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

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Executive summary

Jemena Electricity Networks (Vic) Ltd (**JEN**) is well progressed with its AMI deployment and is meeting its obligations to use its best endeavours to meet the roll out schedule set down by the Victorian government. Since the establishment of the AMI mandate in August 2007, JEN has met a number of key milestones, including:

- accreditation of JEN's AMI solution by the Australian Energy Market Operator (**AEMO**)
- go live of JEN's AMI systems
- meeting the mandatory roll out targets
- maintaining costs within the constraints set out in the AMI Cost Recovery Order.

JEN is providing this amended budget application (**amended application**) in response to the AER's draft determination, published on 28 July 2011.[1]

The amended budget application responds to the AER's draft determination and sets out the amended proposed budget for JEN to deliver the mandate in the AMI Cost Recovery Order in the subsequent AMI budget period (**subsequent budget period**), being the calendar years 2012-2015. The budget application also provides an amended forecast of the number of metering installations that JEN proposes to install in each year of the subsequent budget period. This amended budget application refers to and incorporates by reference (as is permitted under clause 5.3 of the AMI Cost Recovery Order), the entire original budget application submitted to the AER on 28 February 2011, as well as JEN's subsequent responses to the AER's information requests.

JEN appreciates that the majority of costs put forward in JEN's budget application of 28 February 2011 have been accepted by the AER. This amended application therefore does not seek to repeat information that relates to those costs.

The amended application addresses the costs disallowed by the AER in the draft determination and provides additional materials in relation to those costs. In a number of instances, JEN has agreed with the AER's views and has removed from the budget costs that JEN now considers will not need to be incurred. However, JEN's amended application retains the vast majority of the costs disallowed in the AER's draft determination. JEN considers that the AER's reasons for disallowing these costs are based on material errors and inaccurate calculations and cost modelling.

[1] AER, *Draft Determination: Victorian Advanced Metering Infrastructure Review, 2012-2015 budget and charges applications, 28 July 2011* (**draft determination**).

JEN takes compliance with the law seriously. JEN considers that the amended budget application only seeks to receive recovery of expenditure for activities that are within scope and expenditure that is prudent, as required by the AMI Cost Recovery Order.

- The activities outlined in this amended budget application are reasonably required for the provision of Regulated Services or to comply with a metering obligation or requirement (i.e. they are within scope).
- The expenditure is prudent because a large proportion of it will be incurred under contracts that have been let in accordance with a competitive tender process. For other costs, the expenditure is prudent because it is more likely than not that the expenditure will be incurred and incurring it does not involve a substantial departure from the commercial standard that a reasonable business would exercise in the relevant circumstances.

In those circumstances therefore, JEN submits that its proposed amended budget complies with the requirements of the AMI Cost Recovery Order.

JEN's amended proposed Total Opex and Capex for each year of the subsequent budget period is set out in Table 0-1 below.

Table 0-1: Proposed Total Opex and Capex for subsequent budget period

Budget	2012	2013	2014	2015
Capital Expenditure	32,352,399	16,783,274	5,436,901	5,143,711
Operating and Maintenance	19,872,391	17,588,832	15,843,687	15,985,100
Total Opex and Capex	**52,224,789**	**34,372,106**	**21,280,588**	**21,128,812**

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

Table 0-2: Metering installation forecast

Calendar Year	2012	2013	2014	2015
Meters to be installed	125,779	54,017	4,445	4,414

1 Introduction

This document is JEN's amended subsequent budget period budget application (**amended application**) to the Australian Energy Regulator (**AER**) pursuant to clause 5C.5(b) of the *Order in Council made on 28 August 2007* (being an order under Section 15A and Section 46D of the Electricity Industry Act 2000), as amended by the *Order in Council made on 12 November 2007,* the *Order in Council made on 25 November 2008,* the *Order in Council made on 31 March 2009* and the *Order in Council made on 19 October 2010* (the **AMI Cost Recovery Order**).

This amended application covers JEN's AMI costs for the period 1 January 2012 to 31 December 2015.

JEN has identified confidential information in this application that is commercially sensitive using bolded square brackets, **[C-I-C** thus**]**.

This information is not available in the public domain and is commercially sensitive for reasons that include:

- The information enables unit price forecasts to be established for meters, installation services and IT systems and infrastructure which may yet 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 may conduct in relation to meter provision or metering services.

- The information relates to the terms and conditions under which Jemena Asset Management **(JAM)** is providing asset management services for metering. JAM competes for asset management services in a number of markets. Disclosing this information would prejudice the competitive position of the Jemena asset management business in those markets.

JEN respectfully draws the AER's attention to Part 3, Division 6 of the National Electricity Law (**NEL**), which defines the specified set of circumstances under which the AER is authorised to disclose information given to it in confidence.

For the avoidance of doubt, JEN does not give the AER consent under section 28X of the NEL to disclose the confidential information in this application. Should the AER intend to disclose this information on the grounds of public benefit, section 28ZB of the NEL requires the AER to:

- issue JEN with a written notice of such intent and a written decision setting out the AER's reasons

- provide JEN with no less than 5 business days to respond

- consider every representation JEN makes in response

- if the AER maintains its intent to release the information, issue JEN with a further written notice and a written decision setting out the AER's reasons

- not release the information for a further 5 business days after the date of the further notice.

1.1 Nature of dollar figures

As required by the AER, the budget figures are in real 1 July 2011 dollars.

1.2 Application structure and overview

JEN's application comprises this document and associated appendices. In addition to this introduction, this document contains 6 sections:

- Section 2 provides JEN's general comments in response to the draft determination

- Section 3 sets out JEN's detailed response on the specific cost disallowances set out in the draft determination

- Section 4 provides JEN's comments on smoothing charges to customers

- Section 5 provides the forecast of the amended number of metering installations that JEN proposes to install in each year of the subsequent budget period.

- Section 6 provides JEN's amended proposed budget for the subsequent budget period, including the budget figures, how they were arrived at and the assumptions made in preparing those figures.

The AMI Cost Recovery Order 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 8 of Appendix A of JEN's original budget application.[2]

- A forecast of the number of metering installations—Section 5 of this document.

- Expenditure for Regulated Services for each year of the subsequent budget period (distinguishing between capital expenditure and operating and maintenance expenditure)—Section 6 and Appendix D of this document.

[2] JAM, JEN AMI Budget Application 2012-15 Substantiation of Base Cost to Provide Regulated Services, 25 February 2011.

- Total Opex and Capex for each year of the subsequent budget period—Section 6 of this document.

- Information relating expenditure to scope—Chapter 4 of Appendix A of JEN's original budget application, JEN's responses to subsequent information requests from the AER, and Appendix A of this amended application.

- Filled out information templates—attached as Appendix B, a separate Microsoft Excel file.

2 General Comments

This section sets out JEN's overarching comments in response to the draft determination, while the following sections focus on matters of detail.

2.1 Proposed budget amended for certain issues raised by AER

The draft determination raises some valid issues with JEN's original proposed budget. Where JEN recognises issues raised by the AER as valid in whole or in part, JEN has amended its proposed budget to address the issues raised. Such amendments relate to:

- Capex - Installation costs for new connections
- Capex - New connections adds and alts
- Opex - Asset operations (sample testing)
- Opex - AMI Backhaul communications opex
- Reconciliation of regulatory accounts
- Foreign exchange rate.

2.2 Proposed budget not amended for cost issues raised by AER

JEN considers that the proposed budget should not be amended for all the other issues raised by the AER.

Under Clause 5C.2, the AER must approve JEN's proposed budget unless it establishes that the expenditure (or part thereof) that makes up the Total Opex and Capex for each year:

- is for activities outside scope at the time of commitment to that expenditure and at the time of the determination; or
- is not prudent.

Clause 5C.3 provides that expenditure is prudent and 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; or

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

The AER has not established these matters. In particular, the AER has not established that costs involve a substantial departure from the relevant commercial standard (i.e. they are not prudent).

The AER's findings are not supported by credible evidence, or are based on material errors of fact and/or an incorrect application of the regulatory framework. In those instances, JEN maintains its approach of estimating costs, and provides additional information and evidence in this amended application where relevant.

JEN considers that the materials provided by JEN as part of the application process (including the original application, responses to AER information requests and in this amended application) are sufficient to demonstrate that the costs proposed are within scope, prudent and will, more likely than not, be incurred by JEN.

JEN would appreciate the opportunity to provide further information to the AER in the event that the AER is not satisfied with any aspect of the information provided by JEN.

3 Costs Disallowed in Draft Determination

This section sets out JEN's detailed response on the specific cost disallowances set out in the draft determination.

3.1 Disallowances of JAM base costs

Most of the AER disallowances in the draft determination relate to JEN's share of JAM's base costs of delivering the AMI roll out and other metering services for JEN and UED. Those disallowances are addressed in Appendix A to this amended budget application. Appendix A sets out JAM's response to the AER draft determination. JAM's response is supported by expert reports from KEMA (focused on capital expenditure) and Deloitte Touche Tohmatsu (focused on operating and maintenance expenditure).

In preparing Appendix A, JEN asked JAM to provide the following material:

1) A report that:

   a) with reference to the relevant tests in the AMI Cost Recovery Order, sets out a response to each item of base cost disallowance introduced by the AER in its draft decision, including, where relevant, a response to the Impaq consulting analysis that was used to justify these disallowances

   b) quantifies the implications of JAM's response for JEN's original proposed budget, including any acceptances, in part or in full, of the AER's (or Impaq's) position, and

   c) in light of 1a and 1b, provides amended budget estimates of JAM's direct costs to be incurred in undertaking activities required to deliver Regulated Services

2) Relevant supporting material for the report described in 1 above

JEN considers that in relying on the information provided in Appendix A, JEN is acting in a manner consistent with the commercial standard that a reasonable business would exercise in the circumstances. At the very least, this approach does not represent a substantial departure from such a standard.

3.2 Reconciliation of Regulatory Accounts

At the time JEN's original application was submitted, JEN's 2010 regulatory accounts were not finalised and, therefore, draft figures were used. JEN's amended application reflects the finalised costs as per JEN's 2010 regulatory accounts.

3.3 Return on Capital

JEN accepts the AER's proposed process for setting the WACC for 2014-2015.

However, JEN considers that a market risk premium (**MRP**) value of 6.5 percent, as recently set down in the Victorian electricity distribution price review **(EDPR)** process, is more appropriate than the AER's assumed 6 percent. JEN has provided additional evidence to that effect.[3]

JEN also notes that the method ultimately used to calculate the debt risk premium (**DRP**) should reflect the expected decision from the Australian Competition Tribunal on the merits review of the AER's DRP decision for JEN in the 2011-2015 **EDPR**. JEN maintains that the use of a weighted average that places weight on a single bond (such as the APT bond) is not appropriate. JEN's position on this is set out in information that is already available to the AER—namely, correspondence between JEN and the AER in the Victorian EDPR process, as well as JEN's submissions on this matter in the ongoing merits review process for the Victorian EDPR.

3.4 Debt raising costs

JEN considers that the AER has not established that the 12.5 basis point allowance for debt raising costs proposed in JEN's original budget application is a substantial departure from the commercial standard that a reasonable business would exercise in the circumstances. Nevertheless, JEN has implemented the AER's draft determination on debt raising costs in its revised budget.

3.5 Exchange Rate

Section D.2 of the draft decision provides the AER's reasoning and draft decision for the AUD/USD exchange rates to be used in converting USD costs into AUD.

JEN agrees that the exchange rate assumption needs to reflect up to date information. JEN's original budget application was submitted in February 2011 and the exchange rate assumption in that application is now out of date.

3.5.1 AER's approach

The AER noted that:

> "The AER considers that the commercial standard would reflect the current foreign exchange rate, specifically:
>
> - the recent appreciation in the Australian dollar

[3] Appendix E—Value Advisor Associates, Market Risk Premium Current View, August 2011.

Appendix F—NERA, Market Risk Premium, August 2011.

Appendix G—Capital Research, Response to AER Draft Determination on Victorian Advanced Metering Infrastructure Review 2012-15 budget and charges applications, August 2011.

- any hedge rates that are currently available in the money market.

…

The AER has therefore adjusted the DNSPs' forecasts by using a 1 month historical swap rate from Bloomberg at 1.04 AUD to USD"[4]

While JEN, in principle, agrees with the sentiment in the AER's reasoning, the way the AER has applied its approach is not appropriate. The AER's proposed exchange rate of 1.04 reflects a one month swap rate maturing at 30 November 2011[5] and is applied to JEN's entire spend over the 2012-2015 period. However, the relevant USD spend does not begin until 1 January 2012 and continues until 31 December 2015. The AER's approach therefore essentially assumes that the exchange rate that is expected to exist on 30 November 2011 will remain unchanged from that point for over four years, which is unrealistic.

3.5.2 JEN's proposed approach

JEN considers that, in principle, it would be reasonable to use an exchange rate that reflects the expected exchange rate at the time the USD amounts will actually be spent. Given that JEN will spend the USD amounts throughout each calendar year in the subsequent budget application, the most accurate way to estimate the applicable exchange rate would be to:

- calculate the month-by-month profile of USD spend over 2012-2015
- obtain hedge quotes for each monthly spend amount, and
- apply those monthly exchange rates, or construct a weighted average that takes into account the profile of the spend and the month-by-month hedge rates that would apply.

The approach described above is cumbersome and labour intensive. A simpler approach would be to use, for each calendar year, a forecast of the average exchange rate that is expected to prevail over that year.

In Appendix C, JEN provides a recent report from Citigroup that includes a forecast of the average AUD/USD exchange rate for the 2012-2015 calendar years.[6] JEN has amended its proposed budget to reflect the exchange rates set out in Appendix C. JEN considers that this approach is consistent with the commercial standard that a reasonable business would exercise in the relevant circumstances, or, at the very least, does not represent a substantial departure from such a standard.

[4] Draft determination, p. 103.

[5] Draft determination, footnote 161, p. 103.

[6] Citigroup, Global Economic Outlook and Strategy, 20 July 2011, p.13.

3.5.3 Proposed exchange rates

Table 3-1 below sets out the exchange rates proposed by JEN, which are consistent with the approach outlined above.

Table 3-1: Proposed exchange rates

	2012	2013	2014	2015
AUD/USD rate	1.05	0.96	0.92	0.88

3.6 Related Party Margin

The costs on which a margin or management fee is payable in the subsequent budget period will be incurred under the Customer and Market Services Agreement (**CMS agreement**) with JAM, which was provided as Appendix D of JEN's original budget application. The agreement was entered into in February 2011.

JEN is pleased to note that the AER considers that a related party margin is within scope and that, where such a margin does not create double counting of costs recovered elsewhere by the distributor, and only compensates the contractor for:

- risks faced and capital employed by the contractor in the provision of services to the distributor
- efficiencies historically gained by the contractor and shared with the distributor, and
- corporate and indirect costs of the contractor incurred in providing services to the distributor,

such a margin would meet the commercial standard that a reasonable business would exercise in deciding to pay such a margin.

JEN notes that, while it agrees that a margin fitting the above criteria would meet the commercial standard in the AMI Cost Recovery Order, JEN considers that there are other, simpler ways to demonstrate compliance with the relevant standard. The simplest method would be to demonstrate that the decision taken was the best alternative available at the time.

The AER agrees that the JAM margin is recovered only once. Where JEN and AER differ is that JEN considers that, given JEN's circumstances at the time of agreeing to pay the JAM margin, the full quantum of the margin to be paid by JEN to JAM meets the standard set out in the three bullet points above, or, at the very least, does not represent a substantial departure from such a standard. The remainder of this section explains why this is the case.

3.6.1 Margin and mark up

JEN notes that the [C-I-C] percent management fee paid to JAM represents a mark up and not a margin. That is, if JAM's direct costs are equal to 100, the management fee is equal to [C-I-C] and the total costs to JEN (and revenues to JAM) are [C-I-C] The margin, expressed as a percentage of JAM's revenue, is in fact [C-I-C] percent. This is the appropriate way to express the JAM margin if it is to be compared to Earnings Before Interest and Tax (**EBIT**) margins of other companies.

However, even the [C-I-C] percent figure cannot be directly compared to EBIT margins, as EBIT margins represent profit divided by revenue. The profit figure is calculated by subtracting both direct and indirect costs from revenues. The [C-I-C] percent margin received by JAM, however, must fund JAM's indirect costs as well as profits, because under the CMS agreement with JEN, JAM does not receive any payments (other than the agreed margin) to recover its indirect costs.

Therefore, if JAM's margin were to be expressed as an EBIT margin, it would be less than [C-I-C] The [C-I-C] would need to be reduced by an allowance for JAM's indirect costs. Put another way, the EBIT margins analysed by NERA and Ferrier Hodgson must be increased by an allowance for indirect costs and overheads if they are to be compared to the [C-I-C] percent JAM margin.

3.6.2 Evidence relied on by JEN in agreeing the quantum of the margin

In agreeing the quantum of the margin to be paid to JAM, JEN relied on empirical evidence available to JEN in the circumstances and that the evidence relied on reflected actual commercial practice. This evidence included the Ferrier Hodgson report[7] and the NERA report referenced in the AER's draft determination.[8]

The evidence relied on did not include the AER's theoretical assumptions around the sharing of historic efficiency benefits, nor the 2010 views of Impaq Consulting, which, in a different regulatory process under a different set of regulatory rules, asserted that a range of 3 to 8 percent was appropriate, without fully disclosing how it calculated that range.

The NERA report and the Ferrier Hodgson report were both prepared by qualified experts for the sole purpose of analysing appropriate margins for related parties. The reports contain detailed analysis, which includes a range of well-substantiated adjustments to the data. Both reports arrive at a range that represents a 95 percent confidence interval.

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[7] Ferrier Hodgson, Expert's report in respect of United Energy Distribution Pty Ltd Advanced Interval Metering Price Review, 12 June 2008.

[8] NERA, Benchmark Study of Contractor Profit Margins, September 2010. This paper is provided with the original budget application as Appendix E and can be found on the AER website at http://www.aer.gov.au/content/index.phtml/itemId/740632.

In contrast, the AER's figure of 3 percent to account for efficiency gains appears to be based entirely on an assumption set out in footnote 154[9] of the draft determination. This figure is not an empirically based measure of the appropriate margin allowance for efficiency gains. According to footnotes 153 and 154, the figure is derived indirectly from an "Experimental measure of industry multifactor productivity" for the EGW market sector for the 1985-86 to 2008-09 period as published by the Australian Bureau of Statistics. In the circumstances at the time the margin was agreed, it would not have been reasonable or prudent for JEN to give weight to this assumption, when robust empirical evidence was available (nor is it reasonable or prudent to give weight to this assumption now). JEN also notes that the efficiency gains (through synergies attained by JAM that were passed onto JEN) from the arrangements under the Services Requirements Agreement **(SRA)**, which preceded the CMS agreement, were estimated to be in the order of $53M, compared with a total management fee cost of $14.9M.[10] The efficiencies gained by JEN therefore exceeded the management fee paid to the contractor by a factor of [C-I-C] .

The Impaq commentary that introduces the range of 3 to 8 percent is set out in three sentences in Impaq's report on charges for Alternative Control Services (**ACS**).[11] The range is substantiated with a single footnote, which reveals that the range is based on some observations from an article in the Australian Financial Review. Impaq does not fully disclose the sample of the companies it used, nor how the sample was selected, nor the methodology used to calculate the upper and lower bound of the range.

It is not clear whether the range represents a 95 percent confidence interval (as is the case with NERA and Ferrier Hodgson) or simply the highest and lowest observations for individual businesses. It is also not clear how many years of data were used for each company, nor is it clear whether the data was adjusted in any way. JEN therefore does not consider that it would have been reasonable or prudent for JEN to give weight to Impaq's views at the time the margin was agreed, when robust empirical evidence was available (nor is it reasonable or prudent to give weight to these views now).

3.6.3 AER has misinterpreted the evidence relied on

On page 99 of the draft determination the AER states:

> "The AER notes that the margins included in the Ferrier Hodgson report are for businesses operating in similar sectors. Therefore the AER assumes these margins would include compensation for the four economic reasons the AER has identified as legitimate economic reasons for inclusion of a margin, regarding asymmetric risk, return of and return on capital, historical efficiencies and corporate overheads. The AER notes its earlier conclusion

[9] Draft determination, p. 96.

[10] JEN's original budget application, section 6.2.2.3, p.35.

[11] Impaq ACS Report, p. 36.

that a margin should only be allowed in the JAM contract for historical efficiencies and corporate overheads."

The AER's assumption is incorrect. The Ferrier Hodgson and NERA reports provide an analysis of EBIT margins. As explained in section 3.6.1, EBIT margins do not include compensation for corporate overheads. This is noted by Ferrier Hodgson[12] and NERA[13]. In order to calculate a margin that is reflective of corporate overheads, one would need to add actual reported overheads to the EBIT of the companies in the sample and convert this total to a percentage of their total revenues. This would have resulted in **higher** margin ranges being reported by Ferrier Hodgson and NERA.

It is also important to note that both Ferrier Hodgson[14] and NERA[15] control their samples for capital intensity, including only businesses with low capital intensity. Therefore, the return on and of capital implicit in the Ferrier Hodgson and NERA ranges is appropriate for JAM.

3.6.4 JEN's approach under the circumstances was reasonable

JEN maintains that, under the circumstances, and given the information available at the time JEN made the commitment to incur the expenditure related to the JAM management fee, JEN's decision was reasonable. That decision did not constitute a substantial departure from the commercial standard that a reasonable business would exercise in JEN's circumstances.

The margin agreed to by JEN was equivalent to an EBIT margin of [C-I-C] percent, which is below the mid point of the ranges reported by NERA and Ferrier Hodgson, as set out in Table 3-2 below.

Table 3-2: Empirical evidence on margin ranges

Source	Lower bound	Upper bound	Midpoint
NERA[16]			
2002-2009	4.8	6.6	5.7
2005-2009	5.4	7.4	6.4
Ferrier Hodgson[17]	4.96	7.32	6.14

As discussed above, the ranges reported by Ferrier Hodgson and NERA, on a comparable basis to the [C-I-C] percent figure are understated—the ranges

[12] Ferrier Hodgson Report, paragraph 72.

[13] NERA Report, footnote 4, p. 3.

[14] Ferrier Hodgson Report, paragraphs 60-64.

[15] NERA Report, section 3.1.2.

[16] NERA Report, paragraph 1.9.

[17] Ferrier Hodgson Report, paragraph 90.

do not include any provision for positive actual overhead costs that are separately recovered by the sample businesses from their clients, whereas JEN's agreement with JAM ensures that JAM must fund its overhead costs through the [C-I-C] percent margin.

JEN therefore considers that it made a prudent and commercially reasonable decision. The decision ensured that JEN paid no greater a margin, and arguably a smaller one, than is earned by an average provider of similar services. The decision also ensured that JEN pursued the best option available to it at the time – a continuation of cost sharing with UED through ongoing joint provision of services by JAM.

3.6.5 Giving weight to AER approach and assumptions still confirms that JEN's decision is prudent

Even if the AER's approach and assumptions are accepted (which JEN does not), the proper application of that approach and the proper use of those assumptions leads to the conclusion that the [C-I-C] percent JAM margin is prudent.

AER approach

The AER's interpretation of the commercial standard can be found on page 94 of the draft determination:

> "…the AER considers that the commercial standard would encompass the following principles:
>
> …
>
> a margin should compensate the contractor for the following to the extent that each or any of these factors would have been applicable to the particular circumstances of the DNSP:
>
> - the asymmetric risk faced by the contractor that are not already borne by the DNSP
> - the return of and return on capital used by the contractor to provide the outsourced regulated service not already included in the DNSPs RAB
> - any efficiencies historically gained by the contractor and shared with the DNSP over the initial AMI period
> - any corporate and indirect costs that need to be passed on from the contractor to the DNSP."

The four bullets in the quote above set out the four factors that the AER considers can be justified as components of a prudent margin.

The AER argues that the first of those four factors should not be relevant for JAM because JEN and, by extension, JAM face negligible risk as all costs and risks will be passed through to consumers under the framework set up by the AMI Cost Recovery Order.[18]

This statement does not reflect reality. The budget application process itself bears this out. There is currently a large gap between the AER's and the distributors' view of the prudent costs to distributors of meeting the obligation of delivering regulated services.

While JEN and, through contractual arrangements JAM, bears the responsibility and associated liabilities of delivering regulated services, it is the AER that determines which costs are or are not recoverable. The AER makes this decision without being responsible for the ultimate delivery of regulated services. As is borne out by the draft determination, it is possible that the AER will take a completely different view on the prudency of expenditure compared to JEN's and JAM's views. Significant risk therefore remains.

The AER also argues that the second of the four factors should not be relevant for JAM because the AER has assessed that all assets used in the AMI roll-out either are or will be included in the distributors' RABs. This statement appears to ignore the fact that both NERA and Ferrier Hodgson addressed this very issue by only sampling companies with low capital intensity.[19]

Applying AER's own approach

The AER concludes its consideration of the "commercial standard" by stating that:

> "…the commercial standard applicable to a related party margin in a AMI-related contract would have factored in:
>
> - the historical efficiency of the contractor
> - the corporate and indirect costs of the contractor."[20]

Given JEN's arguments above, JEN considers that the first two of AER's factors cannot be excluded entirely. Applying the AER's own framework, some allowance must be made for asymmetric risk and return on and of contractor's capital (as per appropriate low capital intensity comparator businesses). In any case, to the extent the AER perceives a problem that requires the removal of the effect of the first two factors from empirical data, the AER cures this problem by only using the bottom of the Ferrier Hodgson range, rather than the full range or the mid point, when calculating a margin figure the AER considers is acceptable.[21] The AER does not provide any reasoning for taking the lower bound, as opposed to any other number below the mid-point of the range.

[18] Draft determination, p. 95

[19] Ferrier Hodgson Report, p. 15-16. NERA Report, p. 12.

[20] Draft determination, p. 97.

[21] Draft determination, p. 100.

The AER then takes the approximate mid-point between 4.96 percent (the lower bound of the Ferrier Hodgson range) and 3 percent (the AER's assumption of the portion of the margin that relates to the historical efficiency of the contractor). The AER determines this mid point of 4 percent to be a figure consistent with the "commercial standard".

However, taking a mid-point between these two numbers to ensure compensation for the two factors that the AER accepts as requiring compensation (historical efficiencies and overheads) is inconsistent with the AER's own assumptions and the empirical data used. As defined by the AER, the 3 percent figure provides compensation only for historical efficiencies and does not provide compensation for overheads. Also by definition, and as explained above, the Ferrier Hodgson figure of 4.96 percent does not take account of overhead recovery. By implication, a mid point between the two figures would still provide no compensation for overheads.

It is also not appropriate to take the mid-point between a single hypothetical assumption and an estimate arrived at by analysing 51 observations of actual margins earned by comparable businesses. Such an approach gives equal weight to two figures that embody a very different level of reliability and rigour.

In JEN's view, a hypothetical assumption with no direct empirical basis warrants very little, if any, weight. At best, such an assumption defines a theoretical absolute minimum margin (before allowance is made for overheads) that would be required by a contractor that literally bears no risk whatsoever. As such, if the 3 percent assumption is to be given any weight, it should be added as a notional 52nd observation in the Ferrier Hodgson data set. With this addition, the lower bound of the Ferrier Hodgson range is reduced from 4.96 percent to 4.92 percent.

Taking this new lower bound as an appropriately conservative estimate of the compensation required for all factors other than overheads, JAM is receiving overhead compensation at a rate of [C-I-C] percent. JEN considers this level of compensation for overheads cannot be regarded as being unreasonably high. In that context, JEN also notes that it is implicit in the AER's reasoning that the AER considers 1 percent, to be a reasonable allowance for overheads.[22]

For comparison, in the final determination for Alternative Control Services (**ACS**) in the Victorian EDPR, the AER, on Impaq's recommendation, accepted as prudent and efficient a proposed overhead margin of [C-I-C] percent (a mark up of [C-I-C] percent on direct costs) to recover only those JAM overheads that relate to ACS.[23] This amount would need to be added to the 4.92 percent figure above to produce a figure that could be compared to the JAM margin for AMI in the CMS agreement.

[22] The AER determines that 4 percent is an appropriate allowance for the **total** margin that would allow for the recovery of two factors—historical efficiency gains and overheads. The AER also states that 3 percent is an appropriate assumption for the margin portion that provides for the recovery of historical efficiency gains. Therefore, by the AER's own logic, the remaining 1 percent is an allowance for overheads.

[23] JEN Regulatory Proposal, section 19.3.1, pp. 217-18. JEN Revised Regulatory Proposal, section 20.3, p. 327.

Given the above, even applying the AER's approach, which JEN does not accept, the result would be a margin (inclusive of an allowance for overhead recovery) of well above the [C-I-C] percent agreed between JEN and JAM in the CMS agreement.

3.6.6 Further issues with the AER's approach

This section lists further issues that JEN has with the AER's approach, in addition to those already mentioned above.

The AER recognises[24] that the prudence test in the AMI Cost Recovery Order is purposely and explicitly different to the efficiency tests set out in the NEL and the National Electricity Rules **(NER)**. However, the AER goes on to apply an approach that is largely identical (although the key factors are listed in a different order) to the one it employed under the NEL and the NER in the EDPR process.[25]

The AER gives no weight to the NERA report, even though it was a key consideration in JEN agreeing the quantum of JAM's margin. By giving this report no weight, the AER has failed to take into account and give fundamental weight to JEN's circumstances, as required by clause 5C.4 of the AMI Cost Recovery Order.

The AER's selection of the lower and upper bounds of its own range (3 per cent and 4.96 per cent respectively) for the quantum of the margin that would meet the commercial standard appears unreasonable, as does the AER's selection of the midpoint between those two numbers as the appropriate point estimate that meets that standard.

Finally, JEN notes that the AER has provided no comment as to what would constitute a substantial departure from the interpretation of "commercial standard" that the AER promotes. The draft determination appears to imply that any departure is substantial and must be disallowed, which is not consistent with the wording of the AMI Cost Recovery Oder.

[24] Draft determination, p. 84.

[25] AER Final Decision in 2011-2015 Victorian EDPR, section 6.8, p.299

4 Smoothing of Charges to Consumers

Clause 4.1(p) of the AMI Cost Recovery Order provides that the AER may approve charges proposed by a distributor that have the effect that the distributor does not recover, in any year in the period from 1 January 2010 to the End Date (defined in the AMI Order as 31 December 2015), the net present value **(NPV)** of the total costs incurred for regulated services in that year.

In December 2008, the Essential Services Commission of Victoria (**ESC**) published a Consultation Paper seeking comment on its proposed framework and approach to determining AMI charges.[26] On page 41, the ESC noted clause 4.1(p) and stated that it "considers it desirable for distributors to make use of this provision to provide customers with a smooth price path where possible".

In January 2009, the AER published a final framework and approach paper for determining AMI charges.[27] On page 69, the AER noted clause 4.1(p) and stated that "the AER agrees with the ESCV that it is desirable for distributors to make use of this provision to provide customers with a smooth price path where possible".

Consistent with clause 4.1(p) and guidance from the ESC and the AER, JEN's original proposed charges for 2012-2015 sought to smooth the impact of the costs of AMI on customers. JEN proposed to do this by spreading the recovery of those costs beyond 2015.

Section 6.2 of the draft determination rejects JEN's proposed approach on the basis that:

> "…The AER considers that this clause allows for the smoothing of charges within the 1 January 2010 and 31 December 2015 period. In addition, clause 4.1(p)(5) allows for any under or over-recovery of revenue to be adjusted when actual costs are applied to charges in the 2016 and 2017 charges.
>
> The AER does not consider that clause 4.1(p) allows for the recovery of deliberate underspends from the period 2012-2015 as proposed by JEN. The AER instead considers that this clause allows the DNSP to propose a smoothed charges profile to the AER with under and over recovery of charges to be adjusted for when actual values are known in 2016 and 2017."[28]

4.1 AER has misinterpreted clauses 4.1(p)

No analysis or reasoning is provided to support the AER's view, stated above, as to the proper construction of clause 4.1(p).

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[26] ESC, Advanced Metering Infrastructure Review: Consultation Paper: Revised Framework and Approach, December 2008

[27] AER, Final decision. Framework and approach paper – Advanced metering infrastructure review 2009-11, January 2009

[28] Draft determination, p. 42.

JEN assumes that the AER's reference to clause 4.1(p)(5) is a reference to paragraph (5) of the note, which appears at the end of clause 4.1 and which is intended (by its terms) to provide a "summary explanation" of the "regulatory model of this Order". That is, the model used in the entire AMI Cost Recovery Order and not merely in clause 4.1(p). The note does not qualify the language of any aspect of the AMI Cost Recovery Order, including clause 4.1(p). As the note itself states, it is to be read "subject to the express provisions of this Order".

4.2 Proper interpretation of clause 4.1(p)

JEN considers that that the language of clause 4.1(p) expressly contemplates that reduced charges may be proposed by a distributor where the fact that the charges 'have the effect' of under-recovery is known at the time that those reduced charges are proposed.

JEN holds this view because:

- reduced charges are not contemplated by clause 4.1(o), which envisages that charges will be 'designed' so that the NPV of total revenue is equal to the NPV of total costs
- clause 4.1(p) is expressly intended to operate as a potential departure from the application of clause 4.1(o)—the opening words make this clear as does the last sentence which, in effect, reinstates clause 4.1(o) if the AER rejects the reduced charges, and
- the AER is given a discretion to approve reduced charges, which suggests that, at the time it exercises that discretion, the AER is aware (as is the distributor) that the proposed charges will lead to under-recovery.

JEN therefore considers that the AER has the discretion to approve (or not approve) JEN's proposed smoothed charges that result in full cost recovery being deferred beyond 2015.

While the AER may still exercise its discretion to reject JEN's proposed smoothed charges, to do so is a matter of choice for the AER, not a requirement of the AMI Cost Recovery Order.

4.3 Exercise of the AER's discretion

JEN considers that it would be appropriate for the AER to approve the smoothing of charges. It is an NPV-neutral shift in the timing of cost recovery and it benefits consumers by avoiding unnecessary price shocks. Should the AER choose not to exercise its discretion to allow smoothing of charges, it will be requiring that customers pay higher charges over the 2012-2015 period.

4.4 Requested approach to setting charges

In setting JEN's charges in the final determination, the AER should allow the tariffs proposed in JEN's Charges Application of 28 February 2011.

If the AER chooses not to allow smoothing of charges, the AER should set tariffs that result in the same percentage year-on-year increases in charges over 2012-2015.

Table 4.1 below provides JEN's proposed charges with smoothing allowed by the AER, while Table 4.2 provides the proposed charges with smoothing disallowed by the AER.

Table 4.1: Summary of proposed charges, with smoothing

Nominal $/meter	2012	2013	2014	2015
Single phase single element	149.00	152.84	155.22	157.64
Single phase single element meter with contactor	149.00	152.84	155.22	157.64
Three phase direct connected meter	183.11	187.82	190.75	193.73
Three phase current transformer connected meter	203.58	208.82	212.08	215.39

Table 4.2: Summary of proposed charges, without smoothing

Nominal $/meter	2012	2013	2014	2015
Single phase single element	153.60	172.59	193.92	217.90
Single phase single element meter with contactor	153.60	172.59	193.92	217.90
Three phase direct connected meter	188.76	212.09	238.31	267.77
Three phase current transformer connected meter	209.86	235.80	264.95	297.71

5 Amended meter installations forecast

JEN's amended forecast of the number of metering installations that it will install in each year of the subsequent budget period is provided in Table 5-1 below. The table includes both new connections and replacement meters.

Table 5-1: Metering Installation Forecast

Calendar Year	2012	2013	2014	2015
	Number of Meters Installed			
AMI Meters				
Single Phase	81,710	35,555	3,583	3,558
Single Phase Off Peak	24,955	10,379	0	0
Three Phase Direct Connect	16,230	7,117	806	801
Three Phase CT Connect	2,077	894	56	55
AMI Meters Sub-total	**124,971**	**53,946**	**4,445**	**4,414**
Non-AMI Meters				
Accumulation Meters	427	50	0	0
Manually Read Interval Meters	381	21	0	0
Non-AMI Meters Sub-total	**808**	**71**	**0**	**0**
Total Meters	**125,779**	**54,017**	**4,445**	**4,414**

JEN's proposed metering installation profile for AMI meters will ensure that JEN meets its roll-out targets, as set out in the AMI Cost Recovery Order, and replaces faulty meters, as well as meters reaching the end of their useful life.

6 Amended proposed budget

This section sets out JEN's amended proposed budget for the subsequent budget period. All figures are provided in real 1 July 2011 dollars, unless stated otherwise. The substantiation for the proposed budget is provided in section 6.2.

JEN's proposed Total Opex and Capex for each year of the subsequent budget period is set out in Table 6-1 below.

Table 6-1: Proposed Amended Total Opex and Capex for Subsequent Budget Period

Budget	2012	2013	2014	2015
Capital Expenditure	32,352,399	16,783,274	5,436,901	5,143,711
Maintenance and Operating Expenditure	19,872,391	17,588,832	15,843,687	15,985,100
Total Opex and Capex	**52,224,789**	**34,372,106**	**21,280,588**	**21,128,812**

JEN has arrived at its proposed amended budget by adding forecasts of:

- JEN's share of JAM's amended base costs—which are set out and substantiated in Appendix A of JEN's original budget application, with amendments as per Appendix A of this amended application (JAM's response to the draft determination).
- the JAM management fee—which it calculated in accordance with the methodology set out in JEN's CMS agreement with JAM
- JEN's direct costs of delivering the Regulated Services, such as JEN regulatory audit costs.

6.1 Detailed cost tables

The following tables set out JEN's amended detailed build up of the proposed budget.

[C - I - C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

[C-I-C]

6.2 Assumptions

This section sets out the assumptions JEN has made in forecasting the proposed budget set out in the tables above.

If a change in circumstances occurs, the AMI Cost Recovery Order allows the distributor to notify the AER under clause 5F.1 of an actual or anticipated variance from its approved budget at any point after the AER makes its final determination on the budget.

Where JEN's assumptions outlined below do not hold, JEN may need to notify the AER of a variance from its approved budget. If the assumptions below do hold, there may still be unforseen changes in circumstances that may cause JEN to submit a revised budget application or notify the AER of a variance from its approved budget.

6.2.1 Continuation of the AMI roll out

The Victorian Minister for Energy and Resources and the Victorian Treasurer asked the Victorian Department of Treasury and Finance (**DTF**) to undertake an independent review of the AMI program, to address issues raised in the 2009 Victorian Auditor-General's Report on the AMI program. The possible outcomes of that independent review are uncertain at this point in time. However, JEN understands that those outcomes could include a suspension or cancellation of the program. For the purposes of this amended application, JEN has assumed that the outcomes of the DTF review will result in a continuation of the program.

6.2.2 Expiry of time of use charges moratorium

JEN has assumed that the moratorium on customer reassignment to time of use charges will expire by 1 January 2012, as per the endorsed position of the AMI policy committee.

6.2.3 AMI Specifications Order, Functionality Specification and Service Levels Specification

For the purposes of this application, JEN assumes that the final versions of the specifications to which its must comply to roll out AMI will be:

- release 1.2 of the Functionality Specification
- release 1.1 of the Service Levels Specification.

6.2.4 Exclusivity derogation

JEN assumes that the Victorian Government's exclusivity derogation will stay in place unchanged.

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 subsequent 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.

JEN assumes that it will not be required to make any further investments in its AMI systems during the subsequent budget period to enable competition in the provision of AMI metering or services.

6.2.5 National Smart Metering Program

This application assumes that, following the submittal of this application, the NEM processes and procedures for AMI that AEMO is developing under the National Smart Metering Program will come into effect during the subsequent budget period, but that JEN compliance with them will not require JEN to incur any material cost.

While this assumption is sound and represents the most likely outcome, there is a possibility that the new processes and procedures will require JEN to incur material cost. Until the processes and procedures are developed, JEN cannot assess the extent of the cost.

6.2.6 The Victorian AMI program

This application is made on the assumption that any regulatory changes instigated by the Victorian AMI program—for example, changes recommended by the Industry Steering Committee (ISC)—will not create any significant changes in the scope or cost of JEN's AMI program.

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

6.2.7 Cost sharing arrangements with UED

The costs presented in this application assume that JAM continues to provide services to both JEN and UED, thus allowing cost sharing to remain in place for the duration of the subsequent budget period.

6.2.8 Assumptions underpinning the JAM substantiation of base costs

JEN has accepted that JAM has made a number of assumptions in forecasting its base costs. A report from JAM, setting out and substantiating JAM's base costs was provided as Appendix A of JEN's original budget application, with the assumptions JAM made being set out in section 6.2 of that document. JEN has attached to this amended application JAM's response to the AER's draft determination, which sets out a number of additional assumptions. JEN assumes that the assumptions set out in both JAM reports will hold.

6.2.9 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 has caused a level of disruption and other customer impacts.

JEN intends to continue to do what it reasonably can to minimise adverse impacts arising from its roll-out activity.

At this stage, JEN does not intend to conduct a widespread customer education campaign to promote AMI customer benefits. The costs of such a campaign have not been included in this application.

APPENDIX A: JAM Response to the AER Draft Determination on the Victorian Advanced Metering Infrastructure Review

Attached as a separate file (confidential)

APPENDIX B: Amended JEN Budget templates

Attached as a separate file

APPENDIX C: Citigroup Global Economic Outlook and Strategy

Attached as a separate file

APPENDIX D: JEN Integrated Model Set

Attached as a separate file (confidential)

APPENDIX E: MRP – Value Adviser Associates

Attached as a separate file

APPENDIX F: MRP – NERA

Attached as a separate file

APPENDIX G: MRP – Capital Research

Attached as a separate file