



Assessment of AMI Costs following AER Draft Determination

**A Report to the Victorian Department of Primary
Industries (DPI)**

Energy Market Consulting associates

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Disclaimer:

This report has been prepared for the Victorian Department of Primary Industries (DPI) to assist with policy planning and strategic decision-making in regards to the Advanced Metering Infrastructure (AMI) roll-out policy for Victoria. The purpose and scope of this report are described under an agreed scope of works between DPI and EMCa.

The analysis and information provided in this report is derived from information prepared by a range of parties other than EMCa. EMCa disclaims liability for any errors or omissions, for the validity of information provided to EMCa by other parties, for the use of any information in this report by any party other than DPI and for the use of this report for any purpose other than the intended purpose.

In particular, this report is not intended to be used to support business cases or business investment decisions nor is it intended for use as evidence in relation to regulatory cases such as for cost recovery or tariff setting purposes. The suitability of estimates in this report has been assessed based on their materiality in relation to the overall costs of an AMI roll-out in Victoria. Therefore, cost estimates and opinions expressed in this report should be read in relation to the overall objective for this report and should not be read as definitive opinions in relation to costs for specific businesses or for specific items or systems. Readers of this report should be aware that it does not take into account business-specific circumstances.

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Table of Contents

1	Introduction	1
	1.1 Introduction.....	1
	1.2 Background.....	1
	1.3 Scope and context of this analysis	4
	1.4 Declaration of interests.....	5
2	Cost analysis.....	7
	2.1 Introduction.....	7
	2.2 Analysis approach.....	7
	2.3 Comparative benchmarking of transitional costs (2006-13).....	9
	2.4 Comparative benchmarking of ongoing costs (2014-15)	16
	2.5 Other observations.....	17
3	Summary	19

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1 Introduction

1.1 Introduction

Energy Market Consulting associates (EMCa) is pleased to present this report to the Victorian Department of Primary Industries (DPI). The purpose of the report is to provide comparative analysis of key components of the estimated costs of the Advanced Metering Infrastructure (AMI) program, following release of the AER's Draft Determination on metering budgets and charges for the period 2012-15¹.

1.2 Background

1.2.1 Victorian electricity sector and the AMI program

The Victorian electricity sector contains approximately 2.6 million "small customer" supply points². Before commencement of the AMI program, these were metered using around 2.9 million manually-read accumulation meters³ that provide only the total usage in the time between readings (mostly quarterly). These manually-read meters are in the process of being replaced with AMI, which will provide half-hourly consumption information to DBs by

¹ *Draft Determination, Victorian Advanced Metering Infrastructure Review, 2012-15 Budget and Charges Applications* (AER, 28th July 2011)

² Customers using less than 160 MWh of electricity per year

³ Some customers have more than one meter, each measuring different loads which are charged at different tariffs. In many cases premises that are currently dual-metered require only one AMI meter.

the beginning of the next day. The deployment of this infrastructure commenced in late 2009 and is to be completed by 31st December 2013, by which time it is estimated that (with customer growth) there will be around 2.7 million supply points requiring around 2.9 million AMI meters.

The AER was charged by the Victorian government with determining metering charges for the period 2010-11, and made a determination in October 2009 for the period 2010-2011, and a revised determination for the same period, in October 2010⁴.

In February 2011 DBs submitted their budget and charges applications to the AER for the period 2012-15. The current analysis is based on information provided in those submissions⁵, the AER's Draft Determination on those submissions and the report by Impaq Consulting, as AER's consultant, on its detailed analysis of those submissions⁶.

1.2.2 Overview of AMI

An Advanced Metering Infrastructure comprises AMI meters, which incorporate communications devices, together with a communications infrastructure to control the meters, upload meter reading data and to enable non metrology-related "smart" functionalities, such as remote disconnection/reconnection and outage detection.

The major components of an AMI are shown in figure 1.

The majority of AMI deployment costs involve supply of the meters and their installation, the costs of establishing a two-way communications network to those meters with an associated "Network Management System" (NMS) and a "Meter Data Management System" (MDMS) to store the metering and associated data.

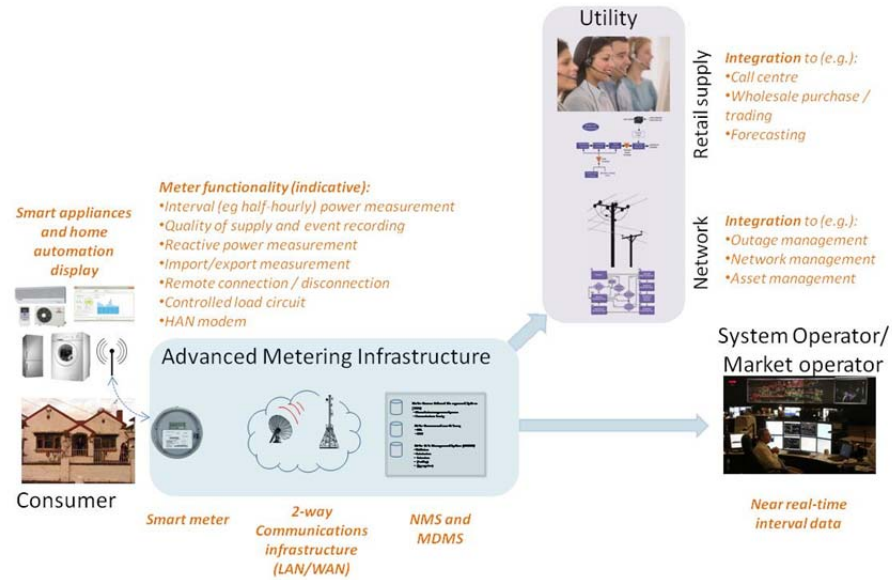
The Victorian AMI meters are also capable of communicating within the home (as part of Home Area Networks or HANs), enabling further capabilities for in-home monitoring and control of electricity consumption.

⁴ The revised determination took account of reported actual costs for 2009 together with revised budgets for 2010 and 2011

⁵ DBs' submissions, including spreadsheets containing detailed cost information (the budget and charges models) are available on the AER's website at <http://www.aer.gov.au/content/index.phtml/itemId/743595>. The models supporting these 2012-15 budget and charges applications also included DBs' updated costs for the period 2010-11

⁶ *Review of DNSPs AMI Budget Submissions for 2012 to 2015. Version 2.2* (Impaq Consulting, 20 July 2011)

Figure 1: Advanced Metering Infrastructure - components and functionality



Source: EMCa

Back-end information systems are an integral part of AMI. AMI meters need to interface with new information systems (such as those that manage and monitor the fleet of meters and store and verify the meter readings) and with existing information systems within each DB⁷. Modifications to existing information systems can also be required in order to enable certain “smart” functionalities and to make use of the additional information and control capabilities of AMI. AMI information systems also need to interface with other parties, such as retailers and with the electricity market operator⁸ and utilisation of AMI data involves further systems changes in those organisations.

⁷ Examples include Distribution Management Systems, Outage Management Systems, Asset Management Systems and Performance Reporting Systems.

⁸ The Australian Energy Market Operator (AEMO)

1.3 Scope and context of this analysis

Objectives of this analysis

The primary objective of our analysis is to provide an indicative comparison between DBs of their submitted costs and of the costs as determined in the AER's Draft Determination.

The AER, informed by its consultant, has undertaken a component-level assessment of the submitted costs, based on interpretation of the relevant regulatory instruments, primarily Orders in Council. Our benchmarking comparisons are intended to provide perspective on the submitted costs and the costs as adjusted by the AER in its Draft Determination; they are not intended as definitive estimates of these costs or as a substitute for the component-level analysis that the AER has undertaken.

The scope of this report does not include a comprehensive review of the AER's Draft Determination and associated consultant's report. Accordingly, this report should be read only as an analysis and presentation of selected information in the Draft Determination and no view is expressed regarding the determination itself.

This assessment is being undertaken while the DBs' costs are under review by the AER. Our assessment may change following the AER's final determination.

Our experience with previous AMI cost analysis

EMCa has previously undertaken analysis of the costs of the Victorian AMI program, commencing with an analysis for the Ministerial Council on Energy (MCE) of the transitional costs of the program⁹. Through subsequent work for DPI, EMCa has undertaken updated analyses of the costs of the program based on information provided by the DBs to the Essential Services Commission (ESC), budget and charges applications by the DBs and determinations by the AER¹⁰.

We are familiar with the structure and quantum of cost information provided by DBs to the AER and of the AER's determinations on previous cost

⁹ *Cost Benefit Analysis of Smart Metering and Direct Load Control; Work Stream 6: Transitional Implementation Costs; Phase 2 Consultation report: Assessment of National and Jurisdictional Costs; A Report to the Ministerial Council on Energy* (EMCa, February 2008)

¹⁰ *Updated assessment of AMI costs for Victoria, A report to the Victorian Department of Primary Industries (DPI)*, (EMCa, June 2010)

information provided to it. We have applied similar analysis to the current cost information, including adjustments where required to facilitate comparisons between the DBs on a consistent basis.

1.4 Declaration of interests

EMCa notes for the public record, that it is currently providing technical assistance to the AER in relation to its determination of revenue for the Queensland electricity transmission business (Powerlink) for the period 2012/13 to 2016/17.

EMCa notes for the public record that Impaq Consulting has previously provided sub-consultancy services to EMCa in regards to smart metering assessments.

In the current work, EMCa is not conducting an assessment of the AER's Draft Determination or of Impaq Consulting's report to the AER. EMCa has used these as data sources.

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2 Cost analysis

2.1 Introduction

In this section we report on our analysis of cost information from DBs' submissions and from the Draft Determination. There are four further parts to this section:

- An overview of our analysis approach;
- Comparative benchmarking of transitional costs;
- Comparative benchmarking of ongoing costs;
- Observations on other matters arising from the Draft Determination.

2.2 Analysis approach

2.2.1 Cost definition

This analysis is based on costs submitted for metering charge determination purposes, and which comprise all costs that are considered to be required to provide metering services. These comprise costs for AMI, and some non-AMI costs which will remain until all meters are AMI¹¹. In our cost

¹¹ For example, manual meter reading costs

comparisons we have separated out non-AMI meter costs¹² compare only AMI meter costs (which in any case constitute the majority of costs).

2.2.2 Desktop study

The analysis in this report has been undertaken as a desktop study. Our primary input sources are the documents and models provided by the DBs as part of their applications to the AER, the AER's Draft Determination and information in the Impaq Consulting report as the primary inputs. This is publically available information.

The cost estimates in this report are largely future estimates, and are therefore subject to estimation uncertainty.

EMCa has not approached DBs or any other party to seek explanations for cost differences or to obtain a second opinion on the appropriateness of cost comparisons or cost forecasts. Independent investigation would be required to support any policy or regulatory decision, which should not be made by reference to information or analysis in this report alone.

2.2.3 Time period and cost reference point

While this analysis focuses on the costs provided for the 2012-15 charges determination, it also relies on previous budget submissions and budget determinations where required to provide a "complete" view on the costs of the AMI transition program. In general we rely on the costs determined by the AER for periods up to and including 2009, since these are now finally determined based on actual costs submitted. For 2010 and 2011 costs, the AER has determined charges based on submitted DB estimates and the AER will assess actual costs in a "revised" charges decision to be made in 2012.

As part of the 2012-15 determination, DBs have provided updated estimates of 2010 and 2011 costs, and these differ from the ex-ante budgets determined by the AER. Although they are not part of the current determination, we have highlighted these costs where the differences appear material and since the actual costs for this period will be considered by the AER in 2012.

All costs in this report (unless otherwise specified) are expressed in \$A September 2011 real terms (consistent with the 2011 AER determination process). We have not undertaken a full lifecycle costs analysis in this report, and all costs are presented in undiscounted terms.

¹² i.e. accumulation meters and manually read interval meters

2.3 Comparative benchmarking of transitional costs (2006-13)

2.3.1 Benchmarking methodology

In the following benchmarking section, we have disaggregated AMI cost estimates to the following level of detail:

- Metering costs (with supply and installation separated where data allows);
- Communications system costs (supply and installation);
- IT system capex;
- Program Management;
- Transitional opex.

The benchmark cost comparisons are solely based on comparisons between the costs for the different DBs; we have not sought to compare these costs with any external benchmarks.

For meter and communications supply and installation, it is meaningful to examine and compare transitional costs within the time period of the current AER review (i.e. for 2012-13) since these costs are largely a function of the numbers of meters being installed in each time period.

For IT and program management costs it is more meaningful to examine costs for the whole transitional period, since these are front-loaded and their timing within the transition period varies between the DBs. Therefore our primary benchmarking for these costs is for the period 2006-2013, and comprises both historical and future cost estimates.

DBs have categorised program management costs in different ways, with one DB treating it as opex, two others treating it initially as opex and then later as capex, and two others treating it as capex throughout. To avoid this distorting comparisons, we have removed program management from opex (where so categorised) and have categorised it for all DBs as “program management capex”.

2.3.2 Comparative benchmark overview

The following diagram shows our assessment of the unit costs implied by the each cost component of the DBs' costs. These costs are the cost *per NMI*¹³ supplied; that is, they are normalised to adjust for the different customer bases of the different DBs.

In the diagrams which follow, we have highlighted "outliers" as follows:

- In comparing "as-submitted costs", we have determined the average per-customer cost for the "lowest three" of the five DBs. We have highlighted other DBs' costs as being "outliers" if their cost exceeds this average by more than 10%;
- In comparing costs as determined by the AER¹⁴, we have highlighted those costs that exceed the average costs "as submitted" by the "lowest three" DBs, that is, without the 10% tolerance¹⁵.

In this way, we have established a set of "peer comparators" from within the range of DB information provided, with some tolerance to allow for anomalies in measurement and definition. These comparators should be considered indicative rather than definitive; however they provide a useful and valid means of drawing attention to areas of focus for any review.

In highlighting outliers resulting from AER decisions, we aim to identify those DBs for which relevant cost components as determined by the AER still exceed those of peer group comparators.

Comparative benchmarking does not explain why cost differences are observed. In some cases the reasons for differences may be intuitive – for example we would expect that certain deployment costs would be higher for the two "rural" DBs (Power and SP AusNet). In other cases, the reasons for differences may require further examination and in some of these cases, the reasons may already have been identified by the AER or its consultant.

¹³ For most practical purposes, a NMI can be considered as a single customer premises, therefore we will use the term "per customer" as a common-language analogue for per NMI.

¹⁴ This includes costs as determined following the AER's review of actual costs submitted by the DBs, to 2009, costs determined by the AER following its review of forecasts submitted by the DBs for 2010 and 2011, and costs according to the current Draft Determination for 2012 and 2013.

¹⁵ We will refer to the non-outliers in this and the previous definition as the "peer group comparators"

In our report, we have not sought to explain benchmarking results by reference to the AER's determination or Impaq Consulting's report, or through our own investigations.

2.3.3 Aggregate capex and opex

Figure 2 shows the benchmarked total transitional capex, opex and total transitional costs compared across the five DBs. The benchmarks are based on:

- Costs for 2010-13 as submitted by the DBs for the 2012-15 charges determination, with preceding costs (i.e. up to 2009) as now fixed by the AER;
- Costs for 2010-13 as per the AER's determinations (including relevant years from the current 2012-15 Draft Determination), with preceding costs as above.

Figure 2: Per-customer comparisons of capex and opex for transition period (2006-13)¹⁶

	Powercor		Citipower		Jemena		UED		SP AusNet		Average (5)	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
Total CAPEX	630	535	639	555	678	608	569	477	843	658	675	563
Transitional OPEX	163	120	188	132	239	210	173	132	172	167	179	147
Total Transitional Cost	792	655	826	687	917	818	742	609	1,015	826	854	709

The “heat map” diagram shows that SP AusNet's submitted costs for 2012-13 represent the highest per-customer transitional cost of the five DBs. The main contributor to this is its proposed capex, which also is the highest of the five DBs. Jemena's as-submitted transitional costs represent the second-highest per-customer costs, with the second-highest per-customer capex and the highest per-customer opex.

The AER's determinations would maintain this ranking, despite the AER's significant Draft Determination reduction in SP AusNet's capex, and per customer costs for both businesses would still exceed the peer group comparator. This is due to capex costs remaining an outlier for SP AusNet and opex costs remaining an outlier for Jemena.

¹⁶ As per section 2.3.1, Program Management (where presented as opex by some DBs) has been transferred to capex to facilitate comparisons between DBs. The aggregate of capex and opex is unaffected. Accumulation meter costs are excluded. The “average” is a weighted average and may differ from the arithmetic average.

Powercor, which along with SP AusNet has a large rural customer base, nevertheless has transitional costs that are consistent with peer group comparators, both “as submitted” and based on the Draft Determination.

Citipower’s submitted per-customer opex presents as an “outlier”. The AER’s Draft Determination would result in this cost being consistent with peer group comparators.

2.3.4 Meters supply and installation

Meter supply and installation costs can be compared for the specific part of the transition period covered by the Draft Determination (i.e. for 2012-13 only) because they are closely related to roll-out volumes (which were provided by the DBs). Figure 3 shows the heat map for per-customer costs as-submitted and as per the Draft Determination.

Figure 3: Per-customer comparisons of meter supply and installation costs (2012-13)

	Powercor		Citipower		Jemena		UED		SP AusNet	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
Meters - supply	232	190	207	170	200	137	216	136	269	170
Meters - installation	168	76	143	59	103	75	94	63	89	83
Metering - sub total	400	266	350	229	303	212	310	199	358	252

Submitted meter supply costs for SP AusNet and Powercor are “outliers” in this analysis. However based on the Draft Determination, all such costs would be consistent with peer group comparators.

Submitted meter installation costs for Powercor and Citipower are outliers; however again the Draft Determination installation costs for these DBs would be consistent with peer group comparators.

The meter supply and installation costs approved in the Draft Determination are significantly lower than were submitted. This applies particularly for SP AusNet meter supply (37% lower) and for Powercor and Citipower installation costs (over 50% lower). Jemena and UED’s determined meter supply costs would also be more than 30% lower than as-submitted and over \$30/customer lower than the determined cost for the next-lowest DBs (Citipower and SP AusNet).

The meter supply and installation costs can also be compared with those approved by the AER for the period to 2011. We do not have visibility of these costs separately for meter supply and meter installation; however at an aggregate level, the DBs’ as-submitted meter and installation costs per

customer for 2012-13 are 19% less, and the Draft Determination costs 45% less, than those approved by the AER for the previous period (i.e. to 2011).

2.3.5 Communications

Communications costs, like meters and IT, are largely related to the roll-out timetable and therefore can be analysed period-by-period. Comparisons for the whole transition period and for the period subject to the current AER review, are shown in the figure below.

Figure 4: Per customer comparisons of communications costs (2006-13 and 2012-13)¹⁷

	Powercor		Citipower		Jemena		UED		SP AusNet	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
Communication (2012-13)	48	17	11	3	22	11	36	28	95	95
Communication (2006-13)	40	30	17	10	15	19	23	26	103	99

Looking at both time-periods, SP AusNet's per-customer communications costs are four to five times those of their peer comparators, and more than twice that submitted by the other "rural" DB, Powercor. In the AER's Draft Determination the AER has accepted the 2012-13 costs submitted by SP AusNet, as meeting the required regulatory tests¹⁸.

Whilst our analysis does not constitute a regulatory legal analysis, our reading of the prudency requirements under the revised Order in Council¹⁹ is that the AER may find expenditure was "not prudent" if it fails any one of the three tests listed (and which are joined by the word "or"). The AER has not assessed SP AusNet's communications system capex under the "commercial standard" test, which would have required consideration as to whether

¹⁷ The "NMI" divisors are the "NMIs installed" in each period, based on DB submissions

¹⁸ As described in the Draft Determination, these comprise a "scope test", followed by a "prudency" test which in turn comprises a "competitive tender" test, an "expenditure incurred" test and a "commercial standard" test

¹⁹ Order in Council August 2007, revised November 2008 and January 2009

“....incurring the expenditure will involve a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances”.

The reasoning given in the Draft Determination is that the AER:

“did not establish that SPAusNet’s contract for the manufacture of AMI communications technology was not let in accordance with a competitive tendering process”²⁰.

The AER then applied the “commercial standard” test only

“to the [following] items that were not let in accordance with a competitive tender process....”²¹

Powercor’s as-submitted communications costs are also outliers relative to peer comparators. The AER’s Draft Determination for Powerlink communications is 65% less than its submitted cost. At this level it would not be an outlier and on a per-customer basis would be less than 20% that of its rural comparator, SP AusNet.

UED’s as-submitted costs are outliers relative to peers; UED has a significant territory of lower customer density than Jemena and Citipower.

With the exception of SP AusNet and (to a lesser extent) UED, the AER’s Draft Determination represents very significantly lower communications costs than were submitted by the DBs.

We have compared the per-customer communications capex costs for 2012-13 with those in the previous period (2010-11). Despite very significant variation between DBs, the weighted average of the Draft Determination communications capex cost is \$40/NMI installed, which is very consistent with DBs’ February 2011 submitted costs for 2010-11 of \$39/NMI, and with the AER’s 2010 determination of \$46/NMI installed in that period (2010-11).

2.3.6 IT systems

The DBs have largely front-loaded their IT expenditure and over 80% of the transitional IT expenditure has already been incurred (or will be before the 2012-13 regulatory period commences). We have therefore assessed the IT expenditure across the whole transition period, as shown in the following table.

²⁰ AER Draft determination, p67

²¹ AER Draft Determination, p104

Figure 5: Per-customer comparisons of IT cost (2006-13)

	Powercor		Citipower		Jemena		UED		SP AusNet	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
IT (2006-13)	128	105	179	149	120	150	84	86	166	164

Citipower, SP AusNet and Powercor all indicate as “outliers” in this analysis, although Powercor’s per-customer cost is only just above that for Jemena. The AER’s Draft Determination represents a reduction of the order of \$7 to \$28 per customer for Powercor, Citipower and UED, and little or no change to the IT costs for SP AusNet and Jemena.

We have previously analysed IT costs at a system level, making assessments of the extent to which specific systems contribute to provision of a metering service as opposed to facilitating management of the network or enabling lower-cost “alternative control services”. Our assessments were made on the assumption that:

- Outage management, performance and regulatory reporting systems and revenue management systems costs would tend not to be economic costs attributable to an AMI metering service;
- Mobility / workforce scheduling systems would not tend to be used solely for provision of an AMI metering service, although investment in such systems (where they are not already present) would be expected to make for more efficient deployment of AMI;
- Asset management systems are partially utilised in providing a metering service.

We also made proportionate adjustments to systems integration and IT hardware costs, consistent with the “systems” allocations above. In the cost update analysis that we reported in June 2010, these assumptions led us to categorise approximately one third of IT costs as relating to distribution services rather than as incremental economic costs resulting from the deployment of AMI metering services.

We have applied similar systems-based allocations to DBs’ 2012-13 submitted IT expenditure, and we find that this would result in 27% of such expenditure being classified as “non-AMI”. Such a re-classification would result in an aggregate IT cost (across all five DBs) that is very similar to the AER’s Draft Determination costs.

The Draft Determination makes almost no adjustment to SP AusNet’s proposed IT, which would leave it with the highest per-customer cost. We also note some “outlier” costs at a system level, including SP AusNet’s “meter data management system” (MDMS) costs which are several times the cost of MDMS systems reported by other DBs.

Jemena appears to have spent less on IT than the AER had previously determined therefore, while the “as-determined” costs across the whole transition period (i.e. from 2006-2013) appear high, this is largely a legacy of the AER’s 2010-11 determination. We would expect this to be reduced when in 2012 the AER assesses actual expenditures for this period, as already reported by Jemena, in its Revised Decision.

2.3.7 Program management

Jemena, UED and SP AusNet’s program management costs are significantly higher than for Powercor and Citipower. The AER’s Draft Determination would significantly reduce this amount for SP AusNet. Jemena and UED’s program management costs, while also reduced substantially from the submitted costs, would still remain significantly higher than those of the other three DBs.

Figure 6: Per-customer comparisons of Program Management cost (2006-13)

	Powercor		Citipower		Jemena		UED		SP AusNet	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
Program Management (2006-13)	68	65	68	66	246	199	159	120	154	74

2.4 Comparative benchmarking of ongoing costs (2014-15)

The current determination includes two years (2014 and 2015) of “ongoing” operation of the AMI-based metering service. As can be seen from figure 7, there are significant per-customer cost variations between the DBs, with Citipower and Jemena’s as-submitted opex and Citipower, Jemena and Powercor’s capex presenting as outliers relative to peer comparators.

Figure 7: Per-customer comparisons of ongoing capex and opex (2014-15)

	Powercor		Citipower		Jemena		UED		SP AusNet	
	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations	per DB submission	per AER determinations
Ongoing CAPEX (2014-15)	40	18	49	16	48	25	31	14	17	11
Ongoing OPEX (2014-15)	72	42	87	41	101	61	67	40	75	29
Total Ongoing Cost	112	60	136	57	149	86	98	54	92	40

The AER's Draft Determination involves reductions of approximately 50% compared with the as-submitted costs and on this basis the ongoing costs for all DBs would be below the "peer comparator" submitted costs. On a per-customer basis, AER-determined ongoing opex and ongoing capex for Powercor, Citipower and UED would each be similar, with higher costs for Jemena and lower costs for SPAusNet.

2.5 Other observations

2.5.1 Specification of charges for UED

We have observed that the AER's Final Determination for UED (in October 2009) approved charges on a \$/NMI basis²². In the current Draft Determination the AER proposes to approve charges for UED on a \$/meter basis²³ and a 2013 figure of 659,246 "meters"²⁴ is used as the basis for the AER's charges determination. The number of "meters" for the year 2011, in UED's 2011 submission (646,256) is the same as the number of "NMIs" forecast for that year in UED's 2009 submission. Given that the meters:NMI ratio is likely to be greater than 1.1, a determination specifying charges on a per meter basis would appear to allow over-recovery, if the meter numbers used in the calculation are in fact numbers if NMIs.

2.5.2 AMI meter deployments

Although data in DBs' 2012-15 submissions is incomplete, it would appear that some DBs did not achieve the number of AMI deployments that their 2010-11 budgets were based on. The implication of this is that some costs

²² Ibid, Table 5: UED (\$/NMI) (page x); also Table 2.15 (page 16)

²³ Ibid, Table 6.14: AER Draft Determination meter charges (\$ per meter), page 44

²⁴ UED charges model 2011; AER website

that are being sought for 2012-15 are for deployments that were included in 2010-11 budgets.

We suggest that DPI consider this issue to ensure that the regulatory requirements on the AER would allow it to take this into account if appropriate, in its revised decision on this expenditure in 2012.

3 Summary

Comparative benchmarking indicates significant differences in metering costs, submitted by the DBs, on a per-customer basis.

The AER's Draft Determination for 2012-15 represents a reduction of \$477m (39%) from the budget of \$1.24 billion proposed by the DBs. We have compared costs from the Draft Determination at a component level and we make the following observations:

- meter supply costs and meter installation costs as budgeted in the Draft Determination would be more consistent between the DBs than those submitted. We note the considerable reduction by the AER to SP AusNet's meter supply costs;
- SP AusNet's communications costs would be four to five times that of peer comparators, and have not been adjusted in the Draft Determination;
- The relative per-customer cost for Powercor and UED communications capex appears counter-intuitive, with Powercor's determined cost per customer (covering a larger territory with lower customer density) being considerably below UED;
- SP AusNet's IT costs would be the highest of the DBs, and have not been adjusted in the Draft determination;
- Jemena's transitional opex cost would remain the highest;
- Ongoing opex costs, which are considerably reduced from those submitted, would be relatively consistent across four of the DBs, but with Jemena's ongoing capex and ongoing opex of the order of 40% to 50% higher than the other DBs.

Jemena and UED's Program Management costs over the whole transition period are significantly higher than those for the other three DBs. However

neither business has submitted a budget for Program Management in 2012-13, and these high cost estimates are based on previous determinations. Both businesses have submitted even higher actual costs for 2010-11 than the budgets the AER has previously determined and on which we base the “outlier” observation above.