SPI Electricity Pty Ltd Advanced Metering Infrastructure 2012 Charges Revision Application

31 August 2012



PUBLIC VERSION



### 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: <u>www.sp-ausnet.com.au</u>.

### Contact

This document is the responsibility of the Networks Strategy and Development Division, SP AusNet. Please contact the officer below with any inquiries.

Julie Buckland Director, Strategic Regulatory Programs SP AusNet Level 31, 2 Southbank Boulevard Melbourne Victoria 3006 Ph: (03) 9695 6606



# Table of Contents

Execu	tive Su	mmary	5
1	Introd	uction	6
1.1	Backgro	und	6
1.2	This app	lication	6
	1.2.1	Purpose	6
	1.2.2	Period covered by this application	6
	1.2.3	Format	7
	1.2.4	Other documentation relied upon	7
2	Regula	atory requirements and timetable	8
2.1	Regulato	ory framework	8
2.2	AER Fra	mework and Approach	8
2.3		t Pass Through approach	
2.4	Charges	Revision Application	10
3	Recov	erable expenditure	11
3.1	Introduc	tion	11
3.2	Audit rep	port for 2011 actual expenditure	11
3.3	-	installation forecast	
3.4	-	g and maintenance expenditure	12
	3.4.1	Introduction	12
	3.4.2	Components of operating and maintenance expenditure	12
	3.4.3	2011–2015 operating and maintenance expenditure	. 15
	3.4.4	2011 actual operating and maintenance expenditure	. 16
	3.4.5	2012 forecast operating and maintenance expenditure	16
	3.4.6	2013–2015 forecast operating and maintenance expenditure	16
3.5	Capital e	expenditure	16
	3.5.1	Introduction	. 16
	3.5.2	Components of capital expenditure	16
	3.5.3	2011–2015 capital expenditure	19
	3.5.4	2011 actual capital expenditure	. 19
	3.5.5	2012 forecast capital expenditure	. 19
	3.5.6	2013–2015 forecast capital expenditure	19
3.6	Cost of a	capital financing	20
	3.6.1	Regulatory depreciation (Return of capital)	20
	3.6.2	Forecast metering asset base (2011–2015)	21



	3.6.3	Metering Asset Base 2011–2015	
	3.6.4	Return on Capital 2011–2015	
3.7	Recond	ciliation to Approved Budget	
4	Reve	nue requirement	25
4.1	Introdu	ction	
4.2	2011 ad	ctual revenue requirement	
4.3	2012–2	015 forecast revenue requirement	
4.4	Total R	evenue requirement	
5	Regu	lated Services Charges	27
5.1	2012 C	harges	
5.2	Reduce	ed Charges	
	5.2.1	Revised Charges (2013–2015)	
Attach	nment	1 – Audit Opinion on 2011 Actual Expenditure.	30



### **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 '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 2013 Charges Revision Application' (the Charges Revision Application).

Under the Order SP AusNet is required to update the 2011 and 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 2011, with the under-recovery being carried forward to the 2013–2015 period.

	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	17.1	29.1	35.1	37.3	33.4
Return of Capital (Depreciation)	26.2	34.7	48.4	43.2	44.4
Operating & Maintenance	42.8	40.0	35.5	23.7	23.5
Actual expenditure still to be recovered		10.6			
Building Blocks Revenue Requirement	86.1	114.4	119.0	104.2	101.3
Tariff Revenue	73.5	79.9	99.2	122.3	150.8

### (\$m, nominal)

### **Regulated Services Charges**

SP AusNet considers that the proposed charges for Regulated Services for the period 2013–2015 as set out in Table 5.4 of this Revised Charges 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) 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 Council<sup>1</sup> gazetted in August 2007 (the original Order).

An amending Order in Council<sup>2</sup> (the Amending Order), based on a 'cost pass through' arrangement 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 2009-11**<sup>'3</sup>, 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 Amending 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 2011, 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 2012 and 'year t+1' is the calendar year 2013.

This submission represents SP AusNet's 'Advanced Metering Infrastructure 2013 Charges Revision Application' (the Charges Revision Application).

### 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 2013 to 31 December 2015 inclusive.

<sup>&</sup>lt;sup>1</sup> Victorian Government Gazette, 'Order in Council No S 200', 28 August 2007.

<sup>&</sup>lt;sup>2</sup> Victorian Government Gazette, 'Order in Council No S 314', 25 November 2008.

<sup>&</sup>lt;sup>3</sup> AER, 'Final decision - Framework and approach paper – Advanced metering infrastructure review 2009-11', January 2009.





### 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.

Section 3 sets out SP AusNet's recoverable expenditure requirements in terms of operating and maintenance expenditure and capital expenditure requirements.

Section 4 sets out SP AusNet's forecast revenue requirement.

Section 5 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:

- Various responses to AER questions in relation to SP AusNet's AMI Subsequent Budget and Charges Application;
- 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 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 Determination<sup>4</sup>, 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.

<sup>&</sup>lt;sup>4</sup> 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) 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.

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 AMI Cost Recovery Order (as amended) states <sup>5</sup> :

'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; 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 2009-11 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 a 'cost pass through' approach to price control rather than the 'forecasts and incentive mechanism' approach previously prescribed. Under this revised approach budgets are established at the beginning of a period, with annual charges adjusted based on actual expenditure.

<sup>&</sup>lt;sup>5</sup> Government Gazette No S314, '*AMI Order in Council, 2008*', Part A, Clause 1A.



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 5l.<sup>, 6</sup>

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 a limited discretion, not forecast costs where no discretion is necessary.

SP AusNet's forecasts are informed by the decision of the Australian Competition Tribunal on 26 April 2012 and subsequent solicitors' correspondence that \$72.7million should be the subject of further consideration by the AER.

2013 charges are set out according to Clause 4.1 Note:

'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.

<sup>&</sup>lt;sup>3</sup> Government Gazette No S314, 'AMI Order in Council, 2008', Part A, Clause 4.1(b).



The AER's Final Determination<sup>7</sup> of October 2009 and October 2011 sets out SP AusNet's Approved Budget and Charges for the initial and subsequent budget periods.

### 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 2013. The application is to be submitted by 31 August 2012.

Clause 5H of the Amending Order sets out the information to be included in this application. For the year commencing 1 January 2013, the information includes:

- actual Total Opex and Capex and revenue for the year 2009, 2010, and 2011;
- updated forecasts of Total Opex and Capex and revenue for the years 2012 (year t), 2013, 2014 and 2015 the remaining years of the subsequent budget period; and
- an audit report on actual expenditure for the year 2011 which complies with the requirements of clause 5H.2.

In making a determination on the revised charges to apply in 2013, the AER must determine charges in accordance with clause 4 and clause 5I.

Under clause 5I.2 in determining the building blocks the AER is required to:

- include actual capital and operating expenditure for 2011 where Total Opex and Capex is;
  - certified in an audit report under 5H.2;
  - is for activities in scope at the time of commitment or incurring;
  - is up to 120% of the Approved Budget for that year.

Clause 5H.2 sets out specific requirements in relation to the audit report in regard to actual expenditure for the year 2011.

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.

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.



## 3 Recoverable expenditure

#### 3.1 Introduction

Clause 5I.1 of the Order requires that the AER make a 'Revised Charges Determination' for the year 2013 in accordance with clause 4 and clause 5I. Clause 4 is the building block methodology used for both the SP AusNet 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 Amending 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 initial AMI budget period, is up to 120% of the Approved Budget for that year or ...; and

For the purposes of this Charges Revision Application:

Period	Year
Year 't-1'	2011
Year 'ť	2012
Year 't+1'	2013

### 3.2 Audit report for 2011 actual expenditure

In accordance with clauses 5I.2 and 5H.2,, SP AusNet engaged KPMG to undertake the audit of the 2011 expenditure. KPMG are members of the Institute of Chartered Accountants in Australia, 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.



### 3.3 Metering installation forecast

In accordance with Clause 5.5(b), Table 3.1 below provides the forecast meter rollout for 2012–15.

	Roll-out		New Connections	
Meter Configuration	2012	2013	2014	2015
Single phase single element	153,986	43,670	7,735	7,563
Single phase two element with contactor	47,722	28,219	1,204	1,154
Multiphase	44,783	47,199	1,108	1,073
Multiphase with contactor	8,283	43,073	25	23
Multiphase CT connected	0	4,049	40	38
Total	254,775	166,210	10,112	9,852

 Table 3.1: Forecast Meter Rollout (2012–2015)

### 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.

### 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 Budget Application.



### 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 (excludes hardware & 'platform' software)	ional Element	
(a) Asset Management	s.2.6(b)(1)(iii), s.2.6(b)(2) (vii)(A)(1)	4.5
(b) Workforce Scheduling & Mobility	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(2)	4.5
(c) Connection Point Management	s.2.6(b)(1)(ii), s.2.6 (b)(2)(vii)(C)(1)	4.5
(d) Outage Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(2)	4.5
(e) Network Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(iv)(B)(1)	4.5
(f) Meter Data Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)	4.5
(g) Performance & Regulatory Reporting	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)(C)(2)	4.5
(h) Revenue Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	4.5
(i) Geospatial Information	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)(E)	4.5
(j) Program Support		
1(j)(i) Program Management & Architecture	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(ii) Testing	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(iii) Change Management	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(iv) Release Management	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5



Template Category	Schedule 2 Reference	SP AusNet Reference		
2. IT Infrastructure (incl middleware, B2B & B2M) Platform' software is not specific to a single functional element - it supports multiple elements				
2.1 Hardware	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5		
2.2 'Platform' software licences & maintenance	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5		
2.3 Hardware support & 'platform' software support	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5		
2.4 System integration / software customisation	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)	4.5		
2.5 Other (please specify)	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)	4.5		

### 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),(ii), (viii),(ix),(x)	4.3
b) Meter data management	S2.6(a)(ii), S2.6(b)(1)(i),(b), (2)(i)(B)	4.3
c) Meter maintenance	S2.6(a)(ii), S2.6(b)(1)(i)	4.2
d) Customer service	S2.6(b)(2)(iii)	4.6
e) Communication Infrastructure Maintenance	S2.6(b)(1)(i)	4.4
f) Backhaul communication	S2.6(b)(2)(iv)(B)(1)	4.4
2. Project & Administrative Costs		
a) Technology trials	S2.6(b)(2)(iv)	4.7
b) Customer response trials	S2.6(b)(2)(vi)	4.7
c) Project management	S2.6(b)(2)(xi), S2.6(b)(2)(x)	4.7
d) Training	S2.6(b)(2)(x)	4.7
f) AMIPO & AMI ISC costs	S2.6(b)(2)(xi)(A)	4.7



Template Category	Schedule 2 Reference	SP AusNet Reference
g) Audit & quality assurance	S2.6(b)(2)(xi)(D)	4.7
h) AMI budget & charges applications	S2.6(b)(2)(xi)(G)	4.7
i) Legal costs	S2.6(b)(2)(xi)(G)	4.7
j) Equity raising costs	S2.6(b)(2)(xii)	4.7
k) Finance & administration incl. treasury	S2.6(b)(2)(xii)	4.7
I) Management fees or overhead	S2.6(b)(2)(xiil)	4.7

### 3.4.3 2011–2015 operating and maintenance expenditure

Clause 5H.1 of the Amending 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')[2011] immediately preceding year t [2012]; 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 **[2012]**; and
  - (iv) the remaining year or years of the initial AMI budget period or the subsequent AMI budget period (as the case may be) [2013 to 2015 in this instance].'

Table 3.3 sets out SP AusNet's total actual and forecast operating and maintenance expenditure for Regulated Services for the period 2011–2015 against the Approved Budget set out in the AMI Budget Final Determinations<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> AER, *'Final Determination Victorian AMI Review 2009-11 AMI budget and charges application'*, October 2009 Table 3.5, p54.

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



### Table 3.3: Total operating and maintenance expenditure (2011–2015)

(\$m, real 2012)

Operating and Maintenance Expenditure	2011	2012	2013	2014	2015
Approved Budget <sup>9</sup>	30.1	36.5	29.9	18.3	16.8
Actual / Forecast <sup>10</sup>	44.3	40.0	34.6	22.5	21.8

### 3.4.4 2011 actual operating and maintenance expenditure

SP AusNet's 2011 operating and maintenance expenditure was \$14.2 million (real 2012) greater than the approved budget. Meter reading and Meter Data management costs and AMI Project management costs were the main contributors to this increase and SP AusNet incurred these costs because of the IT systems issues which arose in 2011 information in relation to which was conveyed to the AER during the 2012-2015 Budget and Charges process.

### 3.4.5 2012 forecast operating and maintenance expenditure

The 2012 forecasts are based on actual costs incurred for seven months of the year and the forecast for the remaining five months has been informed by contracts, timing differentials, regulatory requirements and 2011 actual costs.

### 3.4.6 2013–2015 forecast operating and maintenance expenditure

The 2013–2015 forecasts are informed by contracts, timing differentials and regulatory requirements 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.

### 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 Budget Application.

<sup>&</sup>lt;sup>9</sup> In 2011, the AER used a forecast inflation rate for 2012.

<sup>&</sup>lt;sup>10</sup> SP AusNet has used the actual inflation rate for 2012.



### Table 3.4: Capital Expenditure – Scope Relationship Map

### Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Functional Technology Response per Function (excludes hardware & 'platform' software)	onal Element	
(a) Asset Management	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(1)	4.5
(b) Workforce Scheduling & Mobility	s.2.6(b)(1)(iii), s.2.6(b)(2)(vii)(A)(2)	4.5
(c) Connection Point Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	4.5
(d) Outage Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(B)(2)	4.5
(e) Network Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(iv)(B)(1)	4.5
(f) Meter Data Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)	4.5
(g) Performance & Regulatory Reporting	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)(C)(2)	4.5
(h) Revenue Management	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)(C)(1)	4.5
(i) Geospatial Information	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)(E)	4.5
(j) Program Support	· · · ·	
1(j)(i) Program Management & Architecture	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(ii) Testing	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(iii) Change Management	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5
1(j)(iv) Release Management	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(xi)	4.5



Template Category	Schedule 2 Reference	SP AusNet Reference					
2. IT Infrastructure (incl middleware, B2B & B2M) Platform' software is not specific to a single functional element - it supports multiple elements							
2.1 Hardware	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5					
2.2 'Platform' software licences & maintenance	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5					
2.3 Hardware support & 'platform' software support	s.2.6(b)(1)(ii), s.2.6(b)(2)(vii)	4.5					
2.4 System integration / software customisation	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)	4.5					
2.5 Other (please specify)	s.2.6(b)(1)(ii)(iii), s.2.6(b)(2)(vii)	4.5					

### Non-Information Technology

Template Category	Schedule 2 Reference	SP AusNet Reference
1. Metering & Communications Equipment Purch	nase	
a) Meters	S2.6(a)(i), S2.6(b)(1)(i)	4.2
c) WAN	S2.6(b)(2)(iv)(B)(1)	4.5.1
e) Communication Infrastructure	S2.6(b)(1)(i), S2.6(b)(2)(i)(A)	4.4
2. AMI Installation Services		
a) Meters	S2.6(b)(1)(i), S2.6(b)(2)(i)(A)	4.2
c) WAN	S2.6(b)(1)(i)	4.5.1
e) Communication Infrastructure	S2.6(b)(1)(i), S2.6(b)(2)(i)	4.4



### 3.5.3 2011–2015 capital expenditure

As noted in section 2.4 above, Clause 5H.1 of the Order requires actual and forecast capital expenditure for the period 2011–2015.

Table 3.5 sets out SP AusNet's total capital expenditure for Regulated Services for the period 2011-2015 against the Approved Budget set out in Table 3.5 of the AMI Budget Final Determination<sup>11</sup>.

### Table 3.5: Total capital expenditure (2011–2015)

(\$m, real 2012)

AMI Capital Expenditure	2011	2012	2013	2014	2015
Approved Budget <sup>12</sup>	117.2	134.1	69.2	5.1	1.8
Actual / Forecast <sup>13</sup>	116.6	158.6	108.8	3.2	3.0

### 3.5.4 2011 actual capital expenditure

SP AusNet's 2011 capital expenditure was \$0.6 million (real 2012) less than the approved budget. Whilst there were variances between categories of expenditure the final result was within budget.

#### 3.5.5 2012 forecast capital expenditure

The 2012 forecasts are based on actual costs incurred for seven months of the year and the forecast for the remaining five months has been informed by contracts, timing differentials, regulatory requirements and 2009 actual costs.

### 3.5.6 2013–2015 forecast capital expenditure

The 2013–2015 forecasts are informed by contracts, timing differentials and regulatory requirements costs which are forecast to be incurred.

<sup>&</sup>lt;sup>11</sup> 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.

<sup>&</sup>lt;sup>12</sup> In 2011, the AER used a forecast inflation rate for 2012.

<sup>&</sup>lt;sup>13</sup> SP AusNet has used the actual inflation rate for 2012.





### 3.6 Cost of capital financing

The cost of capital financing comprises a return on capital (weighted average cost of capital or WACC) to be applied to the Regulatory Asset Base and a return of capital allowance (depreciation). Depreciation for 2011 is required to be recalculated in line with actual capital expenditure and both these categories affect the metering asset base which in turn will effect the actual calculation of return on capital.

### 3.6.1 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.

#### 2011 Actual depreciation

Changes to the type and the timing of capital expenditure incurred affect the depreciation calculation. The 2011 actual depreciation of \$27.1 million (real 2012) is \$4.2 million (real 2012) lower than the 2011 Approved Budget.

Table 3.6 sets out SP AusNet's total depreciation attributable to Regulated Services for the period 2011–2015 against the Approved Budget.<sup>14</sup>

### Table 3.6: Depreciation (2011–2015)

(\$m, real 2012)

Depreciation	2011	2012	2013	2014	2015
Approved Budget <sup>15</sup>	31.3	41.5	50.6	43.3	42.3
Actual / Forecast <sup>16</sup>	27.1	34.7	47.2	41.1	41.1

<sup>&</sup>lt;sup>14</sup> 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).

<sup>&</sup>lt;sup>15</sup> In 2011, the AER used a forecast inflation rate for 2012.

<sup>&</sup>lt;sup>16</sup> SP AusNet has used the actual inflation rate for 2012.



### 3.6.2 Forecast metering asset base (2011–2015)

SP AusNet's metering asset base for each year of the period 2011–2015 as determined as part of the AER's AMI Budget Final Determination<sup>17</sup> is set out in Table 3.7 below.

### Table 3.7: Forecast metering asset base<sup>18</sup>

(\$'000, real 2012)

Metering Asset Base								
Year	2009	2010	2011	2012	2013	2014	2015	
Opening (1 Jan)	39,850	70,069	143,067	208,873	301,464	320,136	281,980	
CapEx	41,199	93,662	97,099	134,107	69,242	5,142	1,833	
Depreciation	10,978	20,666	31,293	41,515	50,571	43,298	42,338	
Disposals	0	0	0	0	0	0	0	
Closing (31 Dec)	70,069	143,067	208,873	301,464	320,136	281,980	241,476	

Note: Capital expenditure is net of customer contributions.

<sup>17</sup> 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).

<sup>&</sup>lt;sup>18</sup> In 2011, the AER used a forecast inflation rate for 2012.



### 3.6.3 Metering Asset Base 2011–2015

SP AusNet's metering asset base adjusted for the differences in capital expenditure and depreciation in 2011 is presented in Table 3.8 below.

#### Table 3.8: Revised metering asset base<sup>19</sup>

### (\$'000, real 2012)

Metering Asset Base							
Year	2011	2012	2013	2014	2015		
Opening (1 Jan)	144,405	228,875	343,077	395,493	348,361		
Capital Expenditure	116,661	158,625	108,846	3,221	3,004		
Depreciation	32,191	44,423	56,430	50,352	49,230		
Disposals	0	0	0	0	0		
Closing (31 Dec)	228,875	343,077	395,493	348,361	302,135		

### 3.6.4 Return on Capital 2011–2015

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 3.9 sets out SP AusNet's total return on capital attributable to Regulated Services for the period 2011–2015 against the Approved Budget.<sup>20</sup>

### Table 3.9: Return on Capital (2011–2015)

(\$m, real 2012)

AMI Return on Capital	2011	2012	2013	2014	2015
Approved Budget	16.7	23.6	28.8	28.7	24.9
Actual / Forecast	17.7	29.1	34.2	35.4	31.0

<sup>&</sup>lt;sup>19</sup> SP AusNet has used the actual inflation rate for 2012.

<sup>&</sup>lt;sup>20</sup> 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.



### 3.7 Reconciliation to Approved Budget

The following tables summarise SP AusNet's Approved Budget and forecast expenditure for the 2011–2015 period. SP AusNet is proposing to smooth the recovery of this expenditure in this Charges Revision Application (refer to section 5.2).

### Table 3.10: Approved Budget (2011–2015)<sup>21</sup>

(\$m, real 2012)

Approved Budget	2011	2012	2013	2014	2015
Approved Operating & Maintenance Expenditure	30.1	36.5	29.9	18.3	16.8
Approved Capital Expenditure	117.2	134.1	69.2	5.1	1.8
TOTAL Approved Budget <sup>22</sup>	147.3	170.6	99.2	23.4	18.7

 Table 3.11: Actual and Forecast Expenditure (2011–2015)<sup>23</sup>

(\$m, real 2012)

	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Operating & Maintenance Expenditure	44.3	40.0	34.6	22.5	21.8
Capital Expenditure	115.6	158.6	108.8	3.2	3.0
TOTAL <sup>24</sup>	159.9	198.7	143.4	25.7	24.8

- <sup>22</sup> May not sum due to rounding.
- <sup>23</sup> SP AusNet used the actual inflation rate for 2012
- <sup>24</sup> May not sum due to rounding.

<sup>&</sup>lt;sup>21</sup> In 2011, the AER used a forecast inflation rate for 2012.



SP AusNet's actual Total Opex and Capex for 2011 was \$159.9 million (real 2012) compared to an Approved Budget expenditure of \$147.3 million (real 2012). The actual Total Opex and Capex for 2011 is 109% of the Approved Budget for 2011 and so is less than 120% of the Approved Budget for 2011. There is no expenditure excess.

SP AusNet's actual Total Opex and Capex for 2011 of \$159.9 million must be included in the building blocks under clause 5I.2(a)(iii) of the Order.



### 4 Revenue requirement

### 4.1 Introduction

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

- for the year 2011, revenue (calculated in accordance with clause 4.1(k)); and
- for the years 2012 to 2015, an updated forecast of revenue (calculated in accordance with clause 4.1(k)).

### 4.2 2011 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 2011 revenue as shown in the Regulatory Accounting Statements is \$73.5 million.

### 4.3 2012–2015 forecast revenue requirement

As there has been no determination of revised charges under clause 5I for the years 2012 to 2015, clause 4.1k(ii)(B)(2) of the Amending 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 2012 to 2015 is shown in Table 4.1.

### Table 4.1: Forecast AMI Revenue 2012–2015

(\$m, nominal)

	2012	2013	2014	2015	Total
Forecast Tariff Revenue	79.9	99.2	122.3	150.8	452.2



### 4.4 Total Revenue requirement

Tables 4.2 and 4.3 summarise the Total Revenue Requirement for the period 2012–2015.

### Table 4.2: Total Revenue Requirement

### (\$m, nominal)

	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	17.1	29.1	35.1	37.3	33.4
Return of Capital (Depreciation)	26.2	34.7	48.4	43.2	44.4
Operating & Maintenance	42.8	40.0	35.5	23.7	23.5
Actual expenditure still to be recovered		10.6			
Building Blocks Revenue Requirement	86.1	114.4	119.0	104.2	101.3
Tariff Revenue	73.5	79.9	99.2	122.3	150.8

Table 4.3: Total Revenue Requirement

(\$m, real 2012)

	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Return on Capital	17.7	29.1	34.2	35.4	31.0
Return of Capital (Depreciation)	27.1	34.7	47.2	41.1	41.1
Operating & Maintenance	44.3	40.0	34.6	22.5	21.8
Actual expenditure still to be recovered		10.6			
Building Blocks Revenue Requirement	89.1	114.4	116.0	99.0	93.9
Tariff Revenue	76.1	79.9	96.7	116.3	139.8



## 5 Regulated Services Charges

### 5.1 2012 Charges

SP AusNet's Regulated Services charges for 2012 are set out in Table 5.1 below.

### Table 5.1: Current Metering Charges

### (\$2012, GST exclusive)

Annual Metering Charge	2012	
Single phase, single element *	\$107.25	
Single phase, two element with contactor	\$123.24	
Multi phase	\$148.89	
Multi phase, with contactor	\$165.16	
Multi phase current transformer connected	\$212.67	

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

### 5.2 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 Amending 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 2011 until 2013–2015.



SP AusNet's proposed price movements for the period 2013–2015 are set out in Tables 5.2 and 5.3 below.

#### Table 5.2: Real Price Movements 2012–2015

	2013	2014	2015
Price Movement / X-factor	-18.6%	-18.6%	-18.6%

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

#### Table 5.3: Nominal Price Movements 2012–2015

	2013	2014	2015
Price Movement / X-factor	-21.6%	-21.6%	-21.6%

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

### 5.2.1 Revised Charges (2013–2015)

Clauses 5G.1 and 5I.1 of the Order require a revision of Regulated Services for 1 January 2013 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 2013 as being based on actual expenditures and revenues known to 2011 and revised forecasts for 2012–2015.

SP AusNet's proposed subsequent Regulated Services charges for the 2013 and an indication for the years 2014 and 2015 are set out in Tables 5.4 and 5.5 below.

### Table 5.4: Regulated Services Charges

(\$Nominal, GST exclusive)

Annual Metering Charge	Forecast NMI's at end of 2012	2013	2014 (Forecast)	2015 (Forecast)
Single phase, single element *	389,633	\$130.45	\$158.66	\$192.97
Single phase, two element with contactor	147,484	\$149.90	\$182.32	\$221.74
Multi phase	81,747	\$181.10	\$220.26	\$267.89
Multi phase, with contactor	42,013	\$200.89	\$244.33	\$297.17
Multi phase current transformer connected	3,767	\$258.68	\$314.62	\$382.65

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



### Table 5.5: Regulated Services Charges

(\$2012, GST exclusive)

Annual Metering Charge	Forecast NMI's at end of 2012	2013	2014 (Forecast)	2015 (Forecast)
Single phase, single element *	389,633	\$127.20	\$150.86	\$178.91
Single phase, two element with contactor	147,484	\$146.16	\$173.35	\$205.59
Multi phase	81,747	\$176.58	\$209.43	\$248.38
Multi phase, with contactor	42,013	\$195.88	\$232.31	\$275.52
Multi phase current transformer connected	3,767	\$252.23	\$299.14	\$354.78

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



Attachment 1 – Audit Opinion on 2011 Actual Expenditure