



Draft determination

SP AusNet

Advanced Metering Infrastructure

Revised budget application 2009–11

April 2011

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Request for submissions

This document sets out the Australian Energy Regulator's (AER) draft determination on SP AusNet's revised Advanced Metering Infrastructure (AMI) budget notification for 2010 and 2011. Where this draft determination rejects SP AusNet's revised budget, clauses 5F.4 and 5C.5(b) of the revised Order in Council require that SP AusNet must, within 10 business days of this draft determination, make application to the AER for approval of an amended submitted budget.

Interested parties are invited to make written submissions to the AER on issues regarding SP AusNet's revised AMI budget notification and this draft determination by COB 18 April 2011. The AER will deal with all information it receives in the determination process, including submissions on the draft determination, in accordance with the ACCC/AER information policy. The policy is available at www.aer.gov.au.

Submissions can be sent electronically to aer inquiry@aer.gov.au

Alternatively, submissions can be mailed to:

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Melbourne VIC 3001

The AER prefers that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information are requested to:

- clearly identify the information that is the subject of the confidentiality claim
- provide a non-confidential version of the submission.

All non-confidential submissions will be placed on the AER's website, www.aer.gov.au. A public version of SP AusNet's revised AMI budget notification is also available on the AER's website. Inquiries about the draft determination or about lodging submissions should be directed to the Network Operations and Development Branch on (03) 9290 1436.

Shortened forms

AER	Australian Energy Regulator
AMI	Advanced metering infrastructure
capex	capital expenditure
CNMS	Communications network management systems
forex	Foreign exchange
Impaq	Impaq Consulting
IT	information technology
MMS	Meter management systems
NMS	Network management systems
opex	operational and maintenance expenditure
revised Order	The Order in Council made on 28 August 2007 by the Governor in Council under sections 15A and 46D of the <i>Electricity Industry Act 2000</i> (Vic) as amended on 25 November 2008, 22 January 2009 and 31 March 2009
RFI	Request for information
RFT	Request for tender
SPA	SP AusNet
Victorian DNSPs	Victorian distribution network service provider
WiMAX	Worldwide Interoperability for Microwave Access

1 Introduction and summary

In 2006, the Victorian Government mandated a rollout of advanced interval meters or advanced metering infrastructure (**AMI**) to all Victorian electricity customers by 31 December 2013. It is a license condition of each Victorian distribution network service provider (**Victorian DNSP**) to rollout AMI in Victoria. The regulatory framework for that rollout, including the determination of budgets, revenues and charges for AMI, is set out in an Order in Council made by the Victorian Governor in Council (**revised Order**).¹

The AER is responsible for reviewing and making all determinations under the revised Order.² In assessing whether to approve or reject a budget application the AER must apply the requirements set out in the revised Order.

The AER made a determination on the Victorian DNSPs' AMI budgets and forecast revenues for 2009 to 2011 (**Approved Budget**) and associated metering charges for 2010 and 2011 in October 2009 (**Approved Charges**).³ The revised Order also provides that the Victorian DNSPs may apply to the AER to revise and vary (or to notify the AER of any actual or anticipated variance from) their 2009–11 Approved Budget at any time (**Revised Budget Application**).

This draft determination concerns the first Revised Budget Application submitted by SP AusNet. The AER has 40 business days following such a notification to approve or reject a Victorian DNSP's proposed actual or anticipated variance. In that time, the AER must publish a draft determination and allow for the Victorian DNSP to submit a revised budget in response to and within 10 business days of this draft determination.⁴

Under the revised Order, metering charges are to be set with:

- reference to a combination of actual costs and forecasts of expenditure budgets determined by the AER using a building block approach, and
- applying a series of tests, known as the scope test and the prudent test (which incorporates the competitive tendering test, the expenditure incurred test and the commercial standard test).

Each year AMI charges are to be revised by updating forecast data with actual costs incurred and revenues received to ensure revenue neutrality for the Victorian DNSPs over the rollout period. In this regard, the Victorian DNSPs submitted charges

¹ Victorian Government Gazette, 'Orders in Council No S 314', 25 November 2008 made by the Victorian Governor in Council under sections 15A and 46D of the *Electricity Industry Act 2000* which was amended on 25 November 2008, 22 January 2009 and 31 March 2009.

² Responsibility for regulatory oversight of the AMI roll-out transferred from the Essential Services Commission of Victoria (ESCV) to the AER on 1 January 2009: see section 27A of the *National Electricity (Victoria) Act 2005* (Vic).

³ AER, *Final determination— Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, October 2009.

⁴ Revised Order, clause 5F.1.

revision applications for 2011 charges in August 2010, the AER made its final decision on these charges in October 2010.⁵

SP AusNet's Revised Budget Application for 2009–11

On 28 February 2011, SP AusNet submitted a Revised Budget Application for 2009–11 which seeks to increase SP AusNet's Approved Budget by around \$13 million (\$2010). This is an increase of around 4 per cent on SP AusNet's Approved Budget for this period of \$221 million.⁶ In summary, SP AusNet contend that the basis for the Revised Budget Application is that its rollout has been delayed, leading to movements in expenditure between rollout periods and increases in contracted costs in relation to the AMI meters and associated IT and non IT costs.

The AER has assessed SP AusNet's Revised Budget Application in this draft determination against the relevant tests set out in the revised Order. By way of summary:

- All of SP AusNet's proposed expenditure variances to its Approved Budget have been established to be within scope for the purposes of the revised Order. The only new AMI activities identified by SP AusNet relate to building fit-out costs for office space in Berwick (categorised as Non-IT expenditure). All other proposed expenditure variances relate to AMI activities which the AER previously found to be inside scope in the AER's final determination for 2009–11 budgets.
- SP AusNet has signed a range of contracts with AMI service providers since the 2009 final determination, increasing the proportion of contract costs from around 6 to 64 per cent of its total 2009–11 budget. All of these contracts have been tendered competitively or let in accordance with a competitive process, with the exception of SP AusNet's meter supply contracts, foreign exchange hedged contracts and related party IT contracts.
- SP AusNet's meter supply costs are contract costs which were not let in accordance with a competitive tendering process and incurring them is a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances.

In preparing this draft determination, the AER sought independent advice from Impaq Consulting (**Impaq**) on SP AusNet's proposed metering capex budget variation. Impaq advised the AER of its view of the commercial standard for:

- AMI meters, without communications modules or other add ons
- communications modules which are added to the AMI meters in order to enable communication between the meters and the DNSP.

Impaq's report outlining this advice is available on the AER's website.⁷

⁵ AER, *Decision—Advanced Metering Infrastructure—2011 revised charges*, October 2010.

⁶ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011.

⁷ Impaq Consulting, *Letter to the AER*, 31 March 2011.

For these reasons set out in this draft determination, the AER rejects the proposed expenditure variances to SP AusNet’s Approved Budget as set out in its Revised Budget Application. The AER has instead determined the new expenditure variances to the Approved Budget that it would approve.

The new expenditure variances to the Approved Budget that the AER would approve is set out in table 1 below. It results in a net decrease in SP AusNet’s Approved Budget. All else equal, it also leads to a consequential reduction in 2012–15 AMI charges, however, this will be considered as part of the separate 2012–15 AMI budget process.

**Table 1 AER draft determination—SP AusNet Approved Budget for 2009–11
(\$’000, \$2008)**

	2009	2010	2011	Total
Approved AMI budget capex – AER final decision October 2009	67 901	50 896	102 441	221 238
Approved metering variation	(456)	3 838	(6 810)	(3 427)
Communications variation	(5 554)	1 446	728	(3 380)
Information and control services variation	(27 472)	20 853	8 429	1 810
Non IT variation		640		640
Draft determination on revised budget	34 419	77 403	104 788	216 611
Total capex budget variation	(33 481)	26 507	2 347	(4 627)

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37; AER analysis.

2 SP AusNet's Revised Budget Application

On 28 February 2011, SP AusNet submitted its Revised Budget Application which proposes expenditure variances to its Approved Budget. These expenditure variances lead to an overall increase to its Approved Budget by around \$13 million (\$2010).⁸ SP AusNet's proposed expenditure variances are set out in table 2.

The overall increase sought, in comparison to the Approved Budget, broadly reflects capex variances in contracting expenditure and the quantities of meters installed.⁹ As part of the Revised Budget Application, SP AusNet submitted revised AMI budget templates, copies of signed contracts relating to the AMI rollout program, and procurement policy and tender evaluation documents and referred to information it previously submitted to the AER in 2009 and 2010 as part of other processes under the revised Order.¹⁰

SP AusNet also submitted further explanation and documentation in relation to foreign exchange contracts and a building fit-out as requested by the AER.

Table 2 SP AusNet proposed budget variances—capex (\$'000, \$2008)

	2009	2010	2011	Total
Approved AMI budget capex	67 901	50 896	102 441	221 238
Metering variation	1 886	10 350	927	13 163
Communications variation	(5 554)	1 446	728	(3 380)
Information and control services variation	(27 472)	20 853	8 429	1 810
Non IT variation		640		640
Total proposed revised budget	36 761	84 185	112 525	233 471
Total capex budget variation	(31 140)	33 289	10 084	12 233

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37.

Note: In \$2008, as per SP AusNet's AMI budget templates and Revised Budget Application.

⁸ This application is available on the AER's website and should be read in conjunction with SP AusNet's previous 2009–11 AMI budget proposal.

⁹ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37. The AER notes that SP AusNet did list 'changed regulatory requirements' as another driver of its budget variations, however did not identify any changed regulatory requirements or conditions that had resulted in its proposed capex budget variation. SP AusNet advised the AER that this driver was listed in error.

¹⁰ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 6; SP AusNet, *Advanced Metering Infrastructure Initial Budget Application*, 27 February 2009; SP AusNet, *Revised Budget Application*, 28 August 2009; SP AusNet, *SPI Electricity Pty Ltd—Advanced Metering Infrastructure— 2011 Charges Revision Application*, 31 August 2010.

3 AER considerations

3.1 Previous AER AMI determinations

Many of the matters the AER has taken into account in assessing SP AusNet's Revised Budget Application are matters the AER previously took into account or dealt with in determining SP AusNet's Approved Budget.

This draft determination refers to the 2009 final determination (**2009 Initial Budget Final Determination**), the 2009 draft determination (**2009 Initial Budget Draft Determination**) and the 2009 framework and approach paper (**2009 Framework and Approach Paper**), all of which concern the Approved Budget, as relevant.

3.2 Regulatory requirements

The revised Order allows a Victorian DNSP to notify the AER of any actual or anticipated variance from its Approved Budget at any time.¹¹ The AER must determine to approve or reject the variance in the Approved Budget in accordance with the requirements set out in clause 5C and 5F.¹²

The revised Order provides that the AER must approve the proposed variations to the Approved Budget unless it can establish that those proposed variations are:

- for activities that are outside the scope of the revised Order, at the time of commitment to that expenditure and at the time of the determination (**scope test**), or
- not prudent (**prudent test**).¹³

The AER notes that even where expenditure is outside scope or does not satisfy the prudent test, the AER may still approve a DNSP's proposed expenditure if a net benefit from the activity is demonstrated.¹⁴

3.2.1 The Scope Test

Activities within scope are those reasonably required:

- for the provision of Regulated services (defined in the revised Order) and
- to comply with a metering regulatory obligation or requirement.¹⁵

The activities within scope include those listed in Schedule 2 of the revised Order.

¹¹ Revised Order, clause 5F.1.

¹² Revised Order, clause 5F.3, 5F.4.

¹³ Revised Order, clause 5C.2. The regulatory framework and these tests are discussed in more detail in the AER's draft and final determinations on the AMI budget applications for 2009–11: see AER, *Draft determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, July 2009.

¹⁴ This is discussed in the AER's Framework and approach paper: AER, *Final decision—Framework and approach paper—Advanced metering infrastructure review 2009–11*, January 2009, p. 29.

¹⁵ Revised Order, clause S2.6.

3.2.2 The Prudent Test

Under the prudent test:

- where the expenditure is a contract cost, and the AER establishes the contract was let in accordance with a competitive tender process (**competitive tender test**), clause 5C.3 deems that expenditure to be prudent
- conversely, where the expenditure is not a contract cost, or is a contract cost and the AER establishes that the contract does not meet the requirements of the competitive tender test, clause 5C.3 also deems that expenditure to be prudent unless the AER establishes:
 - it is more likely than not that the expenditure will not be incurred (**expenditure incurred test**) or
 - that incurring the expenditure involves a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances (**commercial standard test**).

3.2.3 Characterising proposed expenditure variances as contract or non-contract costs

How the prudent test is to be applied depends on whether the proposed budget expenditure is characterised as a contract or non-contract cost. The revised Order defines a contract cost as:

... expenditure incurred pursuant to a contract entered into:

- (a) prior to the day on which a distributor made its initial AMI budget period budget application or subsequent AMI budget period budget application (as the case may be); or
- (b) if a revised initial AMI budget period budget application has been made by the distributor pursuant to clause 5B.3, prior to the day on which that application was made,

but does not include expenditure incurred pursuant to a variation of that contract where that variation is entered into or takes effect after that day.¹⁶

3.2.4 The competitive tender test

In establishing whether a contract was not let in accordance with a competitive tender process, the revised Order requires the AER must have regard to:

- the tender process for that contract
- whether there has been compliance with that process, and
- where the AER establishes that the request for tender unreasonably imposed conditions or requirements that prevented or discouraged the submission of any tender that was consistent with the selection criteria, that fact.¹⁷

¹⁶ Revised Order, clause 5C.11.

The 2009 Framework and Approach Paper also set out additional criteria which the AER has taken into account in assessing whether the contract costs which form part of the Revised Budget Application have been let in accordance with a competitive tender process.¹⁸

3.2.5 The expenditure incurred test and the commercial standard test

As noted above, the expenditure incurred test requires the AER to establish whether it is more likely than not that the expenditure in question will or will not be incurred and the commercial standard test requires the AER to establish whether the expenditure in question that will be incurred involves a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances.

The revised Order does not provide any guidance as to how the AER is to apply these tests. In particular, the Order does not define nor elaborate on what ‘more likely than not expenditure will not be incurred’ may mean. Neither does it define or elaborate on the references to ‘substantial departure’ or ‘commercial standard’ other than to require the AER to take into account and give fundamental weight to the matters referred to in clause 5I.8. The matters referred to in clause 5I.8 generally direct the AER’s attention to the particular circumstances of the Victorian DNSP.

In the AER’s view, the references to ‘more likely than not expenditure will not be incurred’, ‘substantial departure’ or ‘commercial standard’, in the context of the revised Order, are not capable of being afforded precise meanings. Properly construed, these references necessarily import the exercise of the AER’s judgment, having regard, in each instance, to the particular relevant factual circumstance.¹⁹ In the context of assessing SP AusNet’s Revised Budget Application, the AER in this draft determination takes the view that:

- expenditure associated with a contract that SP AusNet has actually entered into or that arises from a legal or other relevant regulatory obligation, including a metering regulatory obligation or requirement as defined in the revised Order, is expenditure that is more likely than not to be incurred
- a substantial departure is not merely any departure or any difference from the commercial standard but rather a departure or difference which is of an ‘considerable amount’²⁰
- as at the time SP AusNet submitted its Revised Budget Application, Victoria is the only jurisdiction to have mandated the roll out of AMI or smart meters in Australia. For this reason there are no well-established commercial standards within the Australian electricity industry in respect of AMI expenditures.

¹⁷ Revised Order, clause 5C.10.

¹⁸ AER, *Framework and Approach Paper—Advanced Metering Infrastructure review 2009–11*, January 2009, p. 29.

¹⁹ As to the exercise of judgment in respect of determining whether a matter is ‘substantial’, see, e.g., in the context of section 50 of the *Trade Practices Act 1974* (Cth) (now known as the *Consumer and Competition Act 2010* (Cth)), *Dandy Power Equipment Pty Ltd v Mercury Marine Pty Ltd* (1982) 64 FLR 238 at 260 per Smithers J: “‘Substantially’ is a word the meaning of which in the circumstances in which it is applied, must to some extent, be of uncertain incidence and a matter of judgment’.

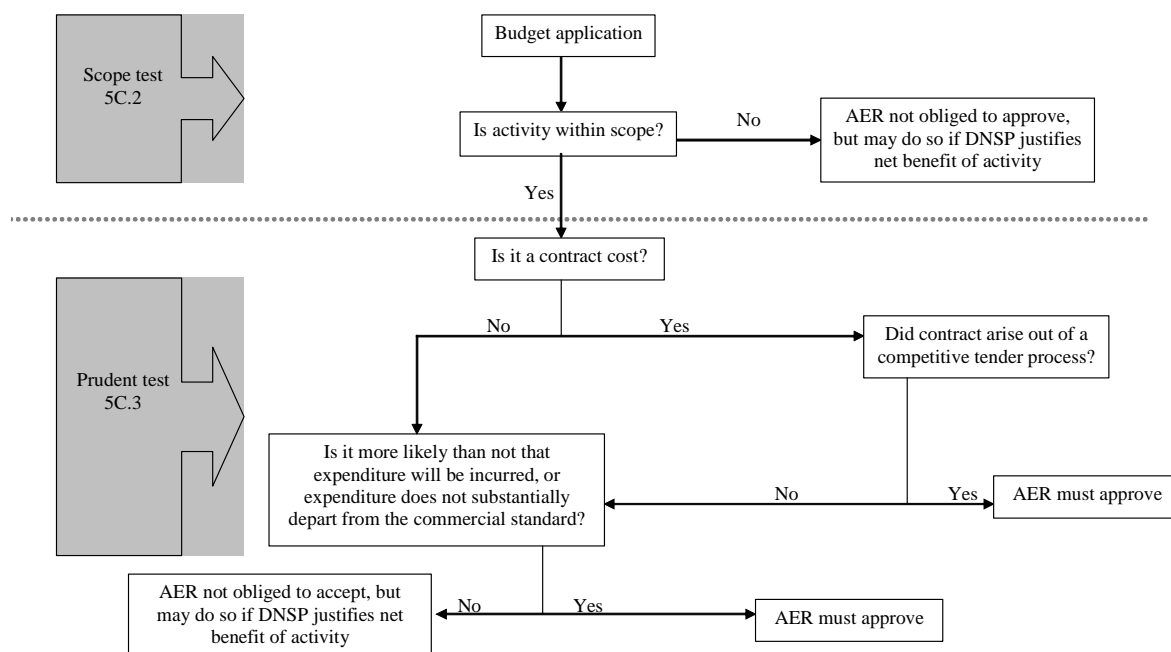
²⁰ Macmillan Publishers Australia, Macquarie Dictionary Online, 2011.

Accordingly the AER considers at this time the commercial standard is to be gauged in reference to the acts of and expenditures incurred by all of the Victorian DNSPs.

The application of the expenditure incurred test and the commercial standard test to SP AusNet’s Revised Budget Application is further discussed in section 3.4 below.

Figure 1 below outlines the process of the scope test and the prudent test (encompassing the competitive tender test, the expenditure incurred test and the commercial standard test).

Figure 1: Relevant tests under the revised Order



3.3 Applying the Scope test

3.3.1 AER considerations

Regarding the activities associated with the proposed expenditure variances to its Approved Budget, SP AusNet referred the AER to the scope relationship map it provided as part of its initial AMI budget application for 2009–11 and information submitted as part of its 2011 Charges Revision application in August 2010.²¹

That scope relationship map aligned each cost element to an activity specified in schedule 2 of the revised Order. In assessing SP AusNet’s activities associated with the expenditure in SP AusNet’s initial AMI budget application for 2009–11, in the final determination the AER only determined that the expenditure associated with load control contactors with relay was outside scope. The AER determined all the other activities associated with the proposed expenditure to be within scope, including

²¹ SP AusNet, *SPI Electricity Pty Ltd—Advanced Metering Infrastructure— 2011 Charges Revision Application*, 31 August 2010.

Worldwide Interoperability for Microwave Access (**WiMAX**) communications, two element meters and direct load control contactors.²²

Most of the proposed expenditure variances SP AusNet seeks (both increases and decreases) relate to shifting budgeted costs between years of the rollout in response to delays and changes to their rollout program that have occurred over the past two years, all associated with activities the AER previously determined to be within scope. It is also the case that the expenditure SP AusNet has actually incurred over 2009 and 2010 is associated with activities that are also within scope on the basis of the AER's assessment of the independent audit report authored by KPMG which SP AusNet provided in August 2010 as part of its 2011 Charges Revision Application.²³ Specifically, KPMG advised that the actual expenditure incurred by SP AusNet in 2009, and listed in its 2011 Charges Revision Application, complied with the scope identified in Schedule 2 of part 2 of the revised Order.²⁴

There is, however, some expenditure on new AMI activities being proposed as part of the Revised Budget Application which has not been previously assessed by the AER. These new activities include 'non-IT' costs.

These non-IT costs are described as relating to a building fit-out for additional premises. SP AusNet submitted that a decision in 2010 to in-source meter data management service provider functions resulted in a need to establish additional premises in Berwick to house new staff. The associated fit-out costs of the new building make up the total of this category of 'Non-IT' capital expenditure.²⁵

In response to the AER's request for the contract associated with the fit-out,²⁶ SP AusNet submitted a document titled 'Expenditure Approval Committee Order Approval Request' which described the need for the building fit out as driven by:

In sourcing...the meter data management function...plus the implementation of new meter data management systems and the need to accommodate additional staff who are required to deliver the EDPR related increase in vegetation and asset inspection works will require the business to accommodate up to 74 additional staff.²⁷

Noting that only costs which are related to the provision of Regulated Services (as defined in the revised Order, being metering services) are considered within scope, the AER requested SP AusNet to provide an allocation of these fit-out costs between the AMI program and the rest of SP AusNet's distribution business.²⁸ For example,

²² *ibid.*, p. 85; AER, *Final determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, October 2009, p. 49.

²³ The Charges Revision Application was made pursuant to clause 5G of the revised Order, which requires the Victorian DNSPs to update the AER on their approved building block components of their AMI budgets annually, to ensure actual incurred costs are reflected in charges. The 2011 charges were approved by the AER in October 2010.

²⁴ SP AusNet, *SPI Electricity Pty Ltd—Advanced Metering Infrastructure—2011 Charges Revision Application*, 31 August 2010, Appendix A.

²⁵ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 49.

²⁶ AER, Information request to SP AusNet, 9 March 2011.

²⁷ SP AusNet, Expenditure Approval Committee Order Approval Request, Date unknown, p. 3. Note – confidential information removed, provided to the AER on a disc on 16 March 2011.

²⁸ AER, Information request to SP AusNet, 17 March 2011.

the costs associated with increased vegetation and asset inspection obligations were separately considered by the AER as part of SP AusNet's 2011–15 distribution determination.²⁹ In response, SP AusNet acknowledged that the information provided in the 'Expenditure Approval Committee Order Approval Request' was incorrect and stated that it is moving all staff involved in the Meter Data Management functions on the AMI project to the new premises and that it intends to use the vacancies created by the moved AMI staff to house its vegetation and asset inspection staff.³⁰

The AER then questioned the business drivers behind the Berwick building fit-out, and the need for new staff in the two separate areas of SP AusNet's business.³¹ In response, SP AusNet provided information outlining that the need for the new building fit-out costs was only related to its decision to in-source its AMI rollout program Meter Data Management staff.³²

3.3.2 AER conclusion

Having reviewed all the relevant information, the AER is satisfied that all of the activities associated with the proposed expenditure variances, including the driver behind SP AusNet's proposed expenditure variance for Non-IT capex building fit-out, are related to the provision of Regulated (metering) Services and within scope for the purposes of the revised Order.³³ A summary of the AER's assessment of the Revised Budget Application against the scope test is set out in Appendix A.

3.4 Applying the Prudent test

The following section sets out the AER's assessment of SP AusNet's proposed expenditure variances to its Approved Budget against the prudent test which includes the expenditure incurred test and the commercial standard test. As noted above, how the prudent test is to be applied depends on whether the expenditure in question is a contract or a non-contract cost.

²⁹ AER, *Final Decision—Victorian electricity distribution network service providers—Distribution determination 2011–2015*, October 2010, Appendix L (Electrical safety regulation related opex step changes).

³⁰ SP AusNet, Response to AER information request, 21 March 2011.

³¹ AER, Information request to SP AusNet, 22 March 2011.

³² SP AusNet, Response to AER information request, 23 March 2011.

³³ In particular see revised Order, clause S2.6(a) and clause S2.6(b)(2)(xiii), which specifically lists 'executive and corporate office services' as being within scope.

Table 3 SP AusNet proposed AMI budget variances for 2009–11 (\$'000, \$2008)

	2009	2010	2011	Total
Metering variation – Contract costs	1 160	27 319	85 004	113 483
Metering variation – Other (Non-contract costs)	727	(16,968)	(84,078)	(100,319)
Communications variation– Contract costs	837	7 699	15 800	24 336
Communications variation– Other (Non-contract costs)	(6,390)	(6,253)	(15,073)	(27,716)
Information and control services variation– Contract costs	6 298	32 278	11 720	50 296
Information and control services variation– Other (Non-contract costs)	(33,770)	(11,425)	(3,291)	(48,486)
Non IT variation– Contract costs	0	640	0	640
Non IT variation– Other (Non-contract costs)	0	0	0	0
Total capex budget variation – contract costs	8 295	67 935	112 524	188 754
Total capex budget variation – Other (Non-contract costs)	(39,434)	(34,647)	(102,441)	(176,522)

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37; AER analysis.

Note: These costs are in \$2008, which is consistent with SP AusNet’s AMI budget templates and Revised budget application.

3.4.1 Contract and non contract costs

The AER has examined the copies of signed contracts for the provision of AMI services and documents setting out its procurement, sourcing, vendor and contract management policies and procedures that SP AusNet submitted as part of its Revised Budget Application.³⁴

The AER also had regard to the following documents SP AusNet previously submitted as part of its Initial Budget Application:

- request for tender (**RFT**) documents for a range of the AMI cost categories, including the original requests for tenders, tender responses, tender evaluation reports, ‘Preferred Solution Overview’ documents
- AMI contracts that had been signed prior to August 2009 (which reflected 6 per cent of SP AusNet’s initial proposed AMI budget for 2009–11)

³⁴ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, Appendix A (confidential).

- various risk assessment documents produced in the initial planning phase of SP AusNet's AMI rollout.

Having regard to these documents, the AER has applied the competitive tender test to all the costs associated with contracts that SP AusNet has entered into, as discussed in the context of the competitive tender test below. It is apparent that around 64 per cent of SP AusNet's total costs for AMI now fall into the contract cost category. This contrasts with the 6 per cent of total costs which SP AusNet specified in its 2009 Initial budget application. Appendix B summarises the AER's application of the competitive tender test criteria to SP AusNet's contracts associated with the proposed budget variations.

The AER has applied the expenditure incurred test and the commercial standard test to all costs that were associated with a contract that the AER established were not let in accordance with a competitive tender process and non-contract costs.

3.4.2 Applying the competitive tender test

Communications network – RFT 2009/T04

SP AusNet contracted a communications technology manufacturer (contractor 1) to design, build, and deploy a WiMAX based communications network to enable the remote management and reading of AMI electricity meters. The contract does not cover the supply or installation of meters or IT systems.

The AER did not establish that SP AusNet's contract for the manufacture of AMI communications technology was not let in accordance with a competitive tendering process.

Meter installations – RFT 2009/T05

Two firms, (contractors 2 and 3) were contracted to provide SP AusNet with services relating to meter installation based on a 50 per cent geographical split. The contracts cover the management and storage of meter stock and associated stock control, and organising and providing meter exchanges. In addition to meter installation services, these contractors are required to provide site inspection services to ensure the meter exchange has been conducted in compliance with requirements outlined by SP AusNet. The contracts do not cover metering equipment costs.

The AER did not establish that SP AusNet's contracts for the AMI meter installation were not let in accordance with a competitive tendering process.

Meter supply – RFI 2009/T05

In 2009 SP AusNet entered into contracts with two other metering companies (contractors 4 and 5) to supply it with AMI WiMAX meters and communications modules. Unlike for the agreements with contractors 1, 2 and 3, SP AusNet opted not to undertake a tender process for the supply of meters and/or the meter management

system. The reasoning behind this decision is outlined in a probity report stemming from an audit conducted by BDO Kendalls (the probity report).³⁵

In early 2008 SP AusNet conducted a request for tender (RFT) for its WiMAX enabled AMI meters.³⁶ The tendering process revealed that only one vendor, contractor 4, was able to supply SP AusNet a WiMAX meter and a WiMAX enabled meter management system. After the tender process had concluded, two other vendors, contractors 5 and 6, approached SP AusNet, stating that they were willing to develop WiMAX meters for SP AusNet's metering solution.³⁷

In March 2009, SP AusNet decided not to conduct an RFT for the supply of meters or the meter management system because it considered that the market did not have any mature offerings.³⁸ The probity report stated that '(the decision) to go to tender was considered to be a waste of time, money, effort and would not generate the best result required for the business.'³⁹ Instead, SP AusNet entered into negotiations with contractors 4, 5 and 6 through a request for information (RFI) process. The probity report stated that the RFI process was carried out as a '...follow up refresh discovery and validation exercise...Therefore the formal rules of tendering were not applied.'⁴⁰

The probity report also noted that as the pricing responses were received from the vendors at different dates and times, this raised concerns regarding the equity, confidentiality, and security of the pricing responses.⁴¹

At the conclusion of the RFI process, SP AusNet chose to contract with contractors 4 and 5 because both companies were capable of supplying WiMAX meters within the required schedule and had functional management systems. The probity report noted that SP AusNet continued discussions with contractor 6, and may contract with them in the future.⁴²

Clause 5C.3(a) of the revised Order requires contract cost expenditure to be approved by the AER unless the AER establishes that the contract was not let in accordance with a competitive tender process. The AER notes that the test outlined in the revised Order specifies that the tendering process, and not the contractual outcome, is to be assessed when determining if a competitive tender process has been conducted. The AER considers that, given the formal rules of tendering were not applied (as highlighted in BDO Kendalls' probity report), and noting the concerns raised in the probity report regarding whether a fair and equitable process was carried out, it is apparent that the process carried out by SP AusNet to enter into meter supply contracts was not competitive. The limited number of vendors and the multi-stage process carried out by SP AusNet, ending in direct negotiations with vendors highlights a lack of competition in the tendering process. The AER notes that the RFI

³⁵ BDO Kendalls, *Probity Audit Report for AMI Metering Solution Request for Information (RFI 2009/T15)*, August 2009

³⁶ A tender process (FRT 2008/T15) was held in early 2008 regarding various metering services, including, but not limited to, the supply of meters and communications modules.

³⁷ BDO Kendalls, *Probity Audit Report for AMI Metering Solution Request for Information (RFI 2009/T15)*, August 2009, p. 5.

³⁸ *ibid.*

³⁹ *ibid.*

⁴⁰ *ibid.*

⁴¹ *ibid.*, p. 4.

⁴² *ibid.*, p. 5.

process carried out for the meter supply contracts was unique to those contracts, and at odds with SP AusNet's tendering process for other AMI contracts.

After reviewing SP AusNet's internal procurement policies, request for information and evaluation reports, and considering the BDO Kendalls probity report, the AER has established that the metering supply contracts were not let in accordance with a competitive tendering process.

As such, these costs will now be considered under the expenditure incurred and commercial standard tests.

Non-IT costs – Building fit-out

As noted above in the discussion under the scope test, SP AusNet provided a document titled 'Expenditure Approval Committee Order Approval Request' which included details on the process carried out by SP AusNet in contracting for a new building fit-out to house new AMI staff. The AER reviewed the details of the associated closed tendering process, including descriptions of the tender responses and decision making in the vendor selection process.

The AER did not establish that the contracts for the building fit-out were not let in accordance with a competitive tendering process.

Proposed related party contract costs – IT services

SP AusNet's Revised Budget Application seeks an expenditure variance of \$128,406 (\$2008) for system integration / software customisation on the basis of a shift in the timeline of its IT program which led to a delay in deployment. SP AusNet engaged a related party service provider, Enterprise Business Services (EB Services), to provide its AMI IT services, and did not provide any evidence that it had undertaken a competitive tendering process.⁴³

The AER has established that SP AusNet's proposed expenditure variances associated with IT services relates to a contract that was not let in accordance with a competitive tender process.

As such, these costs will now be considered under the expenditure incurred and commercial standard tests.

Foreign exchange hedging contracts

SP AusNet provided the AER with seven foreign exchange (forex) deal confirmations which were arranged between August 2009 and October 2009, which was after SP AusNet submitted its Revised budget application in response to the AER's draft determination on its 2009–11 AMI budget. Accordingly the AER did not review these contracts as part of its 2009 decision. The confirmations show that SP AusNet hedged its exposure to AUD/USD currency fluctuations with four banks.

⁴³ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 49, footnote 11.

Schedule 2.1 (b)(2)(xii) of the revised Order provides that foreign exchange hedging is within scope. Section 14A.1 of the revised Order states that a distributor must have an up to date risk management strategy to manage the risk of AMI related expenditure increases.

SP AusNet has provided the AER with its policy regarding the management of foreign currency orders and contracts.⁴⁴ The policy outlines that SP AusNet will fully hedge any foreign currency exposure of AU\$100,000.00 or greater. SP AusNet's seven forex deal confirmations for its AMI program were valued at between AU\$14,000,000 and AU\$37,000,000, totalling over AU\$207,000,000.

SP AusNet's Logistics and Procurement Manual states that foreign currency hedge contracts are exempt from the need to seek quotes (that is, a competitive tendering process).⁴⁵ Accordingly SP AusNet did not carry out a competitive tender process for its AMI foreign currency hedging.

The AER has established that SP AusNet's foreign currency hedge contracts were not let in accordance with a competitive tender process.

As such, these costs will now be considered under the expenditure incurred and commercial standard tests.

3.4.3 Applying the expenditure incurred test and the commercial standard test

As required by the revised Order, the AER has applied the expenditure incurred test and the commercial standard test to proposed expenditure variances associated with non-contract costs and contract costs that were not let in accordance with a competitive tender process.

3.4.3.1 Proposed related party contract costs

SP AusNet's Revised Budget Application seeks an expenditure variance of \$128,406 (\$2008) for system integration / software customisation on the basis of a shift in the timeline of its IT program which led to a delay in deployment.⁴⁶ The AER has established that the contract underpinning this proposed expenditure variance was not let in accordance with a competitive tendering process, as discussed in section 3.4.2.

In assessing whether these IT services related party contract costs are more likely than not to be incurred, the AER analysed the information submitted by SP AusNet and the likely implications for SP AusNet of not incurring budget costs.

For the increases in cost for system integration / software customisation, the AER notes that the nature of the AMI roll-out, and the state of the necessary technologies and changes to SP AusNet's business systems to facilitate the scale of AMI roll-out, increase the likelihood of delays in systems deliveries. SP AusNet indicated that, to ensure efficiency, the implementation of its IT solution has evolved as its AMI rollout

⁴⁴ SP AusNet, *'Managing foreign currency in Orders and Contracts'* PTP00-110, February 2009.

⁴⁵ SP AusNet, *'Logistics and Procurement Manual'* PTP00-122, May 2008, p. 13.

⁴⁶ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 49.

has progressed. In deciding whether these increases in expenditure were reasonable, the AER observes that:

- the cost of the NMS was approved in the AER's draft determination for SP AusNet's 2009–11 AMI budget⁴⁷ and that the proposed expenditure variance being sought is due to a delay in the timeframe for the rollout
- due to these costs being classed as 'non-contract costs' in SP AusNet's 2009 Initial AMI budget application, the AER applied the non-contract cost tests to the proposed NMS budget as part of its 2009 decision, and found that the expenditure did not reflect a substantial departure from a reasonable commercial standard. SP AusNet's proposed expenditure variance for its NMS does not deviate from the scope of the original approved budget for NMS.

The AER has also reviewed SP AusNet's proposed expenditure variance for system integration / software customisation and accepts that:

- this cost is likely to be incurred by SP AusNet, because it is necessary to enable SP AusNet to meet its AMI rollout obligations
- consistent with the 2009 Initial Budget Final Determination, the proposed expenditure variance does not involve a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances.

3.4.3.2 Foreign exchange hedging contracts

Part of SP AusNet's proposed expenditure variances to metering capex is related to changes in its foreign currency hedging arrangements. In 2009, SP AusNet forecast its metering capex costs in \$AUD using an assumed \$US foreign exchange rate of 0.66. When SP AusNet eventually sourced its foreign exchange hedge contracts, the relevant exchange rate was 0.80.⁴⁸ Accordingly, this had the net effect of reducing SP AusNet's total metering capex budget (putting aside increases in metering unit costs, discussed below).

The AER established that SP AusNet's foreign exchange hedging contract costs had not been let in accordance with a competitively tendering process, as discussed in section 3.4.2.

In assessing whether the foreign exchange costs identified by the AER are more likely than not to not be incurred (under the expenditure incurred test), the AER considered that given the costs are the subject of signed contracts, it is likely they will be incurred by SP AusNet.

In applying the commercial standard test, the AER noted that as forex markets are highly competitive, the rates obtained by SP AusNet are likely to be fair and reasonable, despite no tendering process being followed. SP AusNet has engaged in forex arrangements with a number of financial institutions, which demonstrates a willingness to evaluate different offers.

⁴⁷ AER, *Draft determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, July 2009, pp. 101-102.

⁴⁸ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, pp. 38 and 39.

The AER considers that the ‘cost’ to customers associated with the hedged exchange rate is derived by both SP AusNet’s contracts with its metering providers supplying meters priced in US dollars, and its exchange rate hedge contracts.

The AER notes that while the exchange rate agreed to by SP AusNet is significantly lower than rates at present (fixed at 0.80 as compared to current rates of around parity), at the time SP AusNet entered into the hedging contracts, 0.80 was a reasonable forward rate available in the market.

Given the circumstances at the time of the contract signing, SP AusNet’s engagement of several financial institutions for hedging arrangements, and the fact that hedging foreign currency risk forms part of a reasonable business strategy (and indeed part of a risk management strategy required by Section 14A.1 of the revised Order), the AER considers SP AusNet’s approach is consistent with a reasonable commercial standard.

The AER did not establish that the costs associated with SP AusNet’s foreign exchange hedge contracts involve a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances.

3.4.3.3 Meter supply contract costs

As outlined in section 3.4.2 above, the AER has established that SP AusNet’s meter supply contracts with two vendors were not let in accordance with a competitive tendering process.

AER determination on 2009–11 AMI budgets and charges – October 2009

The AER recognises that in the 2009 final determination it approved SP AusNet’s decision to implement WiMAX technology as a primary AMI communications technology on the basis that it was within scope and the associated expenditure was prudent. WiMAX is a telecommunications protocol that provides fixed and mobile internet access.

In particular, although the 2009 draft determination described the WiMAX technology as a ‘communications solution’, which primarily relates to the AMI communications infrastructure, the AER also recognised that it had an impact more generally on SP AusNet’s metering and other network management system capex.⁴⁹ That capex can be categorised into three main areas as follows:

- AMI meters, which excludes communications modules or other components—these basic AMI meters are generic and do not depend on a DNSP’s communications solution
- communications modules that are added to the AMI meters in order to enable communications between the meters and the DNSP—while SP AusNet’s communications modules are WiMAX enabled, a similar communications module designed for mesh radio connectivity is utilised by the other Victorian DNSPs

⁴⁹ AER, *Final determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, October 2009, p. 107(Acknowledging the broader potential of the WiMAX technology).

- other necessary meter add-ons, such as a Zigbee Card, Antenna etc—which may be catered to the DNSP’s choice of communications solution

The AER recognises that in the 2009 final determination it established that SP AusNet’s proposed 2009–11 AMI metering capex was prudent. In referring to SP AusNet’s total ‘communications solution’ (which incorporates the communications modules), the 2009 draft determination noted that WiMAX involved a higher per customer cost than the communications solutions selected by the other DNSPs, specifically stating that on a per customer basis, WiMAX was more than twice the cost of the nearest other DNSP’s communications technology.⁵⁰ However, the AER also recognised at the time that the forecast unit costs of the AMI meters and communications modules were comparable to those forecast by the other Victorian DNSPs. This is highlighted within SP AusNet’s Revised Budget Application, where forecast unit costs approved by the AER in 2009 are compared to the proposed Revised Budget Application unit costs.⁵¹

In providing advice to assist the AER’s 2009 draft determination, the AER’s consultant, Energeia, found that:

- the activities associated with the WiMAX technology do not appear to be outside scope
- while some of the technical criteria were above the minimum specifications defined in the revised OIC, these were largely required to support the overall AMI system performance levels, and to lower the related costs
- a wide range of alternative AMI communications solutions was considered by SPA
- WiMAX was not over specified to support activities outside scope, and bandwidth requirements were necessary to allow the technology to fit to the AMI communications profile
- the total cost of ownership of WiMAX is not significantly more than a mesh radio solution, based on the findings of independent experts⁵²
- the decision to select WiMAX was appropriately considered and approved.⁵³

⁵⁰ AER, *Draft determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, July 2009, p. 78.

⁵¹ SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, pp. 38 and 39.

⁵² The AER notes that Energeia’s observation on the total cost of ownership relates to the long run costs of WiMAX as compared to alternatives, and is based on the expectation that higher capital costs would be offset over the long term by lower operating costs. Energeia, *Review of Victorian Distribution Network Service Provider’s Advanced Metering Infrastructure Budget Applications 2009–11*, July 2009, p. 35.

⁵³ AER, *Draft determination—Victorian advanced metering infrastructure review—2009–11 AMI budget and charges applications*, July 2009, p. 80.

SP AusNet's decision to select WiMAX was in contrast to all the other Victorian DNSPs who proposed mesh radio as their primary communications technology which the AER also approved.

Expenditure incurred test

The AER has not established that it is likely that the proposed expenditure variances will not be incurred. This is because the expenditure in question has all been forecast on the basis of contracts which SP AusNet has entered into.

The commercial standard test

The AER has established that SP AusNet's proposed expenditure variances involves a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances, taking into account and giving fundamental weight to the matters referred to in clause 5I.8, for the reasons discussed below.

First, the surrounding conditions and circumstances of SP AusNet at the time it entered into the relevant contracts include that:

- the AER accepted SP AusNet's WiMAX communications solution in 2009 on the basis of lower on-going operating costs compared to other communications solutions.⁵⁴
- SP AusNet will directly incur and manage the expenditure.⁵⁵

Second, at the time the commitment was made to incur or manage the expenditure excess:

- despite SP AusNet's claim that WiMAX is supported by many vendors with experience in the design and deployment of wireless networks, the fact that only one supplier was able to properly respond to its RFT should have signalled to SP AusNet that it would have been prudent to review the decision to roll out a WiMAX solution, given the possibility that the WiMAX meter may be uncompetitive and immature and the likely impact that this would have on the costs of the AMI roll out⁵⁶
- notwithstanding the initial expectation of lower ongoing costs, SP AusNet should have revisited its decision to deploy a WiMAX solution especially given:
 - the lack of or insufficiently developed market for the supply of WiMAX meters and the comparably improved market for mesh radio meters and solutions at the time SP AusNet went out to tender for the supply of meters⁵⁷
 - a more tested, less expensive market based solution where competition for the supply of meters is more prevalent, such as mesh radio, exists

⁵⁴ Revised Order, clause 5I.8 (a).

⁵⁵ Revised Order, clause 5I.8 (b).

⁵⁶ Revised Order, clause 5I.8 (d).

⁵⁷ Revised Order, clause 5I.8 (i).

which meets the AMI specifications and as the AER understands, can be readily implemented⁵⁸

- it appears that there is a real risk that the costs associated with proceeding to implement WiMAX are substantially higher than forecast⁵⁹
- there were no other regulatory obligations or requirements that prevented SP AusNet from revising its decision to rollout WiMAX once it became apparent that the costs were substantially higher than forecast and the level of competition in the supply of WiMAX meters was very limited.⁶⁰

Meters

In relation to the AMI meters themselves, excluding communications modules or other add-ons, it is apparent that the expenditure proposed by SP AusNet substantially exceeds that of the other Victorian DNSPs. Specifically, SP AusNet proposes unit costs of US\$[confidential] (\$2010) for the majority of its single phase single element meters.⁶¹ The other Victorian DNSPs, which have not submitted revised budget applications, each proposed unit costs of US\$[confidential] (fixed, \$2010) for single phase single element AMI meters.

The AER understands that the choice between adopting a WiMAX solution (as SP AusNet has done) versus a mesh radio solution (as the other DNSPs have done) does not affect the costs or the expenditure associated with an AMI meter (i.e. that is, the basic AMI meter, excluding communications modules or other components). The AER is not aware of any reason nor has SP AusNet provided any information to suggest otherwise. For this reason the AER considers it appropriate that in this case the commercial standard against which SP AusNet's proposed expenditure variances to its Approved Budget can be assessed to determine whether it involves a substantial departure from that which a reasonable business would exercise in the circumstances is the average of that expended by the other Victorian DNSPs. This is set out in table 4.

⁵⁸ Revised Order, clause 5I.8 (g).

⁵⁹ Revised Order, clause 5I.8 (h).

⁶⁰ Revised Order, clause 5I.8 (j).

⁶¹ SP AusNet has engaged two separate suppliers of AMI meters, but has indicated that one of these suppliers will not be used to supply AMI meters over 2009–11. The unit costs for an equivalent meter provided by the second supplier is bundled with the communications module, proposed as US\$[confidential] (\$2010).

Table 4 AMI meter unit cost comparison (\$US, 2010)

Meter type	AER approved budget unit costs (\$US)	SP AusNet proposed revised budget unit costs (\$US)	Established commercial standard unit costs (\$US)	Percentage departure of SP AusNet revised budget unit costs from the commercial standard
Single phase single element	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Single phase, two element with contactor	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase, direct connected with contactor	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase Current Transformer Connected	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37; CitiPower and Powercor, *AMI 2012-15 budget and charges applications*, confidential appendices 41 and 42; Jemena Electricity Networks, *AMI 2012-15 budget and charges applications*, confidential appendix A.

Note: The redacted figures in this table are unit costs (or information that would enable unit costs to be revealed) confidential to CitiPower, Powercor, JEN and United Energy.

From table 4, it can be seen that SP AusNet’s proposed proposed expenditure variances to its Approved Budget per meter exceeds the average of that expended by the other Victorian DNSPs, by greater than 50 per cent for single phase single element meters and greater than 35 per cent for single phase two element with contactor meters. The AER considers this is a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances. Whilst the proposed costs for the remaining meter types also exceed the average of that expended by the other Victorian DNSPs by more than 10 per cent, the AER does not consider this to be a substantial departure for the purposes of the commercial standard test.

The AER considers that this view is also supported by the AER’s consultant, Impaq Consulting (**Impaq**).⁶² Specifically, Impaq advised that SP AusNet’s:

- proposed expenditure variances to metering unit costs reflected a substantial departure from the commercial standard for a reasonable business in SP AusNet’s circumstances, after having also assessed the unit costs proposed by the other Victorian DNSPs in their 2012–15 AMI budget proposals⁶³
- the expenditure for basic AMI meters that connect to a WiMAX communications solution should not be substantially greater than the equivalent expenditure for a basic AMI meter that connects to a mesh radio communications solution⁶⁴

⁶² Impaq Consulting, *Letter to the AER*, 31 March 2011.

⁶³ *ibid.*, p. 4.

⁶⁴ *ibid.*, p. 2.

- it is common place for utilities implementing AMI in other jurisdictions internationally to have a provider of meters and a separate provider for communications modules, and that most metering vendors have metering products that are designed to accept different communications vendors' modules within their meters (i.e. the basic AMI meter can commonly accept either a WiMAX communications module or a mesh radio communications module).
- the benchmark cost or a commercial standard unit costs of a single phase single element meter is approximately US\$60 to \$85 (\$2010).⁶⁵

As noted above, the advice Impaq Consulting has provided to the AER supports the conclusion that SP AusNet's proposed expenditure for single phase single element and single phase two element meters is a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances. In particular, SP AusNet's proposed expenditure for these meters exceeds the high end of the commercial standard unit costs identified by Impaq (which is based on general industry knowledge as well as unit cost information submitted by the other Victorian DNSPs in their 2012–15 AMI budget proposals).⁶⁶

Communications modules

In relation to communications modules, in isolation of the AMI meters or other add-ons, it is apparent that the expenditure proposed by SP AusNet substantially exceeds that of the other Victorian DNSPs. Specifically, SP AusNet proposes communications module unit costs of US\$[confidential] (\$2010) for the majority of its meters.⁶⁷ The other Victorian DNSPs have each proposed communications module unit costs of US\$[confidential] (fixed, \$2010) for single phase single element and single phase two element customers, and between US\$[confidential] and US\$[confidential] (fixed, \$2010) for multiple phase meters.

SP AusNet's choice of communications modules is closely related to its decision to implement a WiMAX communications solution. As noted above, communications modules are added to the AMI meters in order to enable communications between the meters and the DNSP. While SP AusNet's communications modules are WiMAX enabled, a similar communications module designed for mesh radio connectivity is utilised by the other Victorian DNSPs.

The procurement process followed by SP AusNet (and described in section 3.4.2 above) indicates that early in the decision making and technology selection phase of SP AusNet's AMI communication solution, it was apparent that there were limited vendors of WiMAX technology as compared to mesh radio and other technologies. This is at odds with several key justifications for the rationale for WiMAX which SP AusNet submitted to the AER in 2009. The AER considers that the subsequent increase in communications module prices for WiMAX (from US\$[confidential] to

⁶⁵ *ibid.*, p. 4.

⁶⁶ Based on a unit cost benchmark unit cost of \$[confidential] USD and a budgeted unit cost by SP AusNet at \$[confidential] USD.

⁶⁷ SP AusNet has engaged two separate suppliers of AMI communications modules, but has indicated that one of these suppliers will not be used to supply AMI meters over 2009–11. The unit costs for an equivalent communications module provided by the second supplier is bundled with that suppliers AMI meter price, being US\$[confidential] (\$2010).

US\$[confidential] (\$2010), a 70 per cent increase) should have signalled to SP AusNet that its decision to implement a WiMAX communications solution was potentially no longer prudent. The AER considers that to not take steps to reduce the costs of the AMI rollout, having regard to this information, is likely to result in expenditure which is a substantial departure from the commercial standard a reasonable business would exercise in the circumstances.

Given this decision was open to SP AusNet at the time of the communications module unit cost increase, the AER considers it appropriate that in this case the commercial standard against which SP AusNet’s proposed expenditure variances can be assessed to determine whether it involves a substantial departure from that which a reasonable business would exercise in the circumstances is the average of that expended by the other Victorian DNSPs on mesh radio communications modules. This is set out in table 5.

Table 5 Communications module unit cost comparison (\$US, 2010)

Meter type	AER approved budget unit costs (\$US)	SP AusNet proposed revised budget unit costs (\$US)	Established commercial standard unit costs (\$US)	Percentage departure of SP AusNet revised budget unit costs from the commercial standard
Single phase single element	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Single phase, two element with contactor	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase, direct connected with contactor	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%
Multiphase Current Transformer Connected	\$(confidential)	\$(confidential)	\$(confidential)	[confidential]%

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37; CitiPower and Powercor, *AMI 2012-15 budget and charges applications*, confidential appendices 41 and 42; Jemena Electricity Networks, *AMI 2012-15 budget and charges applications*, confidential appendix A.

Note: The redacted figures in this table are unit costs (or information that would enable unit costs to be revealed) confidential to CitiPower, Powercor, Jemena Electricity Networks and United Energy Distribution.

The AER’s concerns in respect of SP AusNet’s substantially proposed increase in expenditure for its communications modules are supported by Impaq.⁶⁸ Specifically, Impaq advised that SP AusNet’s proposed unit cost of US\$[confidential] for a WiMAX communications module for single phase single element and single phase two element meters is a substantial departure from the commercial standard unit cost for such communications modules.⁶⁹

⁶⁸ Impaq Consulting, *Letter to the AER*, 31 March 2011.

⁶⁹ *Ibid.*, p. 4.

The AER has considered the percentage departure of SP AusNet's proposed communication module unit costs from the average of the other Victorian DNSPs' communication module unit costs (the commercial standard), set out in table 5. The AER considers that a departure greater than 100 per cent from the commercial standard for communications modules for single phase single element and single phase two element with contactor customers is clearly substantial. While the AER has concerns that the remaining communication modules are greater than 20 per cent above the commercial standard, the AER considers that at this time these departures from the commercial standard are not substantial for the purposes of the commercial standard test.

Other add ons

SP AusNet's Revised Budget Application also proposed expenditure variances relating to additional metering capex for Zigbee cards and antennas, which were not part of its original approved metering capex budget for 2009–11.⁷⁰ The unit costs of these add-ons are US\$[confidential] (\$2010) for Zigbee cards and AUD\$[confidential] (\$2010) for antennas. SP AusNet has forecast that for every AMI meter rolled out, one antenna will be required. The Zigbee cards are only added to the meters supplied by one of the two AMI metering suppliers selected by SP AusNet.

The AER has not established that the proposed costs for antennas and Zigbee cards reflect a substantial departure from the commercial standard that a reasonable business in SP AusNet's circumstances would exercise.

3.4.3.4 Net benefit test

The AER has also considered the extent to which incurring the expenditure, despite it not meeting the prudent tests, may offer a net benefit to either SP AusNet or its customers.⁷¹ As the AER has established that the proposed expenditure variances are a substantial departure from the commercial standard a reasonable business would exercise in the circumstances, the AER also considers that there is likely to be no net benefit for SP AusNet or its customers in relation to the provision of AMI services from SP AusNet incurring the proposed revised metering capex unit costs. SP AusNet has not provided any supporting business cases or additional documentation to show a net benefits test would result from the unit cost increases, as compared to alternative available metering infrastructure.

3.4.3.5 AER conclusion

For the reasons set out above, the AER has established that SP AusNet's proposed expenditure variances to its Approved Budget for metering capex unit costs associated with:

- AMI meters for single phase single element and single phase two element customers; and

⁷⁰ This additional metering capex variation relates to the balance of the antenna costs that have increased from that approved as part of communications capex in SP AusNet's Approved Budget.

⁷¹ See: AER, *Final decision—Framework and approach paper—Advanced metering infrastructure review 2009-11*, January 2009, p. 29.

- communications modules for single phase single element and single phase two element customers

involve a substantial departure from the commercial standard that a reasonable business in the circumstances would exercise.

Accordingly, the AER has rejected these proposed expenditure variances from SP AusNet's Revised Budget Application.

In determining the new variances to SP AusNet's Approved Budget that the AER would approve, the AER has determined to use the unit costs it approved as part of SP AusNet's Approved Budget.

4 AER draft determination

Pursuant to clause 5F.3 of the revised Order, the AER has determined to reject the variances to SP AusNet's Approved Budget as proposed in its Revised Budget.

Pursuant to clause 5C.7 of the revised Order, the new variances to SP AusNet's Approved Budget that the AER would approve is set out in table 6, an overall reduction of \$4.63 million.

Table 6 AER Approved Budget—SP AusNet AMI budget for 2009–11 (AUD \$'000, \$2008)

	2009	2010	2011	Total
Approved AMI budget capex – AER final decision October 2009	67 901	50 896	102 441	221 238
Metering variation	(456)	3 838	(6 810)	(3 427)
Communications variation	(5 554)	1 446	728	(3 380)
Information and control services variation	(27 472)	20 853	8 429	1 810
Non IT variation		640		640
Draft determination revised budget	34 419	77 403	104 788	216 611
Total capex budget variation	(33 481)	26 507	2 347	(4 627)

Source: SPI Electricity Pty Ltd, *Advanced Metering Infrastructure—Revised Budget Application*, 28 February 2011, p. 37; AER analysis.

APPENDIX A: Summary of AER considerations under the scope test – SP AusNet’s Revised budget application 2009–11

Proposed expenditure category	Activities undertaken	AER considerations
Metering	Non IT capex—metering and communications equipment purchase: meters	<p>Within scope, as defined per:</p> <p>S2.6 (a)(i) procurement...of accumulation and manually read interval metering installations to support the billing of network tariffs, including accumulation meters and manually read meters, measurement transformers and associated equipment</p> <p>S2.6 (b)(1)(i) ...provision of remotely read interval meters... ‘AMI technology’...</p>
	Non IT capex—AMI installation services: meters	<p>Within scope, as defined per:</p> <p>S2.6 (b)(1)(i) ...provision of remotely read interval meters required to be installed... ‘AMI technology’...</p> <p>S2.6 (b)(2)(i)(A) provision and installation of AMI technology. This activity includes: planning, designing and managing the roll-out of AMI technology.</p>
Communications	Non IT capex—metering and communications equipment purchase: backhaul communications; communication infrastructure	<p>Within scope, as defined per:</p> <p>S2.6(b)(1)(i) provision and operation of...communications equipment, communications services...</p> <p>S2.6 (b)(2)(i)(A) provision and installation of AMI technology</p>
	Non IT capex—AMI Installation services: backhaul communications; communication infrastructure	<p>Within scope, as defined per:</p> <p>S2.6(b)(1)(i) provision and operation of...communications equipment, communications services...</p> <p>S2.6 (b)(2)(i) provision and installation of AMI technology</p>

Information and control services	Capex—Functional technology response per functional element: asset management, workforce scheduling and mobility, connection point management, outage management, network management, meter data management, performance and regulatory reporting, geospatial information, program support	<p>Within scope, as defined per:</p> <p>S2.6(b)(1)(ii) information technology infrastructure and all information technology systems to comply with the Specifications</p> <p>S2.6(b)(1)(iii) business processes and information technology systems to manage the remotely read interval meter roll-out</p> <p>S2.6(b)(2)(vii)(A)(1) manage the roll-out of AMI technology, including the asset management system to manage the full asset life cycle for interval meters and communication network infrastructure; (2) mobile workforce system and infrastructure including hand held devices to enable co-ordination of field personnel for the communications infrastructure and interval meter roll-out</p> <p>S2.6(b)(2)(vii)(B)(1) network management system (NMS) for management of data communication between the meters and business IT systems. The NMS is made up of meter management system (MMS) and communication network management system (CNMS); (2) manage the operation of AMI technology, including outage management system</p> <p>S2.6(b)(2)(vii)(C)(1) deliver all required Regulated Services and achieve associated service obligations, including: metering and revenue system for meter data collection, meter data processing, service order management, revenue management, consumption data management, customer details management and connection point management; (2) enhancements to corporate systems required to support AMI technology</p> <p>S2.6(b)(2)(vii)(E) include any modifications to distribution IT Systems affected by the introduction of AMI technology</p> <p>S2.6(b)(2)(xi) program governance and management, including planning, program and project management</p>
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	Capex—IT infrastructure: hardware, ‘platform’ software licenses and maintenance, system integration/software customisation	<p>Within scope, as defined per:</p> <p>S2.6(b)(1)(ii) information technology infrastructure and all information technology systems to comply with the Specifications</p> <p>S2.6(b)(1)(iii) business processes and information technology systems to manage the remotely read interval meter roll-out</p> <p>S2.6(b)(2)(vii) provision, operation and maintenance of IT applications, systems and infrastructure, including disaster recovery</p>
	Non-IT capex—Metering and communications Equipment Purchase: WAN	<p>Within scope, as defined per:</p> <p>S2.6(b)(2)(vii)(B)(1) network management system (NMS) for management of data communication between the meters and business IT systems. The NMS is made up of meter management system (MMS) and communication network management system (CNMS)</p>
	Non-IT capex—AMI installation services: WAN	<p>Within scope, as defined per:</p> <p>S2.6(b)(1)(i) provision and operation of...network management systems and other associated equipment</p>
Non-IT	Non-IT capex—Project and administrative costs (other – building fit-out)	<p>Within scope, as defined per:</p> <p>S2.6(b)(2)(xiii) executive and corporate office services.</p>

APPENDIX B: Summary of AER considerations under competitive tender test–SP AusNet Revised budget application 2009–11

AER approach to competitive contract test, as set out in framework and approach	Considerations
that the initial request for tender documentation is made widely available to all parties that might be interested in tendering	<p>RFT 2009/T04 & RFT 2009/T05: RFTs were made widely available to potential applicants. Vendors had the opportunity to request further information from SPAusNet regarding the tender. This view is confirmed in the probity report by BDO Kendalls.</p> <p>RFI 2009/T15: Due to only one vendor responding to a previous RFT in regards to WiMAX-compatible meter supply, SP AusNet decided to contact vendors directly using a request for information. This process was reviewed in a probity report issued by BDO Kendalls.</p>
that, if adopted, any multi-stage tendering process is appropriate given the nature of the services sought and the number and prospects of potential bidders	<p>RFT 2009/T04, RFT 2009/T05: No multi-stage tendering process adopted for contract costs.</p> <p>RFI 2009/T15: Given limited responses to previous RFT, an RFI process was undertaken. No subsequent RFT process was undertaken. Independent negotiations with vendors were then carried out. Probity report found that formal rules of tendering were not applied.</p>
<p>that the issued tender documentation:</p> <p><i>a. provides adequate information about the background to the AMI program and the DNSP</i></p> <p><i>b. details the tender process</i></p> <p><i>c. provides a detailed specification of the services sought</i></p> <p><i>d. adequately addresses matters such as risk sharing and contractual terms and conditions</i></p> <p><i>e. where appropriate, sets out the tender evaluation criteria</i></p>	<p>RFT 2009/T04 & RFT 2009/T05:</p> <ol style="list-style-type: none"> a. Comprehensive information about the background of the AMI program and SP AusNet was provided in the RFT b. The tender process was described in detail c. The RFT included a detailed specification of the services sought, inclusive of a questionnaire to ensure vendors understood the specifications d. The RFT outlined contractual terms and conditions and risk e. The RFT outlined the evaluation criteria for the vendors <p>RFI 2009/T15:</p> <ol style="list-style-type: none"> a. Comprehensive information about the background of the AMI program and SP AusNet was provided in the RFI

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- b. As discussed above, instead of adopting a tendering process, SP AusNet entered into discussions individually with vendors. This process has been assessed in the probity report issued by BDO Kendalls.
 - c. The RFI provided a detailed specification of the services sought, inclusive of a questionnaire to ensure vendors understood the specifications
 - d. The RFI outlined contractual terms and conditions and risk
 - e. The RFI outlined highly detailed specifications relating to the WiMAX metering solution. The answering of the questionnaire by vendors would have likely provided SP AusNet with an appropriate way to evaluate different vendors. However, note that only one vendor response to the initial RFT was received.
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that adequate time has been allowed for bid preparation and between tender stages, taking into account the scope and complexity of information sought from tenderers

RFT 2009/T04: RFT issued: 17 March 2009. Briefing session: 25 March 2009. Responses closed: 27 April 2009
 RFT 2009/T05: RFT issued: 14 March 2009. Briefing session: 25 March 2009. Responses closed: 14 April 2009
 RFI 2009/T15: WiMAX modem requirements sent to 3 vendors: 3 April 2009. Contractor briefing sessions held on 8, 9, and 15 April 2009 respectively. Further meetings for Contractors held on 13, 15, and 18 May 2009 respectively.

that the request for tender does not unreasonably impose conditions that prevent or discourage the submission of any tender. For example, these might include the payment of high fees for receiving tender documentation, technical requirements that are unreasonably high given the nature of the tender, unreasonable liability requirements, or any other requirements that impose unduly high expenses on potential tenderers

RFT 2009/T04, RFT 2009/T05, RFI 2009/T15: No evidence to suggest that there were any conditions designed to discourage the submission of tenders.
 RFI 2009/T15: BDO Kendalls probity report concludes that the RFT/RFI process was 'fair and equitable' (but not competitive).

that detailed and appropriate tender evaluation criteria have been developed and applied. The design of the tender and

RFT 2009/T04 & RFT 2009/T05: A tender evaluation plan was developed and conducted by Deloitte.
 The RFT extensively outlined the requirements of the tender. Vendors were required to fill in a questionnaire confirming their understanding of these requirements. Vendors were given the opportunity to suggest amendments

<p>the evaluation criteria need to ensure that, as far as possible, competing bids are easily comparable.</p>	<p>to these requirements if the Vendor deemed them unsuitable. Vendors were given the opportunity to attend a briefing session.</p> <p>RFI 2009/T15: All 3 vendors were required to fill out a questionnaire in the RFI. This would have provided SP AusNet with a way to compare vendors equally. All vendors were provided the opportunity to have meetings with SP AusNet, and it appears they were all awarded equal opportunity in this regard.</p>
<p>that any ‘bundling’ of different services into a single contract is appropriate and that the advantages of doing so (economies of scale, reduced administration costs) outweigh the costs (less competition)</p>	<p>RFT 2009/T04, RFT 2009/T05: No bundling of different services were included in the RFT.</p> <p>RFI 2009/T15: Bundling of AMI meters and WiMAX communications modules has likely resulted in a higher price than would otherwise have been the case had SPA contracted separately for its AMI meters and WiMAX communications modules. Given the AMI meters should be able to support any communications module (WiMAX or otherwise), the higher price per AMI meter within SP AusNet’s AMI budget as compared to the other Victorian DNSPs suggests that the lack of competition in the supply of WiMAX communications equipment has affected SP AusNet’s contracts with AMI meter providers and resulted in a higher unit cost.</p>
<p>that appropriate tender briefings have been conducted and vendors have been provided with the opportunity to clarify aspects of the tender</p>	<p>RFT 2009/T04, RFT 2009/T05, RFI 2009/T15: All vendors were provided several opportunities to discuss their tenders with SP AusNet.</p>
<p>that the DNSP has taken appropriate steps to verify the information provided in tender responses, including referee interviews, field trials, and other checks</p>	<p>RFT 2009/T04 & RFT 2009/T05: Information provided by the vendors was verified using the tender evaluation plan developed by Deloitte.</p> <p>RFI 2009/T15: As SP AusNet engaged in a request for information instead of a request for tender, the tender evaluation plan developed by Deloitte was not used.</p>
<p>that any post-tender negotiations with the successful tenderer are consistent with the tender and do not call into question the original selection decision</p>	<p>RFT 2009/T04, RFT 2009/T05: No evidence to suggest any post-tender negotiations were inconsistent with the initial stages of the tender.</p> <p>RFI 2009/T15: Note discussion on bundling of AMI meters and communications modules outlined above. Post RFT negotiations were likely to have been affected by lack of competition, and should have called into question the decision to bundle the AMI meters and communications modules.</p>
<p>that the outcome of major tenders have been considered and approved by the DNSPs’ boards of directors</p>	<p>RFT 2009/T04, RFT 2009/T05, RFI 2009/T15: SP AusNet did not provide any information as to whether its Board approved the tenders.</p>

that for large contracts, a probity audit of the tendering process has been conducted. RFT 2009/T04, RFT 2009/T05, RFI 2009/T15: Probity audit conducted by BDO Kendalls. Note that for RFI 2009/T15, probity report did not state that process undertaken was 'competitive'.
