Determination Victorian AMI Review 2009-11 AMI budget and charges application'*, October 2009, Table 3.5, p. 54.

AER, *'Final Determination Victorian AMI Review 2012-15 budget and charges application'*, October 2011, Table 2.28, p. 126 (real 2008).

AER, *'Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal's Orders'*, 4 February 2013, p. 108.

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Table 3.8: Depreciation (2012–2015)

(\$m, real 2013)¹³

Depreciation	2012	2013	2014	2015
Approved Budget	34.8	45.8	38.6	38.6
Actual / Forecast	35.1	51.0	44.6	45.6

3.8.2 Metering asset base as per Approved Budget (2009–2015)

SP AusNet's metering asset base for each year of the period 2009–2015 as determined as part of the AER's Approved Budget¹⁴ is set out in Table 3.9 below.

Table 3.9: Metering Asset Base as per Approved Budget

(\$'000, real 2013)¹³

Metering Asset Base							
Year	2009	2010	2011	2012	2013	2014	2015
Opening (1 Jan)	41,252	72,535	148,102	234,734	340,749	362,552	321,031
CapEx	42,648	96,960	119,648	150,626	76,337	5,541	2,050
Depreciation	11,365	21,393	33,015	44,611	54,534	47,062	46,081
Disposals	-	-	-	-	-	-	-
Closing (31 Dec)	72,535	148,102	234,734	340,749	362,552	321,031	277,000

Note: Capital expenditure is net of customer contributions.

¹³ The 'approved budget' figures in this table are obtained from the AER's AMI 2012-15 Charges Application Remittal Decision model, February 2013. The 'approved budget' figures include inflation and WACC parameters as per the AER's model. The 'actual/forecast' figures include inflation and WACC parameters as per the Victorian Electricity Distribution Businesses' AMI WACC submission, August 2013.

¹⁴ AER, 'Final Determination Victorian AMI Review 2009-11 AMI budget and charges application', October 2009, Table 3.5, p. 54.

AER, 'Final Determination Victorian AMI Review 2012-15 budget and charges application', October 2011, Table 2.28, p. 126 (real 2008).

AER, 'Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal's Orders', 4 February 2013, p. 108.

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3.8.3 Revised Metering Asset Base 2012–2015

SP AusNet's metering asset base adjusted for the differences in capital expenditure and depreciation in 2012 is presented in Table 3.10 below.

Table 3.10: Revised Metering Asset Base
(\$'000, real 2013)

Metering Asset Base				
Year	2012	2013	2014	2015
Opening (1 Jan)	233,462	332,367	407,024	370,188
Capital Expenditure	143,661	132,935	17,135	18,034
Depreciation	44,756	58,277	53,972	54,054
Disposals	-	-	-	-
Closing (31 Dec) ¹⁵	332,367	407,024	370,188	334,168

3.8.4 Return on Capital 2012–2015

As described in section 3.5 the building block calculation for the return on capital will be affected by the changes to capital expenditure and depreciation.

Table 3.11 sets out SP AusNet's total return on capital attributable to Regulated Services for the period 2012–2015 against the Approved Budget.¹⁶

¹⁵ May not sum due to rounding.

¹⁶ AER, 'Final Determination Victorian AMI Review 2009-11 AMI budget and charges application', October 2009, Table 3.5, p. 54.

AER, 'Final Determination Victorian AMI Review 2012-15 budget and charges application', October 2011, Table 2.23, p. 119.

AER, 'Final Decision, AMI Review 2012-15 budget and charges application – Amendments pursuant to the Australian Competition Tribunal's Orders', 4 February 2013, p. 108.

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Table 3.11: Return on Capital (2012–2015)

(\$m, real 2013)¹⁷

AMI Return on Capital	2012	2013	2014	2015
Approved Budget	29.3	32.6	32.5	28.5
Actual / Forecast	28.8	32.3	31.2	28.3

3.9 Reconciliation to Approved Budget

The following tables summarise SP AusNet's Approved Budget and forecast expenditure for the 2012–2015 period. SP AusNet is proposing to smooth the recovery of this expenditure in this Charges Revision Application (refer to section 6.2).

Table 3.12: Approved Budget (2012–2015)

(\$m, real 2013)¹⁸

Approved Budget	2012	2013	2014	2015
Approved Operating & Maintenance Expenditure	38.9	31.7	18.9	17.4
Approved Capital Expenditure	150.6	76.3	5.5	2.1
TOTAL Approved Budget¹⁹	189.5	108.1	24.5	19.5

¹⁷ The 'approved budget' figures in this table are obtained from the AER's AMI 2012-15 Charges Application Remittal Decision model, February 2013. The 'approved budget' figures include inflation and WACC parameters as per the AER's model. The 'actual/forecast' figures include inflation and WACC parameters as per the Victorian Electricity Distribution Businesses' AMI WACC submission, August 2013.

¹⁸ Ibid.

¹⁹ May not sum due to rounding.

Table 3.13: Actual and Forecast Expenditure (2012–2015)

(\$m, real 2013)

	2012 Actual	2013 Forecast	2014 Forecast	2015 Forecast
Operating & Maintenance Expenditure	41.0	39.5	31.3	28.9
Capital Expenditure	143.7	132.9	17.1	18.0
TOTAL²⁰	184.7	172.4	48.4	47.0

SP AusNet's actual Total Opex and Capex for 2012 was \$184.7 million (real 2013 dollars) compared to an Approved Budget expenditure of \$189.5 million (real 2013 dollars). The actual Total Opex and Capex for 2012 is 97.5% of the Approved Budget for 2012 and so is less than 100% of the Approved Budget for 2012. There is no expenditure excess.

SP AusNet's actual Total Opex and Capex for 2012 of \$184.7 million must be included in the building blocks under clause 51.2(a)(iii) of the Order.

²⁰ May not sum due to rounding.

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4 AMI rollout update

4.1 Performance in 2012

As at 31 December 2012, a total of 411,914 meters were installed by SP AusNet, of those meters 39,959 were 'logically converted' and operating as remotely read interval meters.

Table 4.1: Report of Remotely Read Interval Meter Installations for 2012

Budget Forecast (February 2011)	Charges Application Forecast (August 2012)	Actual	Cumulative to 31 December 2012	Meters operating as remotely read
316,329	254,775	198,238	411,914	39,959

Of the 411,914 installed meters as at 31 December 2012:

- 261,000 meters were under WiMAX coverage and reliably communicating;
- 39,959 meters were logically converted and successfully operating as remotely read interval meters; and
- a further 2,181 meters were in the progress of being 'logically converted'.

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Other results in 2012:

- As at December 2012, the WiMAX communications rollout was tracking positively with 26 active sites, 12 sites construction complete, 3 ready-to-go-live and 15 under construction.
- The cutover of SP AusNet's IT systems which enable the conversion of the installed interval meters to remotely read interval meters (logical conversion) was completed over the weekend of 25-26 August 2012 and SP AusNet sent its first batch of logical conversions to market participants in September 2012.
- SP AusNet successfully managed the ongoing risk of delay in EnergyAustralia's implementation of its Customer Care Billing system without impacting the market.

4.2 Forecast for 2013

Forecast Outcomes in 2013:

- SP AusNet forecasts that it will have installed 670,000 meters by 31 December 2013. That is 258,086 additional meters to be installed during 2013.

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- In July 2013, WiMAX communications rollout was tracking positively with 73 active sites in production, 2 sites with construction complete, 8 under construction and 6 planned. Total towers expected to be completed by November 2013 are 88.

Table 4.2: Forecast of Remotely Read Interval Meter Installations for 2013

Budget Forecast (February 2011)	Charges Application Forecast (August 2012)	Forecast (August 2013)	Cumulative to 31 December 2013	Meters operating as remotely read
152,500	264,166	258,086	670,000	570,000

4.3 Network operational efficiency benefits due to AMI rollout

The AMI rollout is expected to deliver efficiency and operational benefits for SP AusNet. Additionally SP AusNet's customers are also expected to benefit from innovative tariffs and services.

Network operational efficiency benefits

- *Reduction in unserved energy due to faster detection of outages and restoration times* – The AMI rollout is expected to deliver improved recognition when parts of the network are down. This creates the opportunity to reduce the interruption experienced by impacted customers.
- *Remote services* – SP AusNet plans to have the capacity to perform remote special meter reads, re-energisations, de-energisations and meter reconfigurations by September 2013. It is expected that the take up will be low initially, but increase as retailer's register to provide remote services.

Innovative tariffs and demand management

- *Energy conservation from flexible tariffs* – Time of Use and flexible tariffs are expected to provide an incentive for some customers to shift load from 'peak' network demand times, thereby reducing the peak rate of growth below what it would otherwise be. It is expected that this will reduce the rate of network augmentation required, relative to what it would be without the shift in demand from the peak time. It is expected that this will also result in avoided network and generation augmentation in the future.

5 Revenue requirement

5.1 Introduction

In regard to revenue requirement, this Charges Revision Application is required to include:

- for the year 2012, revenue (calculated in accordance with clause 4.1(k)); and
- for the years 2013 to 2015, an updated forecast of revenue (calculated in accordance with clause 4.1(k)).

5.2 2012 actual revenue requirement

Clause 4.1(k) of the Order requires that:

“For the purposes of clauses 4.1(o) and 5H.1, revenue must be determined as follows:

- (i) *Where actual revenue is available, by using the revenue figures in the distributor’s Regulatory Accounting Statements.”*

SP AusNet’s actual 2012 revenue as shown in the Regulatory Accounting Statements is \$83.6 million (real 2012 dollars).

5.3 2013–2015 forecast revenue requirement

As there has been no determination of revised charges under clause 5I for the years 2013 to 2015, clause 4.1k(ii)(B)(2) of the Order requires that the revenue be determined by multiplying the initial charges for that year determined in accordance with clauses 5D and 5E by the forecast quantities of the service category to which the charges related for that year.

SP AusNet has provided forecast quantities for each year in the templates. SP AusNet’s forecast tariff revenue requirement for 2013 to 2015 is shown in Table 5.1.

Table 5.1: Forecast AMI Revenue 2013–2015

(\$m, nominal)

	2013	2014	2015
Forecast Tariff Revenue	98.8	120.9	148.0

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5.4 Total Revenue requirement

Tables 5.2 and 5.3 summarise the Total Revenue Requirement for the period 2012–2015.

Table 5.2: Total Revenue Requirement

(\$m, nominal)

	2012 Actual	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	28.2	32.3	32.0	29.7
Return of Capital (Depreciation)	34.4	51.0	45.7	47.8
Operating & Maintenance	40.2	39.5	32.1	30.4
Carry forward from 2009-11	10.6			
Building Blocks Revenue Requirement	113.4	122.8	109.8	107.9
Tariff Revenue	94.6	98.8	120.9	148.0

Table 5.3: Total Revenue Requirement

(\$m, real 2013)

	2012 Actual	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	28.8	32.3	31.2	28.3
Return of Capital (Depreciation)	35.1	51.0	44.6	45.6
Operating & Maintenance	41.0	39.5	31.3	28.9
Carry forward from 2009–2011	10.8			
Building Blocks Revenue Requirement	115.7	122.8	107.1	102.8
Tariff Revenue	96.5	98.8	118.0	140.9

6 Regulated Services Charges

6.1 2013 Charges

SP AusNet's Regulated Services charges for 2013 are set out in Table 6.1 below.

Table 6.1: Current Metering Charges

(\$2013, GST exclusive)

Annual Metering Charge	2013
Single phase, single element *	\$130.45
Single phase, two element with contactor	\$149.90
Multi-phase	\$181.10
Multi-phase, with contactor	\$200.89
Multi-phase current transformer connected	\$258.68

* This charge applies to NMI's where a single phase, single element with contactor meter is installed.

6.2 Reduced Charges

As stated in Section 2.3 Clause 4.1(o) requires that the Net Present Value of the Regulated Services costs be equal to the Net Present Value of the revenue earned. If SP AusNet was to apply this Clause customers would experience large year on year price increases and decreases. In order to provide a smooth transition for customers SP AusNet is proposing in this submission the following price changes or x-factor.

Clause 4.1(p) of the Order allows:

*if a distributor proposes charges ("**reduced charges**") that have the effect that the distributor does not recover, in any year in the period from 1 January 2010 to the End Date, the net present value of the total costs incurred by the distributor for Regulated Services in that year, the Commission may approve those reduced charges. For the purposes of this paragraph, costs and revenues shall be determined in the manner provided by clause 4.1(o). If the Commission does not approve the reduced charges, then the charges of the distributor must be determined in accordance with clause 4.1(o).*

SP AusNet is aware of customers' concern regarding the cost of the AMI program and as such is proposing to not recover the net present value of the total costs incurred by 2012 until 2014–2015.

SP AusNet's proposed price movements for the period 2014–2015 are set out in Tables 6.2 and 6.3 below.

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Table 6.2: Real Price Movements 2014–2015

	2014	2015
Price Movement / X-factor	-17.78%	-17.78%

Note: Under the CPI-X pricing regime a negative X- factor equates to a price increase.

Table 6.3: Nominal Price Movements 2014–2015

	2014	2015
Price Movement / X-factor	-20.69%	-20.69%

Note: Under the CPI-X pricing regime a negative X- factor equates to a price increase.

6.2.1 Revised Charges (2014–2015)

Clauses 5G.1 and 5I.1 of the Order require a revision of Regulated Services for 1 January 2014 to be determined in accordance with Clause 4 and Clause 5I.

The note to Clause 4.1 of the Order summarises the approach to setting charges to apply to the year 2014 as being based on actual expenditures and revenues known to 2012 and revised forecasts for 2013–2015.

SP AusNet's proposed subsequent Regulated Services charges for 2014 and an indication for the year 2015 are set out in Tables 6.4 and 6.5 below.

Table 6.4: Regulated Services Charges

(\$Nominal, GST exclusive)

Annual Metering Charge	Forecast NMI's at end of 2013	2014	2015 (Forecast)
Single phase, single element *	390,822	\$157.44	\$190.01
Single phase, two element with contactor	155,345	\$180.91	\$218.34
Multi-phase	83,176	\$218.57	\$263.79
Multi-phase, with contactor	42,268	\$242.45	\$292.62
Multi-phase current transformer connected	3,786	\$312.20	\$376.79

* This charge will apply to NMI's where a single phase, single element with contactor meter is installed.

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Table 6.5: Regulated Services Charges
 (\$2013, GST exclusive)

Annual Metering Charge	Forecast NMI's at end of 2013	2014	2015 (Forecast)
Single phase, single element *	390,822	\$153.64	\$180.96
Single phase, two element with contactor	155,345	\$176.55	\$207.95
Multi-phase	83,176	\$213.30	\$251.23
Multi-phase, with contactor	42,268	\$236.61	\$278.68
Multi-phase current transformer connected	3,786	\$304.68	\$358.85

* This charge will apply to NMI's where a single phase, single element with contactor meter is installed.

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Attachment 1 – Audit Opinion on 2012 Actual Expenditure