Advanced Metering Infrastructure Roll-out Budget Application from Jemena Electricity Networks (Vic) Limited

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Contact Person
Anton Murashev

Title
Manager Asset Regulation & Strategy (JEN and AMI)

Phone Number
03 8544 9036

Email
anton.murashev@jemena.com.au

Jemena Electricity Networks (Vic) Limited
ABN 82 064 651 083

321 Ferntree Gully Road

Mt Waverley VIC 3149

Postal Address:
Locked Bag 7000

Mt Waverley

VIC 3149

Ph: (03) 8544 9000

Fax:(03) 8544 9888

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Executive Summary

This Budget Application sets out the proposed budget for Jemena Electricity Networks (JEN) to deliver Advanced Metering Infrastructure (AMI) in the initial AMI Budget Period. The Budget Application also provides a forecast of the number of metering installations that JEN proposes to install in each year of the initial AMI Budget Period.

JEN's proposed Total Opex and Capex for each year of the initial budget period is set out in Table 0-1 below. As required by the AER, the budget figures are in real 2008 dollars.

Table 0-1: Proposed Total Opex and Capex for Initial Budget Period

Budget	2009	2010	2011
Capital Expenditure	54,607,237	31,940,187	34,044,430
Maintenance and Operating Expenditure	3,920,761	8,738,339	13,463,729
Total Opex and Capex	**58,527,998**	**40,678,526**	**47,508,159**

The proposed Total Opex and Capex meets the scope and prudence tests set out in the Cost Recovery Order in Council and must therefore be approved.

The forecast of the number of metering installations that JEN proposes to install in each year of the initial budget period is provided in Table 0-2 below.

Table 0-2: Metering Installation Forecast

Calendar Year	2009	2010	2011
Meters to be installed	**18,920**	**38,523**	**113,304**

The proposed metering installation profile will ensure that JEN meets its roll-out targets, as set out in the Cost Recovery Order in Council.

1 Introduction

This document is Jemena Electricity Networks (Vic) Limited's (JEN) Initial AMI Budget Period Budget Application (Application) pursuant to clause 5A.1(a) of the Order Under Section 15A and Section 46D of the Electricity Industry Act 2000 made on 28 August 2007, as amended by the Advanced Metering Infrastructure Order in Council 2008 made on 25 November 2008 (CROIC). This Application covers costs for the period 1 January 2009 to 31 December 2011.

Confidential information in this document has been identified with bolded square brackets. This information is confidential because:

- The information enables unit price forecasts to be established for meters, installation services and IT systems and infrastructure which are yet to be tendered by JEN (or by others, on behalf of JEN). JEN does not want to prejudice any future competitive tender processes that JEN or other parties will conduct in relation to AMI.
- The information relates to the terms and conditions under which Alinta Asset Management (AAM) is providing asset management services for AIMRO. AAM competes for asset management services in a number of markets. Disclosing this information would prejudice AAM's competitive position in the market.

This section introduces the Application and provides a brief overview of:

- the background to the deployment of Advanced Metering Infrastructure (AMI) in Victoria
- the price review process under the preceding regulatory framework and how that process transitions into the budget application process
- JEN's AMI obligations
- the joint Advanced Interval Metering Roll Out (AIMRO) program to deliver AMI that JEN is undertaking with United Energy Distribution (UED).

Finally, the introduction also sets out the structure of this budget application.

1.1 AMI Background

In early 2006, the Victorian Government formally endorsed the deployment of Advanced Metering Infrastructure (AMI) to all Victorian electricity consumers consuming less than 160 MWh per annum. Subsequently, the Government established a legal mandate for distributors. The mandate defined a range of

requirements for the deployment of AMI, including the setting of minimum AMI functionality, performance and service levels and roll-out timelines.[1]

The mandate also defined a cost recovery framework for AMI. The nature of the cost recovery framework has changed significantly over time, with the approach moving from an incentive-based regime to a cost pass-through regime.

JEN's deployment will involve approximately 324,000 meters. To meet AMI obligations, there will be a major transformation of Victorian distribution businesses as they adopt leading edge meters and communications infrastructure and implement new information systems and business processes, roles and responsibilities. These technical and organisational changes will be implemented over a relatively short period.

JEN continues to be committed to meeting its AMI obligations by ensuring a robust, effective and commercial AMI solution is implemented to meet the high expectations of the roll-out. However, JEN has concerns that a number of legal and regulatory AMI uncertainties, which JEN had expected to be resolved prior to submitting this Application, have either not been resolved or are only now being addressed. As a direct result of this, JEN has had to make a number of assumptions. JEN has clearly set out its assumptions in this Application and, where appropriate, has provided additional information on the budget implications that would result, should those assumptions not hold.

1.2 Prior Price Review Process and Budget Application Process to Date

As the regulatory framework for AMI cost recovery has evolved, JEN (under its former name of Alinta AE) has previously participated in several AMI processes administered by the Essential Services Commission (ESC)[2]. Those processes culminated in three prior pricing submissions, namely:

- "Advanced Metering Infrastructure Pricing Proposal: Submission to the Essential Services Commission" (31 December 2007)[3]

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[1] Minimum AMI Functionality Specification for Victoria (Functionality Specification) originally published by the Department on 18 October 2007 and revised in September 2008, as approved by the Hon Peter Batchelor, Minister for Energy and Resources; and Orders in Council under section 15A and section 46D of the Electricity Industry Act 2000 originally published in the Victorian Government Gazette on 28 August 2007 (original CROIC) and 12 November 2007 (Specifications OIC). Both OICs were amended on 25 November 2008.

[2] At the time JEN was trading as Alinta AE or AAE. References to JEN throughout this application are to be taken as references to AAE, where appropriate.

[3] Clause 9.1(b) of the original CROIC required Victorian Distributors to submit to the Commission their proposed prices for the provision of metering services, including AIMRO,

- "AIMRO Program: Further Information on Costs – Submission prepared for Essential Services Commission" (12 March 2008)
- "Updated AMI Pricing Proposal: Submission prepared for Essential Services Commission" (18 June 2008)[4].

While those pricing submissions may be contextually relevant to the AER's consideration of this Budget Application, those submissions were made under a different regulatory framework (an incentive-based regime). In considering those prior submissions, it is important to remember that, since the time those submissions were made, many material changes have occurred. In particular, the mandated scope of AMI was changed by the Department of Primary Industries in September 2008. In addition, since June 2008, JEN has signed its Service Requirements Agreement with AAM, which in turn has progressed its procurement process; completing a number of tenders, signing contracts and updating cost estimates as additional information became available.

1.3 JEN's AMI Obligations

JEN's current obligations under the CROIC are:

- to use best endeavours to install AMI meters by 31 December 2013 for all customers with annual consumption of less than 160 MWh (for which JEN is the responsible person).
- to ensure its AMI meters meet the minimum functionality and service levels specified under the Functionality Specification and the Specifications OIC.
- to use best endeavours to observe the following percentages of the total number of AMI meters to be installed:[5]
    - by 30 June 2010 – 5 per cent,
    - by 31 December 2010 – 10 per cent
    - by 30 June 2011 – 25 per cent,
    - by 30 June 2012 – 60 per cent
    - by 30 June 2013 – 95 per cent
    - by 31 December 2013 – 100 per cent.

for customers with annual electricity consumption of less than 160 MWh, by 31 December 2007.

[4] This submission focused mainly on updating the cost estimates for the AMI roll-out as, at that stage, additional information was received, which allowed more accurate cost estimates to be made.

[5] Each number includes the previous percentage.

Not only does AMI require the deployment of new complex and advanced meters to replace all existing residential meters, AMI also requires JEN to:

- implement a large-scale, high-performance, two-way communications network (with 324,000 end points)
- establish new business processes for the roll-out and ongoing management of the new metering and communication environment
- provide metering data for each day by 9:00am the following day
- implement processes and information systems to capture data at half-hourly intervals (48 reads per meter per day)
- implement new information systems to validate, process and store the metering data
- establish new processes and systems to manage the new meter, network and systems environment and achieve associated service obligations
- establish business processes to ensure that the current manual meter-reading environment can be efficiently and effectively operated over the four-year period in which it is being replaced by AMI.

1.4 Joint AIMRO Program to Deliver AMI for JEN and UED

JEN's prior pricing proposals had explained that Alinta Asset Management Pty Ltd (AAM) has developed a joint program to manage the delivery of AMI for JEN and United Energy Distribution Pty Ltd (UED) (referred to below as either joint AIMRO program or program).

The program, including the cost-sharing arrangements, is described in more detail in Appendix A.

1.5 Application Structure and Overview

JEN's Application comprises this document and associated appendices. This document contains 5 sections:

- Section 2 explains JEN's interpretation of the AMI Regulatory Framework that now applies, as well as explaining in more detail the background to the current regulatory framework.
- Section 3 describes the arrangements that JEN has put in place to deliver the mandated AMI rollout.
- Section 4 provides the forecast of the number of metering installations that JEN proposes to install in each year of the initial budget period.
- Section 5 provides JEN's proposed budget for the Initial Budget Period, including the budget figures, how they were arrived at and the assumptions made in preparing those figures.

- Section 6 substantiates the proposed budget in terms of the relevant tests set out in the CROIC.

The CROIC specifically requires the provision of certain information. The information is provided in JEN's Application and the list below provides a guide to where the relevant information can be found:

- The process that is proposed (or in the case of contracts already entered into, has been used) for competitive tenders—Chapter 7 of Appendix A.
- A forecast of the number of metering installations—Section 4 of this document.
- Expenditure for Regulated Services for each year of the initial AMI budget period (distinguishing between capital expenditure and operating and maintenance expenditure)—Section 5 of this document.
- Total Opex and Capex for each year of the initial AMI budget period—Section 5 of this document.
- Information relating expenditure to scope—Chapter 5 of Appendix A.
- Filled out information templates—attached as a separate Microsoft Excel file.

2 AMI Regulatory Framework

The legal and regulatory instruments which support the Victorian AIMRO are:

- the Specifications OIC, the Functionality Specification and the Service Level Specification
- the CROIC
- the National Electricity Amendment (Victorian Jurisdictional Derogation (Advanced Metering Infrastructure Roll Out)) Rule 2009, approved by the Australian Energy Market Commission (AEMC).

Other significant legal and regulatory influences include:

- the National Electricity Market (NEM) Metrology Procedures
- the Victorian AMI Program
- the National Smart Metering Program[6].

This section briefly reviews these elements as they currently stand. JEN notes some ongoing uncertainty regarding many of these instruments and it has made assumptions in section 5.2 as to how to manage this uncertainty.

2.1 Specifications OIC, Functionality Specification and Service Levels Specification

The Specifications OIC was gazetted on 12 November 2007 and amended on 25 November 2008. It defines the minimum meter functionality and meter service levels to be provided by JEN by reference to the Functionality Specification[7] and the Service Levels Specification[8].

2.2 Cost Recovery Order in Council

The CROIC was originally gazetted on 28 August 2007 and prescribed an incentive-based framework under which distributors were to recover the cost of providing metering services to customers. However, on 25 November 2008, the CROIC was amended, fundamentally changing the cost recovery framework. The new framework is based on a cost pass-through, rather than an incentive-based approach.

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[6] http://share.nemmco.com.au/smartmetering/default.aspx.

[7] Department of Primary Industries, "Minimum AMI Functionality Specification (Victoria) – Release 1.1", September 2008 – previously published as release 1.0 in October 2007

[8] Department of Primary Industries, "Minimum AMI Service Levels Specification (Victoria) – Release 1.1", September 2008 – previously published as release 1.0 in October 2007.

The CROIC (clause 5A.1(a)) requires JEN to make this Application no later than 27 February 2009. The CROIC (clause 5B.3) also allows JEN to revise this application by 31 August 2009 where there is:

- a change in expenditure due to a contract being entered into between 27 February and 31 August, or
- a material change in a metering regulatory obligation or requirement.

The Cost Recovery OIC (clause 5F) also allows JEN to notify the AER of an actual or anticipated variance from its approved budget at any time after the AER makes a determination on the Application.

Clause 5C sets out the process the AER must follow in assessing the Application. A separate process is defined for setting charges, once a budget is approved (this is a separate process and, therefore, this Application does not deal with the issue of charges[9]).

In essence, the CROIC sets up a number of tests that the AER must apply to the budgeted expenditure, with the onus of proof in applying the tests being placed on the AER. That is, where the AER can establish that, for a particular amount of expenditure, the relevant test is not met, the AER may choose not to approve the amount in question. More specifically, under clause 5C.2, the budgeted expenditure proposed in the Application must be allowed, unless the AER establishes that the expenditure:

- is for activities outside the scope defined in Schedule 2, ("the scope test"), or
- is not prudent, as defined in clause 5C.3 ("the prudence test").

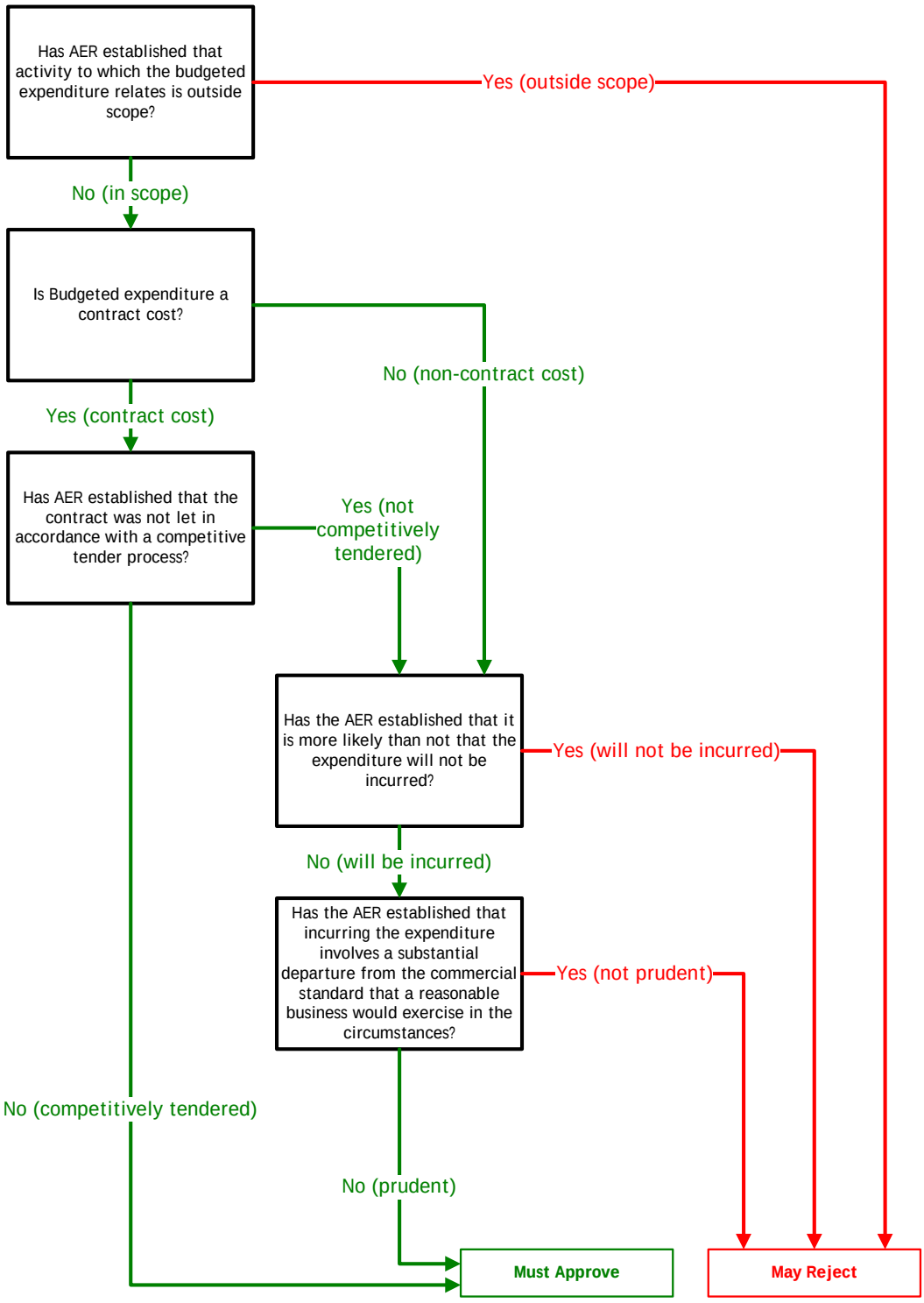
Clause 5C.3, in turn, defines expenditure to be prudent and provides that it must be approved by the AER, unless the AER establishes that:

- for expenditure that is a contract cost—that the contract was not let in accordance with a competitive tender process ("competitive tender prudence test"), or
- for expenditure that is not a contract cost (or is a contract cost, but the AER has established that the contract was not let in accordance with a competitive tender process)—it is more likely than not that the expenditure will not be incurred, or that incurring the expenditure involves a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances ("commercial reasonableness prudence test").

The process described above is summarised in Figure 2-1 below.

[9] Pursuant to clause 5A.1(b) of the CROIC JEN will be submitting a charges application to the AER not later than 1 June 2009.

Figure 2-1: Process for Assessing the Application



2.3 Exclusivity Derogation

The Victorian Government's stated position is that the Victorian distributors should have primary responsibility for the mass installation of AMI meters for the initial roll-out period, plus one further year (i.e. 2009 to 2014 based on the current time-frame). On 3 November 2007, the Victorian Government wrote to the Australian Energy Market Commission (AEMC) with a Rule change proposal seeking a jurisdictional derogation from the National Electricity Rules (NER).[10] The proposed derogation would establish the local network service provider as the exclusive responsible party for small customer metrology and, in particular, for the roll-out of AMI.

On 29 January 2009, the Australian Energy Market Commission approved the derogation proposal and gave notice under sections 102 and 103 of the National Electricity Law (NEL) making the National Electricity Amendment (Victorian Jurisdictional Derogation (Advanced Metering Infrastructure Roll Out)) Rule 2009 (Exclusivity Derogation) and related Rule determination.

2.4 NEM Metrology Procedures

Parties that provide metering services in the NEM must comply with the Metrology Procedures, which are part of the NER. Distributors, as providers of AMI systems, will be under an obligation to comply with these rules and procedures and any subsequent amendments.

Consultation is currently under way on draft changes to these procedures to accommodate the provision of AMI services in Victoria in accordance with the mandated Functionality Specification and Service Level Specification. The final decision on this matter is due shortly and will likely be made before 30 August 2009.

2.5 The Victorian AMI Program

The Victorian AMI program is a collaborative program involving the Victorian Government, Victorian distributors, retailers, inter-state energy businesses and consumer groups. The Victorian AMI Industry Steering Committee (ISC) is leading the development of the Victorian AMI program and creates a forum for distribution and retail business to identify risks and resolve issues common to all stakeholders. A number of work streams have been generated to develop the detailed business requirements and regulatory changes and the implementation plan for the deployment and operation of AMI. The Victorian AMI program ISC will also oversee the deployment of AMI over the roll out period and report against the program milestones.

[10] Department of Primary Industries: Victorian Government Rule Change Proposal (Jurisdictional Derogation) – Advanced Metering Infrastructure Rollout, August 2007.

The Industry Steering Committee (ISC) governs the Victorian AMI Program, approves its plans and makes strategic decisions on its approach. The Cost Recovery Order in Council bestows two specific tasks upon the ISC:

- **Advises on the achievement of timeframes and targets** – The ISC may consider and assess the materiality of issues raised by members that may pose a significant risk to the achievement of timeframes and targets set out in the CROIC and the ISC may make recommendations to the Minister in relation to amendment or otherwise of the timeframes and targets[11].
- **Recommends trials** – The CROIC allows distributors to recover the costs of technology and customer response trials that the ISC recommends and the Department of Primary Industry agrees[12].

Following a review by the Minister (potentially initiated by an ISC recommendation), the timeframes and targets included in the CROIC may be changed by a further Order in Council made under section 46D of the Act.

The delivery of business as usual requirements will depend on the timely agreement of the requirements, amendments to the regulatory instruments and successful implementation of the changes in industry IT systems and processes. The Victorian AMI program recognises and monitors these external dependencies which may influence the timeframe and scope of the AMI roll out.

The availability of the metering technology components and resources to implement the mass rollout, and the ability of the technology to meet functional and performance requirements, all pose risks to the overall Victorian program timeframes. Additional risks to the program include consumer impacts and industry readiness for the higher volumes of data processing.

The CROIC provides for the Victorian AMI Program ISC to advise the Minister of any impacts to the rollout timeframes and targets. Where material issues arise with the overall Victorian Program, there may be consequential impacts to JEN's regulatory obligations and, as a result, the scope and cost of the joint AIMRO program.

2.6 National Smart Metering Program

At the national level, the Ministerial Council on Energy (MCE) Standing Committee of Officials has reviewed the costs and benefits of a national roll-out of interval meters with two way communications. This project - under the auspices of the MCE - has been coincident with the development of the Victorian AIMRO.

On 13 June 2008, the Ministers of the MCE issued a communiqué, stating that:

[11] Clause 2.3 of the CROIC

[12] Clause 5D.4(d) of the CROIC

> Ministers committed to development of a consistent national framework for smart meters in the National Electricity Market, supporting distributors to be responsible for the roll-out of smart meters.
>
> …To maximise the benefits of the roll-out, MCE will develop a consistent national framework for smart meters in the National Electricity Market (which excludes WA) with the obligation for deployment placed on distributors and appropriate cost recovery…[13]

This national smart metering initiative has significant implications for the Victorian AIMRO. The National Program is ongoing and may have a significant impact on JEN's roll out of AMI.

JEN considers it is most desirable for the Victorian AMI framework (including the CROIC and the Specifications OIC) and the national smart metering framework to be aligned. There are substantial risks in any misalignment, both to Victorian and national market participants.[14] However, it needs to be recognised that the timing of any subsequent Rule development process under the MCE initiative has precluded taking into account future developments at the national level.

[13] Ministerial Council on Energy, Communique, June 2008, Canberra, pages 1 and 4.

[14] For example, from incompatibility and stranding of technology.

3 AMI Delivery Arrangements

This section explains the arrangements JEN has put in place to deliver the mandated AMI rollout.

3.1 Ownership Structure and Management

JEN is a wholly owned subsidiary of Jemena Limited that, in turn, is a wholly owned subsidiary of SPI (Australia) Assets Pty Ltd (SPIAA).

Figure 3-1 shows the current ownership structure.

Jemena Limited owns 100 percent of Jemena Asset Management Pty Ltd (JAM). Also, through its wholly-owned subsidiary, Jemena Asset Management Holdings Pty Ltd, Jemena Limited holds a 100% economic interest in AAM's eastern states contracts.

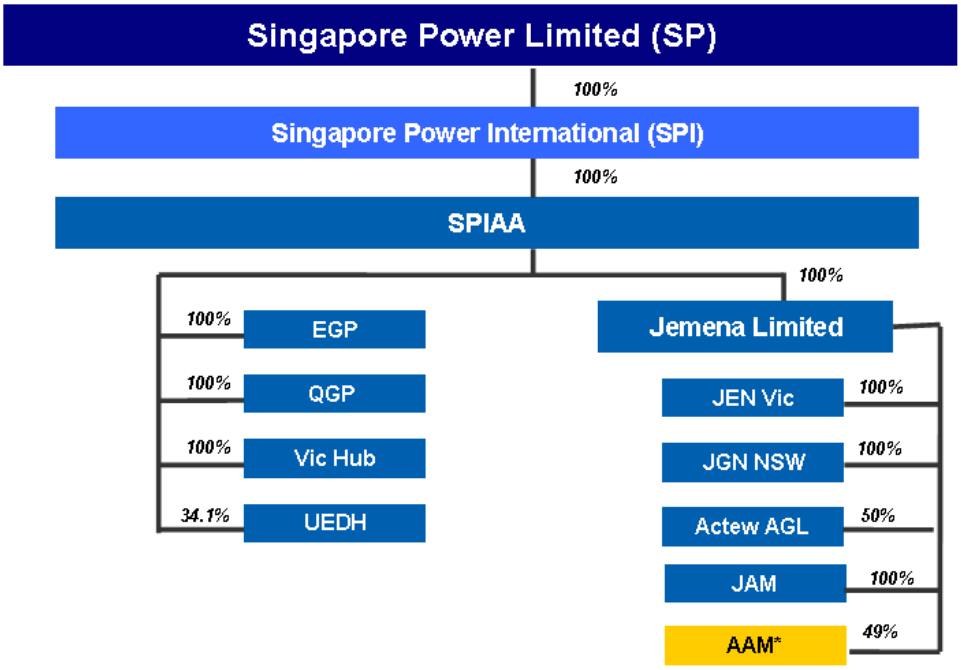
Since 2000, JEN outsourced its asset management services to JAM (formerly as Agility Management Pty Limited). The scope of JAM's asset management does not extend to AIMRO services.

In a cost-sharing arrangement with UED (the arrangement is discussed in more detail in Section 3.2.2 below and in Appendix A), JEN has outsourced the delivery of AIMRO to Alinta Asset Management Pty Ltd (AAM) under a commercial AIMRO Service Requirements Agreement (SRA).[15] The SRA applies for the duration of the initial budget period. A similar SRA was also agreed between UED and AAM.

The SRA between JEN and AAM sets out a transparent arm's-length governance arrangement between AAM, JEN and UED in relation to the AIMRO program. The SRA is discussed in more detail is sections 3.2 and 3.3 below.

[15] The SRA is attached with this Budget Application as Appendix B

Figure 3-1: JEN ownership structure



* Jemena Limited holds a 100% economic interest in AAM's eastern states contracts; Babcock and Brown Infrastructure will retain 51% of AAM until consents are obtained for the transfer of those shares to an entity that is 100% owned by Jemena Limited.

3.2 Joint AIMRO Program

To deliver on its obligations under the two SRAs with JEN and UED, AAM has created a comprehensive and professional program (joint AIMRO program, joint program) to plan, develop and implement a solution to meet JEN's and UED's AMI obligations established through the Specifications OIC, the Functionality Specification and the CROIC.

The program is governed by a steering committee comprising executive managers representing JEN, UED and AAM. Reporting to the steering committee is a program director responsible for overall management.

The joint program covers:

- the selection, procurement and installation of:
  - meters
  - communications systems
  - IT systems
- participation in industry related activities related to AIMRO
- business process change design, planning and implementation

Detailed information on the joint program, including its activities and costs, is provided in Appendix A.

3.2.1 Governance Arrangements

The SRA sets up a governance structure for the joint program that:

- establishes a joint Steering Committee to govern the program, with representatives from AAM, JEN and UED
- makes the Steering Committee responsible for:
    - endorsing decisions relating to scope, determination of deliverables and timescales for the joint program
    - defining the responsibilities and roles of AAM, JEN and UED
    - reviewing overall joint program operation and performance, including achievement of program objectives
    - endorsing the joint program management plans
    - endorsing the project budgets
    - managing the flow of information between AAM, JEN and UED
    - endorsing the vendor contracting strategy and other relevant decisions relating to contracts
- requires decisions of the Steering Committee to be unanimous and, where a unanimous decision cannot be reached, sets up a dispute resolution procedure
- requires AAM to be open and transparent in its management of the program, including:
    - keeping and providing access to its own and contractor's records
    - allowing records to be audited.

3.2.2 JEN's Costs of Participating in the Joint Program

In addition to governance arrangements, JEN's SRA with AAM also defines the costs to JEN of participating in the joint program, which comprise of two components:

- JEN's allocated share of the direct incremental costs (to AAM) of undertaking the joint program on JEN's and UED's networks. We refer to JEN's share of these direct incremental costs as "AAM base costs". **[ ]**
- A management fee paid to AAM for the delivery of the joint AIMRO program. **[ ]**

3.2.2.1 AAM Base Costs

AAM base costs are JEN's allocated share of the direct incremental costs AAM incurs in delivering the joint AIMRO program on JEN's and UED's networks. AAM base costs do not include indirect incremental costs incurred by AAM, such as corporate overheads.

The agreed cost sharing of AAM's direct incremental costs between JEN and UED reflects a simple pro-rata cost allocation based on the costs that each party would have incurred without cost sharing (i.e. - if a stand-alone AMI solution were required). For the initial budget period, the cost sharing arrangements established in JEN's SRA with AAM apply. These cost sharing arrangements are summarised in **[**

]

3.2.2.2 AAM Management Fee

In addition to requiring JEN to pay a share of AAM's direct incremental costs, the SRA requires JEN to pay AAM a management fee for the delivery of the AIMRO program on JEN's network. [

]

3.3 Features of the SRA

The JEN's SRA with AAM provides significant value to JEN by requiring AAM to deliver AIMRO on JEN's electricity distribution network to satisfy JEN's statutory and regulatory obligations to deploy AMI in Victoria. The SRA ensures that AIMRO on JEN's network is delivered at least cost and to the appropriate standards by explicitly requiring AAM to deliver AIMRO:

- in accordance with good industry practice (exercising the degree of skill, diligence, prudence and foresight that reasonably would be expected from an experienced project manager)
- in accordance with the relevant environmental management, quality assurance and occupational health and safety plans
- in a timely manner
- in a commercial, prudent and reasonable manner, and
- using staff for each task with the requisite level of professional skill, customer service orientation, care and diligence which maybe reasonably expected of a skilled, professional person suitably qualified and experienced in the performance of such tasks.

4 Metering Installations Forecast

The forecast of the number of metering installations that JEN proposes to install in each year of the initial budget period is provided in Table 4-1 below. The table includes both new connections and replacement meters.

Table 4-1: Metering Installation Forecast

Calendar Year	2009	2010	2011
	Number of Meters Installed		
AMI Meters			
Single Phase	7,794	29,917	87,992
Single Phase Off Peak	1,185	4,550	13,381
Three Phase Direct Connect	1,004	3,852	11,330
Three Phase CT Connect	53	204	601
AMI Meters Sub-total	**10,036**	**38,523**	**113,304**
Accumulation Meters			
Single Phase	4,091		
Single Phase Off Peak	772		
Three Phase Direct Connect	3,991		
Three Phase CT Connect	28		
Non-AMI Meters Sub-total	**8,884**		
Total Meters	**18,920**	**38,523**	**113,304**

The proposed metering installation profile for AMI meters will ensure that JEN meets its roll-out targets, as set out in the CROIC.

5 Proposed Budget

This section sets out JEN's proposed budget for the initial budget period. All figures are provided in real 2008 dollars, unless stated otherwise. The substantiation for the proposed budget is provided in section 5.2.

JEN's proposed Total Opex and Capex for each year of the initial budget period is set out in Table 5-1 below.

Table 5-1: Proposed Total Opex and Capex for Initial Budget Period

Budget	2009	2010	2011
Capital Expenditure	54,607,237	31,940,187	34,044,430
Maintenance and Operating Expenditure	3,920,761	8,738,339	13,463,729
Total Opex and Capex	**58,527,998**	**40,678,526**	**47,508,159**

The proposed budget was arrived at by:

- starting with a forecast of AAM's direct incremental costs (which is set out and substantiated in Appendix A) and deriving JEN's share of those costs (AAM base costs) using the cost sharing methodology set out in JEN's SRA with AAM (the methodology is summarised in section 3.2.2.1)
- adding to AAM base costs the forecast management fee, calculated in accordance with the methodology set out in JEN's SRA with AAM (summarised in section 3.2.2.2).

5.1 Detailed Cost Tables

The tables below set out JEN's detailed build up of the proposed budget. The tables are provided in the same format as the tables in Appendix A, which splits out AAM's direct incremental costs by:

- cost category by the relevant activity under which the cost is incurred:
  - AMI technology
  - AMI IT
  - AMI acceptance testing
  - AMI installation services
  - AMI program management
  - AMI business and industry transition
  - Operational costs

- cost category by relevant CROIC prudence test to be applied (either the "competitive tender prudence test" or the "commercial reasonableness prudence test") (for these purposes, the definition of contract costs is applied in relation to contracts that have been entered into by AAM[16]):
    - **Committed tendered contract costs** – the expenditure that meets the CROIC definition of contract costs at the date of this Application and that has been competitively tendered
    - **Future tendered contract costs** – the expenditure associated with contracts that will be entered into after the date of this Application, all of which have been or will be subject to competitive tender
    - **Other costs**:
        - **Committed non-tendered contract costs** – the expenditure that meets the CROIC definition of contract costs at the date of this Application, and which will be incurred in a manner that is consistent with the commercial standard that a reasonable business would exercise in the circumstances, but the relevant contract has not been tendered
        - **Future non-tendered contract costs** – the expenditure that will be committed to under contracts that will be entered after the date of this Application and which will be incurred in a manner that is consistent with the commercial standard that a reasonable business would exercise in the circumstances, but the relevant contract will not be tendered
        - **Non-contract costs** – the expenditure that will not be covered by a contract, but which has been or will be incurred in a manner that is consistent with the commercial standard that a reasonable business would exercise in the circumstances.

The budget figures in the tables below treat management fee costs as committed non-tendered contract costs. This is appropriate because:

[16] All of JEN's costs are contract costs in that they are all incurred pursuant to the SRA between JEN and AAM. However, for the purposes of the categorisation of costs in this Application, the 'contract cost' definition is applied in relation to contracts that are entered into by AAM with third parties. The note to clause 5C.11 of the CROIC expressly provides that '[t]he competitive tender process need not be conducted by the distributor, nor need the contract be one that the distributor has entered into.'

- The SRA was signed on 10 December 2008, i.e. before 27 February 2009. The cost therefore meets the CROIC definition of a contract cost.
- JEN agreed the SRA with AAM, rather than undertaking a tender process.

Clause 5B.3 of the CROIC allows JEN to submit a revised budget application by 31 August 2009 where there is a change in expenditure by reason of a contract entered into between the budget application and that date. JEN expects to submit a revised budget application under clause 5B.3 of the CROIC to address contracts that have been entered into between the date of this Application and 31 August 2009. That revised budget application will result in some future tendered contract costs becoming committed tendered contract costs, and therefore becoming subject to the competitive tender prudence test for the purposes of the AER's budget determination.

[

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5.2 Assumptions

This section sets out the assumptions JEN has made in forecasting the proposed budget set out in the tables above. Under the cost recovery framework, the cost of contingencies is not included in the budget. However, where changes in a metering regulatory obligation or requirement impact the scope and cost of AMI to the distributor, the CROIC provides for a revised budget application to be submitted under clause 5B.3 by 31 August 2009. If a change in circumstances occurs after that date, the CROIC allows the distributor to notify the AER under clause 5F.1 of an actual or anticipated variance from its approved budget. Where JEN's assumptions outlined below do not hold, JEN may need to submit a revised budget application or notify the AER of a variance from its approved budget.

5.2.1 Specifications OIC, Functionality Specification and Service Levels Specification

For the purposes of this Application, JEN assumes that the final versions of the specifications required for AIMRO will be:

- release 1.1 of the Functionality Specification
- release 1.1 of the Service Levels Specification.

5.2.2 Exclusivity Derogation

This Application is made on the assumption that the Exclusivity Derogation will stay in place unchanged and will have the same legal effect for the duration of the initial budget period (1 January 2009 to 31 December 2013).

While this assumption is sound and represents the most likely outcome, there are a number of scenarios under which the Derogation or other related instruments (such as Chapter 7 of the National Electricity Rules) could be amended during the initial budget period and the Derogation could lose its legal effect of providing distributors with an exclusive right to roll-out AMI meters to small customers.

5.2.3 NEM Metrology Procedures

This Application assumes that the draft changes, currently being considered to the NEM Metrology Procedures to accommodate the provision of AMI services in Victoria, will be implemented without substantial alteration from the draft.

While this assumption is sound and represents the most likely outcome, there is a possibility that additional material changes will be introduced.

5.2.4 National Smart Metering Program

This Application assumes that, following the submittal of this Application, the National Smart Metering Program will not significantly affect the scope and cost JEN's AMI roll out.

While this assumption is sound and represents the most likely outcome, there is a possibility that the National Smart Metering Program may create changes in JEN's metering regulatory obligations.

5.2.5 The Victorian AMI Program

This Application is made on the assumption that any changes to the Victorian AMI program, for example changes recommended by the ISC, will not create any significant changes in JEN's regulatory obligations, or the scope of JEN's AIMRO program.

While this assumption is sound and represents the most likely outcome, there is a possibility that the Victorian Program may create changes in JEN's metering regulatory obligations.

5.2.6 Cost Sharing Arrangements with UED

The costs presented in this Application assume that JEN's cost sharing arrangements with UED (described in section 3.2.2 above) will be retained for the life of the AMI roll-out program out to 31 December 2013.

5.2.7 Tariff reassignment

Under the Electricity Distribution Price Review 2006-10 October 2005 Determination (EDPD) made by the ESC, electricity distributors may reassign tariffs for those customers that consume more than 20 MWh per year. No such provision exists for those customers who consume 20 MWh per year or less and the EDPD prohibits tariff reassignment, unless interval meter reassignment requirements have been published by the ESC (or the AER, as the new regulator for Victorian distributors).

This Budget Application assumes that the AER will, by the end of March 2009, publish meter reassignment requirements that will allow distributors to reassign tariffs for all customers. Tariff reassignment will allow distributors to rectify inefficient legacy metering arrangements by consolidating multiple single-element meter installations and two-element meter installations into one single-phase single-element meter.

Where the AER does not publish meter reassignment requirements by the end of March 2009, or the published requirements prevent distributors from consolidating multiple single-element meter installations and two-element meter installations into one single-phase single-element meter, additional costs and complexity will result for JEN's roll out of AMI. Delays to the roll out may also result.

5.2.8 AMI Public Education Campaign

AMI presents a major opportunity for customers to better understand their energy usage patterns and respond to time of use pricing signals. At the same time, the physical roll-out of AMI meters will cause a level of disruption and other customer impacts. JEN intends to do what it reasonably can to minimise adverse impacts arising from its roll-out activity such as providing customers with appropriate notice.

At this stage, it does not intend to conduct a widespread customer education campaign to promote AMI customer benefits. Such a campaign is certainly required. However JEN understands that this will be conducted by the Victorian Government, which would align with its policy to mandate the roll-out of AMI meters.

JEN anticipates that additional costs will be incurred as a consequence of customer confusion and access issues if the Government does not conduct such a campaign. If this transpires, as a reasonable business in the circumstances, JEN will conduct the campaign and will incur material additional costs to do so. These costs have not been included in this Application.

6 Substantiation of Proposed Budget

This section explains why JEN considers that the Total Opex and Capex in JEN's proposed budget meet the scope and prudence tests set out in clauses 5C.2 and 5C.3 of the CROIC and, therefore, must be approved by the AER.

As explained in section 3.2.2, JEN's Total Opex and Capex comprises:

- JEN's payments for AAM base costs—the direct incremental costs that AAM incurs in delivering AIMRO on JEN's network. **[**
  ]
- JEN's payments for AAM's management fee—a fee AAM charges for delivering AMI on JEN's network. **[**
  ]

Each of these costs is discussed in turn below.

6.1 Substantiation of AAM Base Costs

To support their respective Budget Applications, JEN requested from AAM a report that:

- provides detailed background information on the joint Advanced Interval Metering Roll Out (AIMRO) Program, including:
  - The program's origins, objectives and benefits
  - The program's governance, phases and current progress
  - The roll out plans for UED's and JEN's networks for the initial budget period
  - The cost sharing arrangements between JEN and UED.
- for the initial budget period, provides budget estimates of AAM's direct costs to be incurred in undertaking the activities required to deliver Regulated Services (as defined in the CROIC) on JEN's and UED's networks (the joint base costs).
- considers the scope and prudence tests set out in the CROIC and explains whether, in AAM's opinion, the joint base costs meet those tests.
- provides any additional information AAM considers relevant in complying with the CROIC requirements.

AAM's report is attached as Appendix A. Appendix A:

- for each of the activities with respect to which AAM base costs are incurred explains:

- that the activity is reasonably required for the provision of Regulated Services
- that the activity is reasonably required to fulfil metering regulatory obligations or requirements (including detailed tables of the relevant regulatory requirements).

- splits AAM base costs into categories by the relevant CROIC prudence test to be applied (either the "competitive tender prudence test" or the "commercial reasonableness prudence test") and for each cost category:
  - explains the competitive tender processes or the reasonable commercial processes followed or to be followed when incurring the relevant cost
  - concludes that the relevant prudence test is met.

Therefore, given the evidence presented in Appendix A, AAM base costs included in JEN's proposed Total Capex and Opex meet the scope and prudence tests in the CROIC and must be approved.

6.2 Substantiation of the Management Fee

JEN's and UED's joint arrangements with AAM:

- require AAM to deliver AIMRO on JEN's (and UED's) electricity distribution network in a commercially prudent manner (discussed in more detail in section 3.2
- in return for AAM's service, require JEN to pay:
  - its share of AAM's direct incremental costs, which exclude corporate overhead costs, of delivering AIMRO on JEN's and UED's networks (AAM base costs, discussed in section 6.1 above)
  - a management fee **[ ]**.

6.2.1 Management Fee Costs Relate to Activities within Scope

The management fee relates directly to operating and capital expenditure that makes up the AAM base costs and the relevant activities as a result of which these costs arise. Appendix A explains, in detail, why each of the relevant activities is within the scope of cost recovery defined in the CROIC. Therefore, the management fee costs are within the scope of cost recovery.

6.2.2 Management Fee Costs Are Prudent

As explained in section 5.1, in this budget application, management fee costs are treated as committed non-tendered contract costs. Therefore, the appropriate prudence test that applies is the "commercial reasonableness prudence test"—in considering the cost recovery of the management fee, it is relevant to consider whether:

- it is more likely than not that the expenditure will not be incurred, and

- whether incurring the expenditure involves a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances.

The SRA is a signed contract, which obliges JEN to pay the management fee. It is therefore beyond doubt that management fee costs will be incurred. The rest of this section therefore focuses on whether the decision to incur the management fee was a commercially reasonable one in the circumstances.

JEN's obligation to pay the management fee arose upon the execution of the SRA with AAM. Therefore, the relevant decision to which the prudence test must be applied is the decision to enter into the SRA. Below, we explain why JEN considers that decision to be a commercially reasonable one.

6.2.2.1 Prior Regulatory Consideration of Outsourced Contractual Arrangements Involving a Management Fee

As the AER is aware, the ESC has previously examined the issue of outsourced contractual arrangements that involve a management fee for the service provider. In its Final Decision for Multinet in the Gas Access Arrangement Review 2008-2012, the ESC made a number of remarks concerning the consideration of outsourcing contracts. It noted that the payment of a margin-based management fee is not necessarily inconsistent with an efficient level of costs, particularly where the contractor has the ability to provide the services at a lower cost than the distributor could do so itself or obtain elsewhere[17].

The ESC noted a number of ways that a distributor may seek to demonstrate that the costs it incurs under the outsourcing arrangements are lower than the costs that it would likely incur if it undertook the activities itself. One way to do this would be to produce evidence that it considered this factor when it entered into the contract and weighed up the alternatives before entering into the contract. Another way is to identify economies of scale, scope or other efficiencies that are available to the contractor that are not available to the distributor. Another way is to provide evidence that shows that if it undertook the activities itself, the distributor's costs would be higher than the contract payments[18].

6.2.2.2 Options for Delivering AIMRO on JEN's Electricity Distribution Network

JEN has historically outsourced all services related to the maintenance and operation of its distribution network. At the time of the decision to enter the SRA, JEN did not, nor does it now, have the internal capability or resources to deliver a project of the magnitude of the AIMRO program.

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[17] Essential Services Commission, Gas Access Arrangement Review 2008-2012, Final Decision – Public Version, 7 March 2008, page 54

[18] See reference above, page 55

Given JEN's circumstances, JEN had two primary options available to it for the delivery of the AIMRO program. The first option was to outsource the delivery of the program as a stand-alone AIMRO program for JEN. The second option was to commit to a joint AIMRO program with UED, to be delivered by AAM under its proposed SRA. At that point, UED had already signed an SRA with AAM for AIMRO services up to the middle of 2011.

6.2.2.3 Decision to Adopt the AAM Option

As a matter of principle, JEN's preference was for an explicit agreement on the delivery of AIMRO. An explicit agreement provides both the asset owner and the service provider with certainty and clarity of roles. It also ensures that the process is transparent, with a clear allocation of accountability.

[

] JEN's management considered the following circumstances present at the time of the decision:

- AAM was 49% owned by Jemena Limited (with the balance owned by Babcock and Brown Infrastructure), and structurally separate to JEN.
- AAM was a business that provided asset management services to asset owners, the majority of which were not part of the Jemena group.
- AAM's scale and scope of activities enabled it to achieve efficiencies that JEN could not achieve alone, and thereby AAM successfully competed for work and made a profit. It was therefore appropriate for AAM to charge a management fee to JEN as if it was an unrelated party.
- The level of the management fee in the proposed SRA was reasonable **[**

].
- The synergy benefit of JEN and UED cost sharing that AAM enabled through its SRA with each asset owner was substantially greater than the management fee. **[**

]

The latter (the scale of the expected synergy benefits for JEN) was a key commercial driver in JEN's decision to enter the SRA. The next section provides additional detail on why such significant benefits were expected.

6.2.2.4 Source of Synergy Benefits

The timeframes of the CROIC require that approximately one million combined JEN/UED meters be installed by 31 December 2013. To complete a roll-out program of this size within the mandated timeframe, both JEN and UED required a mass roll-out approach for replacing meters and installing communications.

For both JEN and UED, AIMRO was a new project-based activity and as such was never provided in-house. As a result, neither JEN nor UED had the immediate in-house capability to undertake AIMRO. Both JEN and UED were also similarly placed in relation to their respective AMI obligations. The two distributors had almost the same starting point in terms of current IT environments and neither distributor had existing information systems that were able to be modified to meet the AMI requirements.

Therefore, both distributors required new systems to deal with the increased data volumes and new functional requirements. Furthermore, JEN and UED both operated distribution networks in suburban and short rural areas of Victoria.

A clear opportunity existed for establishing a joint AIMRO program that would enable both JEN and UED to reduce the cost and risk associated with meeting their respective AIMRO obligations. The distributors saw a shared program as an effective cost minimisation (through increasing the scale of the roll-out) and risk mitigation (in particular, reducing the risk of non-delivery on the statutory deadline) approach, because many of the program deliverables and solutions would be common.

For example, program deliverables and solutions with cost sharing benefits included:

- project plans/management processes
- target IT architectures
- target business processes
- testing of meter and communications technologies
- information systems products/vendors, procurement strategies, and
- deployment plans (with some elements being network-specific).

The scale achieved through the joint program ensured that the costs of the mass-roll out could be reduced below what would be achievable by JEN or UED trying to deliver AMI alone—either in-house, or through an outsourced solution without the other distributor's participation.