Australian Energy Regulator

NSW Gas Distribution Revenue Reset

AER Draft Decision

A response

by

The Energy Markets Reform Forum

April 2010

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The content and conclusions reached are the work of the EMRF and its consultants.

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Executive Summary

The Energy Markets Reform Forum (EMRF) provides its comments on the AER's draft decision on Jemena's gas distribution access arrangements application.

The EMRF reiterates its concerns with the absence of detailed cost information from Jemena, which had made it difficult not only for the AER and its consultants to assess cost claims for prudency and efficiency, but also for consumers who have to pay for the costs of the massive opex and capex claims sought by Jemena.

Nevertheless, against the background of a forensic assessment by the AER and its consultants, the conclusions of the review are that the revenues sought by Jemena are excessive for the proposed services. In particular, the AER points to the excessively high capex and opex sought by Jemena, as well as the higher than reasonable WACC.

The EMRF has also undertaken a forensic assessment of Jemena's application and revised application and the AER's draft decision, within the constraints of inadequate information disclosures by Jemena, notwithstanding the requirements of the National Gas Rules.

The EMRF considers that:

- Mines subsidence costs must not be capitalized and must be removed from past capex.
- Costs related to access arrangements must not be capitalized into the asset base.
- Despite clear reservations from Wilson Cook concerning justification of actual capex, the AER has erred in accepting actual capex is prudent and efficient.
- The Jemena revised capex claim for market expansion must be rejected as it is excessive, and even the market expansion allowed by the AER in its draft decision, is probably too high.
- The AER's decision on system reinforcement, renewal, and replacement capex is supported as it is impossible, based on the information provided by Jemena, to attest to the efficiency of the program because of insufficient substantiation.
- The AER's decision to allow much of the non-system capex is still considerably higher than the current period, even though there is insufficient information to attest to its efficiency.
- The AER's decision to allow for real wages growth specific to the EGW industry without building in any adjustment for productivity is incorrect and unacceptable, and is contrary to its expressed approach in the treatment of this issue.

- With respect to the WACC, the EMRF provides arguments in support of the following:
    - The use of the French Fama Three Factor Model does not comply with the NGR
    - MRP should be 6.0%
    - Equity beta should be 0.7
    - DRP should be in the range of 200-300 basis points
    - Gamma should be 1.0

- The First Response Tariff program should be strongly supported by the AER but should not be diluted as proposed by the AER. More examination is required to identify how much gas is likely to be voluntarily load shed.
- The AER is correct in denying many of the step changes claimed by Jemena to boost its opex claim.
- Outsourcing expenditure claims are very disconcerting because of the absence of a tendering process and an arms-length approach to O & M and the employment of JAM.
- The AER's approach to cost escalators in allowing larger than CPI adjustments for materials based on estimates only is incorrect, and further increases the regulatory risks faced by consumers under this review.
- The AER should further examine the issues of prudent discounts and bypass; the increases in tariffs especially in the Sydney area could encourage bypass and it should be made clear to Jemena that it must allow customers to connect directly to its trunk line.
- The EMRF also:
    - Reiterates the earlier view that there should be an incentive program for Jemena to further reduce the loss of gas from its network (unaccounted for gas).
    - Reiterates its earlier view about the treatment of carbon reduction costs as a pass through cost.
    - Expresses concerns with the AER's treatment of self-insurance costs.
    - Raises concerns with the proposed allocation of costs for the Newcastle-Horsley Park-Wollongong trunk line, particularly in light of the STTM introduction and the potential for a new pipeline to be connected between Wallumbilla and Newcastle. These concerns need to be addressed in the development of tariffs.

1. Introduction

1.1. The Energy Markets Reform Forum (EMRF)

The Energy Markets Reform Forum (EMRF) is a forum representing large energy consumers in New South Wales. The EMRF is an affiliate of the Major Energy Users Inc (MEU), which comprises some 20 major energy using companies in NSW, Victoria, SA, WA, NT, Tasmania and Queensland. EMRF member companies – from the steel, aluminium, paper and pulp and the mining explosives industries – are major manufacturers in the State and are significant employers, especially in many regional centres.

The EMRF welcomes the opportunity to provide comments on the draft decision by the AER in relation to the application by Jemena to increase its revenue allowances for providing its gas distribution business (DB) located in NSW.

Analysis of the gas usage by the members of EMRF shows that, in aggregate, they consume a significant proportion of the gas used in NSW. As such, they are highly dependent on the gas distribution network to deliver efficiently the gas so essential to their operations. Many of the members, being regionally based in NSW, are heavily dependent on local suppliers of hardware and services, and also have an obligation to represent the views of these local suppliers. With this in mind, the members of the EMRF require their views to not only represent the views of large energy users, but also those of smaller gas using facilities, and even at the residences used by their workforces.

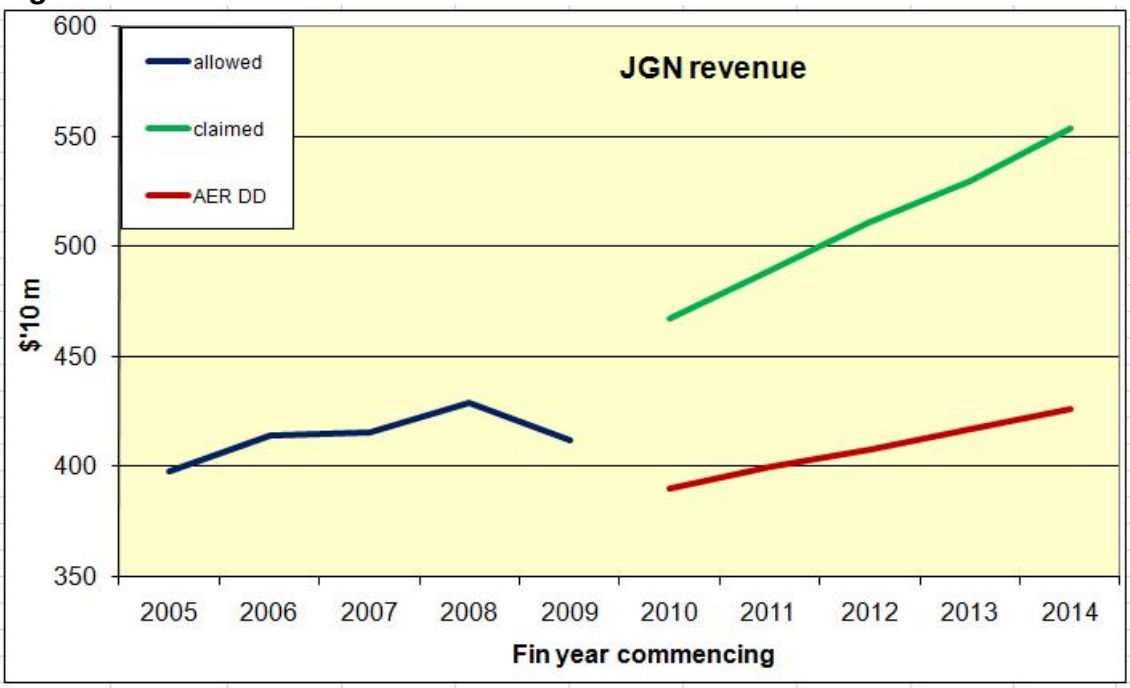
1.2 An overview of the AER draft decision

The AER has carried out the review for the development of the allowed revenue following a similar approach to that used in other utilities' pricing reset programs, including the earlier reviews by IPART of the Jemena NSW Gas distribution network.

The conclusions of the AER review are that the revenues sought by Jemena are excessive for the services provided. The AER specifically points to the amounts of capex and opex sought by Jemena as unjustifiably too high, and that the WACC sought is also higher than reasonable.

As a result of the AER review, the amount of revenue to be allowed is much lower than that sought by Jemena. The following figure 1 shows this graphically.

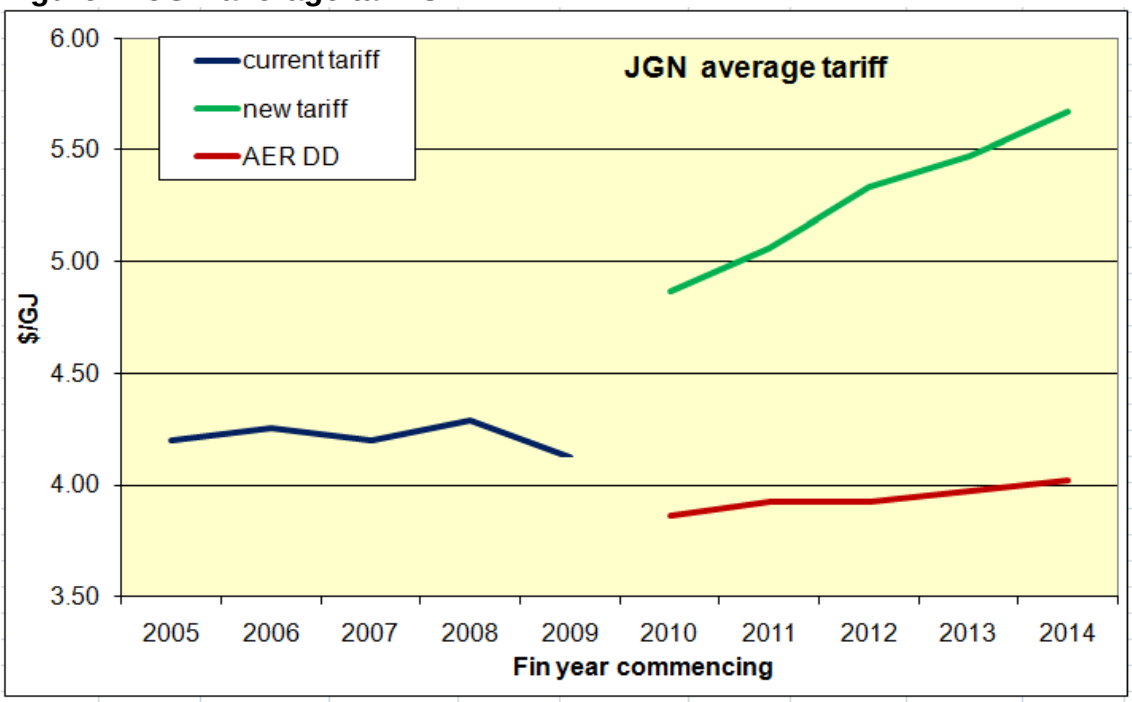
Figure 1: JGN revenue



Sources: Jemena application, IPART FD 2005, AER DD 2010

Using the AER assessment of future demand, the AER draft decision for the allowed revenue results in an overall reduction in average tariff for the services provided by Jemena. This is shown in figure 2.

Figure 2: JGN average tariffs



Sources: Jemena application, IPART FD 2005, AER DD 2010

In this regard, the EMRF sees that, prima facie, the AER draft decision provides an overall benefit in relation to the costs NSW gas users must incur for the use of the Jemena gas network.

1.3 An overview of the capex draft decision

An assessment of the Jemena application shows that it is aggressively seeking an investment expansion. Across the board capex demands have been massively inflated from the current period, despite Jemena indicating an expectation of a reduction in gas consumption.

The EMRF did raise in its earlier response to the Jemena application that, in the environment that Jemena operates in, with no growth in consumption projected, there is no market imperative for such an investment expansion to occur immediately, but there is a requirement under the NGL, that any new investments must be efficient. The EMRF did raise the concern that careful analysis was required to ensure that investment is not being made when the need to do so is low and non-compelling, and where deferment would lead to lower (and therefore more efficient) overall costs.

The AER (and its consultant Wilson Cook) identifies that Jemena has not provided sufficient evidence that its proposed capex was indeed efficient, and very correctly the AER and its consultant have developed a different approach to setting an efficient level of capex for Jemena. The EMRF strongly agrees,, and as the detailed analysis and commentary by the EMRF demonstrates, the AER revision is supported.

The EMRF provides more detailed comments in section 2.

1.4 An overview of the opex draft decision

Wilson Cook has carried out, under quite difficult circumstances, a creditable task in developing a recommendation which provides an indication of what efficient costs Jemena should be allowed.

Overall, the EMRF considers that the AER has developed (under difficult circumstances) a reasonable assessment of the level of opex an efficient service provider would need to deliver gas through the Jemena network. Notwithstanding that achievement, there is unfortunately no program to provide Jemena with an incentive to reduce its opex, such as that used by ESCV or the AER's EBSS used for electricity distribution businesses.

There is no financial/efficiency driver for Jemena to reduce its opex over the next regulatory period, or for the achievement of consumer benefits of the

larger than expected reinforcement, renewal and replacement element of the Jemena capex. These are major shortcomings of the draft decision.

The EMRF provides more detailed comments in section 3.

1.6 Confidentiality

The EMRF was concerned that significant elements of the AER draft decision and the consultants' reports retained deletions of information which stakeholders needed to use to provide informed comments to the AER.

The decision to allow such information to be excluded is to be regretted. The EMRF considers that the AER has an obligation to limit the amount of confidential information necessary for stakeholders to fully participate in the regulatory process.

1.5 The EMRF'S General View

The main difference between this review and earlier reviews has been the impact of the introduction of the gas short term trading market (which has led to the decision to incorporate the Wollongong/Newcastle trunk line into the distribution network) and the decision by Jemena to move away from the unique tariffs used previously for each demand gas user, to a more generic location based tariff structure.

Whilst Jemena has indicated that the demand market as a whole is unlikely to see much increase in real network charges, the actual detailed development of the tariffs shows there are very large movements in the costs individual consumers will see as many large gas users will incur significantly increased tariffs while others will see quite large reductions. At the forum where Jemena presented its application (23 September 2009, slide 23) Jemena advised that there would be no material change in the total revenue from the demand service; this is despite the overall increase in revenue sought by Jemena. The AER draft decision has reduced the allowed overall revenue below the current AA revenue (see figure 1) implying that the amount of revenue for demand haulage should reduce also. With the wide variety of changes in demand haulage tariffs, it is not possible to verify this unless the AER undertakes this verification.

The AER has accepted the logic presented by Jemena which underpins the structure of the new tariffs. What is not discussed or reviewed is why, under the decisions of IPART, the earlier structure implemented was established. All that is discussed is that the new structure is significantly simpler.

In its submission to the Jemena application, the EMRF pointed out that the new NGR requires the revenues to lie between avoided cost and stand alone cost (which is recognized as being a very wide range) but the Rules also require that tariffs should reasonably reflect long run marginal cost. The clear implication of the draft decision is that the AER considers that as Jemena has decided to reduce the number of tariffs, then the requirement of cost reflectivity (resulting from application of LRMC) applies only to the new groupings of customers into the classes Jemena has decided upon.

On a global level, the AER has addressed many of the EMRF concerns raised in the EMRF response to the Jemena application.

As the AER will note, the EMRF has significant concerns about the AER approach to the cost escalators the AER has used. The EMRF detailed comments about cost escalators are in section 4.

The EMRF has also provided detailed comments about its concerns on elements of the WACC development (section 6) and pricing methodology (section 8),

2. Capital expenditure and asset base

2.1 The starting RAB

The AER has modified the Jemena proposed RAB in a number of ways – adjusting the allowed roll-in of capex and adjusting the depreciation approach used.

In particular, both Wilson Cook (the AER technical consultant) and the AER consider that the cost incurred by Jemena as a result of the mines subsidence should not be rolled into the asset base as this was effectively a repair and did not create new assets. Because of this the work should not, quite correctly, be capitalized.

The EMRF concludes that this work should not be a charge on consumers either, and the Jemena must recover the costs incurred from those parties that caused the subsidence. Wilson Cook implies a similar view as it remarks (page 45):

> "Expenditure to repair damage to pipelines caused by mines subsidence is forecast to be $21.7 m, an overrun of $20.5 m or around twenty times the level foreseen. This is before the **deduction of recoveries … from other parties** in respect of the damage." (our emphasis).

A recurring theme in the Wilson Cook report on capex costs sought by Jemena is that (page 42):

> "In conclusion, … and notwithstanding PB's view of the reasonableness of the incurred costs but in the absence of a quantitative statement of the effects of the various cost-increasing factors and in the absence of detailed cost information (which could be expected to show a considerable variance in the cost of new connections in different circumstances but which could also be expected to disclose the amount of any capitalised overheads or capitalised profit margins arising from the related parties to whom or through whom the work was outsourced) **we considered the expenditure reasonable in terms of scope and nature but are not able to attest to its cost efficiency."** (our emphasis)

Wilson Cook avers that in order to assess the efficiency of the investment, a "bottom up" appraisal is required. But this has not been possible as Jemena has not provided the detail necessary to perform this essential step. Wilson Cook observes (page 48);

> "In short, we consider that the arguments advanced … to demonstrate prudence in the manner in which the works were identified, planned and

> executed … do not demonstrate efficiency, which in our opinion would require either a "bottom-up" appraisal of the costs incurred or identification of wholly competitive processes in tendering the work. In addition, a justification and reconciliation of any capitalised overheads or profit margins that have been added to the expenditure would need to be provided."

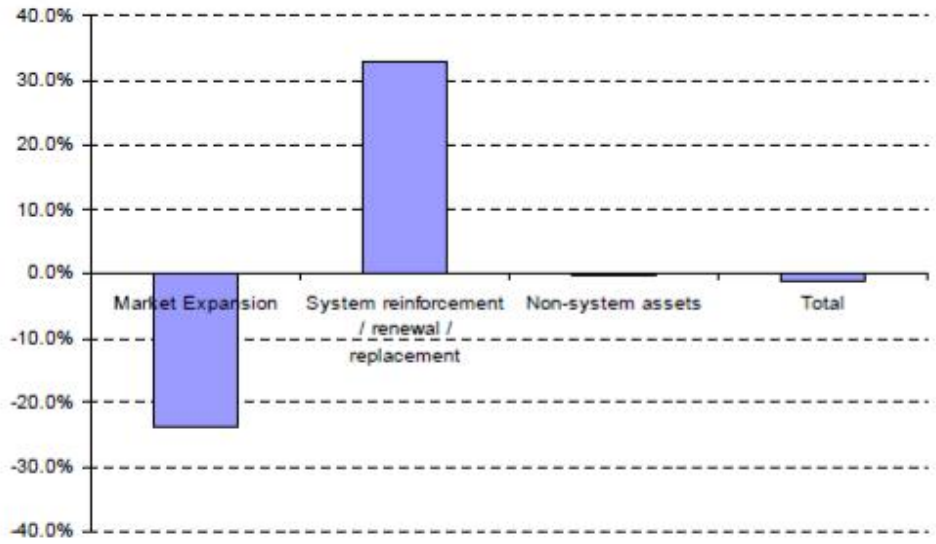
Despite these clear reservations, Wilson Cook surprisingly recommends that the actually incurred capex of $530.5k be rolled into the asset base with the only exceptions being the removal of the capex for mines subsidence and to remove from the capex, an amount of capitalized costs related to access arrangements.

The EMRF agrees with these two exceptions but queries how Wilson Cook can still recommend acceptance of past capex even though it has not been demonstrated to be efficient. Capex efficiency is a basic tenet of the gas Rules.

In its draft decision the AER comments that the capitalization of the AA costs was approved by IPART and therefore should remain in the asset base. The EMRF strongly disagrees with this action.

Despite the very clear reservations Wilson Cook has regarding proving the efficiency of the actual capex, the AER has accepted the actual capex as prudent, mainly based on its observation that overall the actual capex incurred is much in line with the overall amount allowed by IPART – this acceptance, in light of the fact that there are massive variances between the different classifications of capex which the AER clearly highlights in its figure 3.2 (shown below), appears to be based on guesswork or at best an undisclosed assumption. The EMRF strongly considers the AER's draft decision on this fundamental issue unacceptable, as capex has to be demonstrably efficient for it to be rolled into the RAB.

Figure 3.2: Differences between actual/estimated and forecast capital expenditure (Sm, real, 2009–10)



Source: Jemena, *Access arrangement information*, August 2009, p. 49.

With such large variances between market expansion and system reinforcement, the EMRF is at a loss to understand how the AER can assume that, because IPART approved an overall capex amount that nearly matches the overall actual capex, the actual capex is efficient and prudent in the absence of supporting data which Jemena should have provided.

2.2 Overview of Jemena next AA capex

In its application, Jemena sought a large increase in its capex allowance. Subsequent to its application Jemena converted its estimated fourth year capex to an actual value from that estimated at the time of the application(a downward revision), and downwardly revised its estimated 5th year capex.

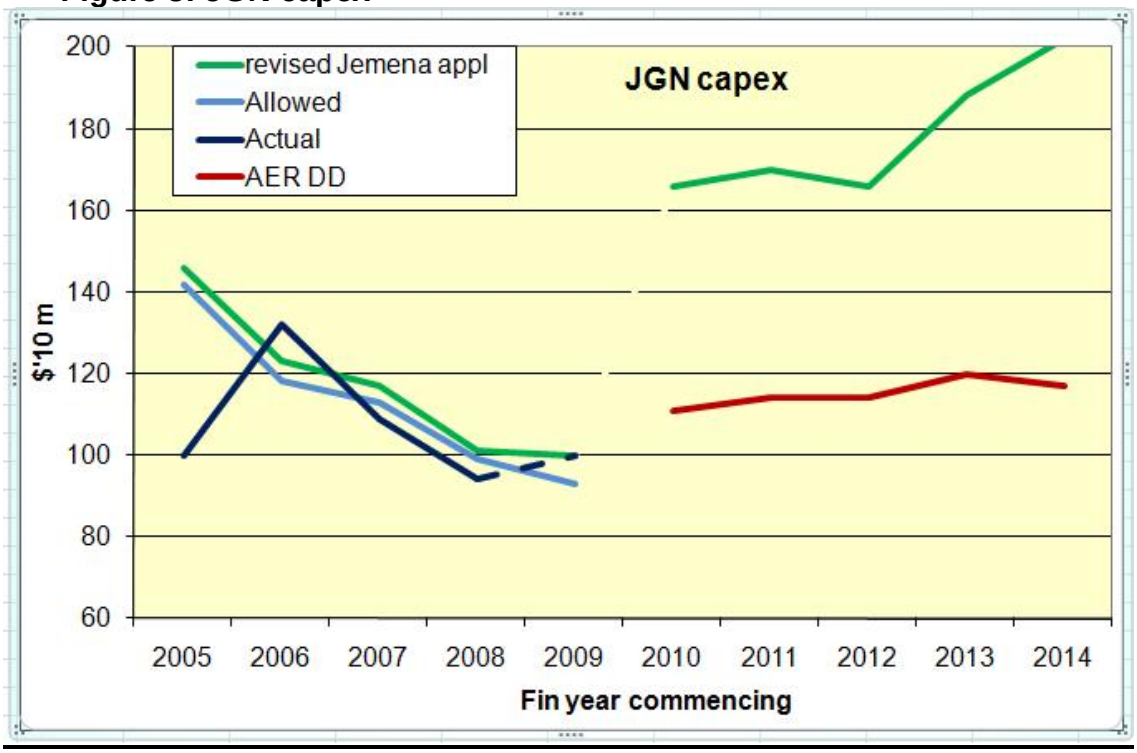
After detailed review of the application, Wilson Cook – the AER technical consultant – recommended significant reductions to the claimed capex to be allowed for the next AA period. The AER accepted most of the Wilson Cook recommendations and, in its draft decision, determined the capex for the next AA period should be slightly more than that based on the fourth year actual capex incurred in the current period and some 35% less than Jemena applied for.

In response, despite the AER draft decision, Jemena provided a revised capex plan which results in **an increase** (albeit a very small increase) to the capex it sought in its application. This capex increase is primarily driven by

an increase in market expansion of 6% offset by similar sized reductions in the two other categories of non-system and system reinforcement, renewal and replacement.

This is shown graphically in the following figure3:

Figure 3: JGN capex



Source: Jemena application, AER 2010 DD, IPART 2005 FD

In developing its view on the allowable capex, the AER noted that Wilson Cook had had considerable difficulty in getting full and detailed information from Jemena and its corporately related operator of the network – Jemena Asset Management (JAM). It noted that JAM was operator of the network, directly carried out capital works and provided the management for all subcontracted capital works.

2.2.1 The Wilson Cook review

In its report Wilson Cook observed a number of disturbing elements about the Jemena capex application. As with the review of past capex, Wilson cook observes (page 57) in relation to the forecast capex:

> "After review, we were satisfied that the scope of the planned works was based on need and that their timing appeared appropriate. We did not receive business cases or detailed

technical reports for any of the planned works. Nor did we receive sufficient information to enable us to attest to their cost efficiency."

Whilst this observation is in relation to capacity development, the sentiment is a recurring theme throughout the Wilson Cook report on new capex.

Wilson Cook concludes its assessment of forecast capex by accepting the Jemena proposal and deducting from it amounts which are marked confidential for 10 specific aspects, and then deducting a margin from the works which was to be granted to JAM. Overall, Wilson Cook recommends a 15% reduction in the allowed forecast capex.

Other than some qualitative assessment provided by Wilson Cook, the EMRF has no ability to assess whether the Wilson Cook recommendation is sound, although Wilson Cook does clearly state it has not been able to attest (due to the lack of detailed information) as to the efficiency of the capex it recommends the AER should accept.

2.2.2 The AER assessment of forecast capex

Because the AER has taken the view that the Wilson Cook assessment of the Jemena forecast capex must be suspect due to the lack of information provided by Jemena, it considers that it must assess the forecast capex on the following bases (page 45):

- "For certain capital expenditure items a baseline level of capital expenditure is derived from the average annual actual capital expenditure in the earlier access arrangement period. The scope of this capital expenditure for the access arrangement period is assessed as reasonable on the basis that Jemena has demonstrated it has delivered similar programmes in the earlier access arrangement period, but for a lower base cost
- As the cost of the proposed capital expenditure cannot be attested to in terms of efficiency, the AER applies a cost benchmark derived from the historical costs incurred in the earlier access arrangement period. This ensures that the costs of works undertaken in the access arrangement period are at least as efficient as works undertaken of a similar nature in the earlier access arrangement period
- Certain individual projects are included that have sufficient information, and for which historical levels of capital expenditure are not indicative, whereby the AER can conclude that these projects meet the criteria set out in the

NGR. In these cases, the AER removes the flat 6 per cent overhead allocation and the JAM margin

- Certain items of capital expenditure are removed (for example, because the AER considers that they are operating expenditure in nature)."

The EMRF agrees with the AER that this is both an appropriate and reasonable approach in view of the absence of fundamental information from Jemena.

2.2.2.1 JAM overhead and margin

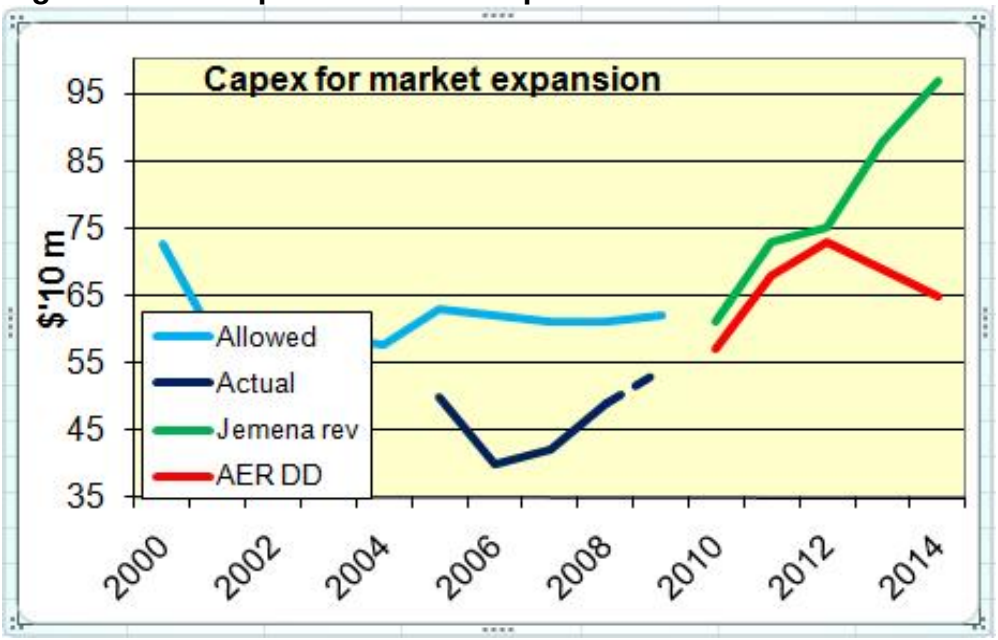
The AER has removed the overhead and profit margin included by Jemena. The EMRF for reasons included in section 3.3.2 below agrees with this approach.

2.2.2.2 Market expansion

Despite the reservations about the lack of evidence the AER has accepted the Jemena claimed capex for market expansion discounted for the removal of the JAM margin and adjustment of the escalation factors.

In response to the AER draft decision, Jemena provided a revised capex program for its market expansion program increasing its claim. The following figure 4 depicts the revised Jemena claim and the AER draft decision and past performance.

Figure 4: JGN capex for market expansion



Source: Jemena rev application, AER 2010 DD, IPART 2005 FD

When the actual capex in the current period for market expansion is calculated in reference to the number of new customers connected in the same period, the cost per connection averages at ~ $2160 per new customer. The AER draft decision allowance for market expansion capex and the AER forecast of new customer numbers (145,000[1]) averages at ~$2220 per new customer, which is a 3% premium.

In contrast, the original Jemena claim is ~$2560 per new customer, nearly 20% more than each connection actually cost Jemena in the current period. The revised claim increases this rate to ~$2720 per customer, some 26% higher than its performance in the current period.

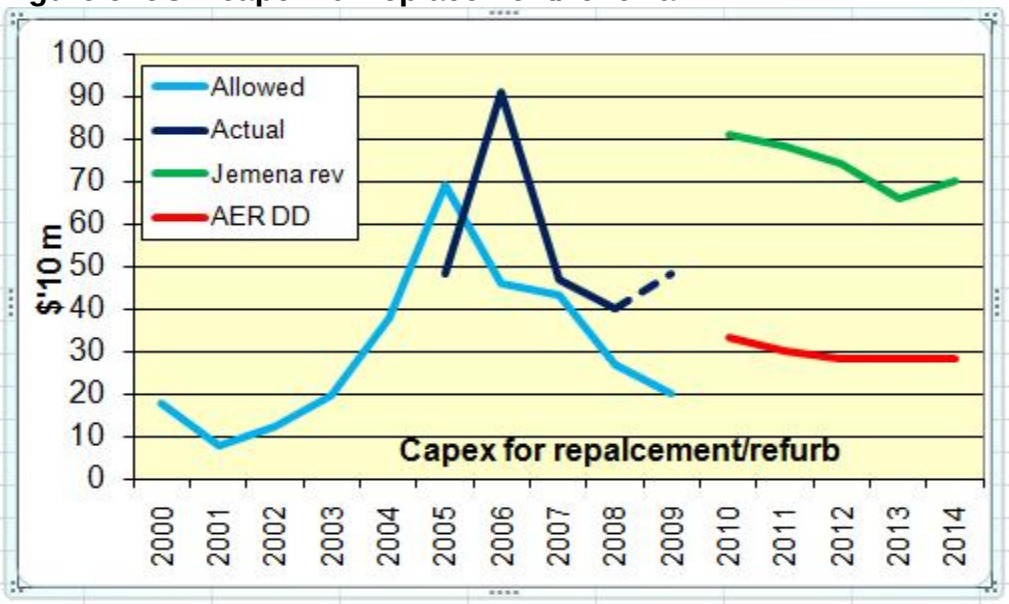
Whilst the EMRF is not convinced that the basis of the AER approach gives an efficient capex for market expansion, it seems that the outworkings are comparable with an efficient cost per customer based on the actual costs Jemena incurred most recently for this work. The Jemena revised claims should be rejected.

2.2.2.3 System reinforcement, renewal, replacement

The AER agrees with Wilson Cook that due to Jemena providing insufficient substantiation for its proposed reinforcement and replacement capex program it was impossible to demonstrate that the program proposed is efficient. To overcome this, the AER developed its own assessment of what could be considered to be efficient, based on historic actual expenditure, coupled with interpretation of four elements of the program where Jemena had provided additional data. The following figure 5 depicts the revised Jemena claim and the AER draft decision.

[1] The figure of 145,000 new connections is 35% higher than that achieved in the current period. Although the EMRF does not have the figures to dispute this large increase it has significant reservations about its achievement based on the current period performance.

Figure 5: JGN capex f0r replacement/renewal



Source: Jemena rev application, AER 2010 DD, IPART 2005 FD

The AER draft decision essentially projects the most recent capex levels with some discount.

Whilst the EMRF fully understands why the AER had to come to its draft decision, it decided to take an alternative assessment to test whether the AER approach has been perhaps too aggressive considering that the AER is proposing to allow only 40% of what Jemena is seeking.

The EMRF addresses this conundrum in two ways:

1. The most recent full year capex for this class of work was $40m in 2008/09 and the average allowance made by IPART for the current AA period is a similar amount. Extrapolating this amount for a full five years implies that Jemena would spend some $200m in the next AA period. This represents some $10m pa more than the AER draft decision.

2. The IPART allowance for this class of work for the last three years of the current period is $25m pa, which when extrapolated to a full five years, provides a capex allowance of $125m

The EMRF sees that the AER allowance falls roughly equidistant, on a percentage basis, between these two numbers giving a high degree of support for its decision.

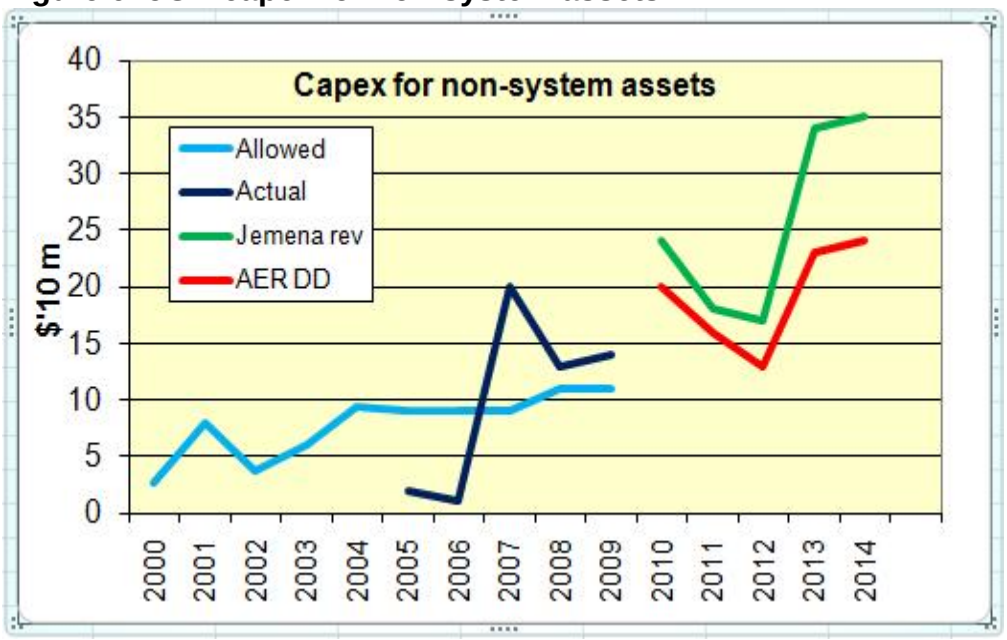
The EMRF therefore considers the AER draft decision gets support from both the Jemena past performance and the IPART assessment of the needs of the network.

2.2.2.4 Non system capex

As with the other elements of the capex program, Jemena has failed to provide sufficient information for Wilson Cook and the AER to assess the efficiency of the proposed non-system capex program

In response to the AER draft decision, Jemena provided a revised capex program for its non system capex program slightly reducing its claim. The following figure 6 depicts the revised Jemena claim and the AER draft decision and past performance.

Figure 6: JGN capex for non-system assets



Source: Jemena rev application, AER 2010 DD, IPART 2005 FD

It is clear that the AER proposes that Jemena be allowed considerably more non-system capex than Jemena used in the current AA period. This decision reflects the perceived need for a significant upgrading of the Jemena IT system although the AER has removed certain inefficient elements from the allowance.

The EMRF has insufficient information to provide any comment other than to note the AER draft decision.

2.2.2.5 Cost escalators

The EMRF comments on cost escalators to be used for adjusting the capex allowances, is provided in section 4.

2.3 Summary

The AER has addressed some quite basic concerns and anomalies in the Jemena development of the starting asset base. We agree with the AER decision to remove the cost of the repairs due to mine subsidence, but we remain concerned that the AER has not placed sufficient pressure on Jemena to have the causers of the damage to pay rather than allow Jemena the easy solution to pass this cost onto consumers. The AER's draft decision could well allow Jemena to "double-dip" should it subsequently claim damages from the parties responsible for the damage.

It is apparent that Jemena is either unwilling or unable to provide sufficient evidence to the AER and its consultant that the forecast capex is efficient. Provision of such data is essential in a regulatory environment (more so when massive levels of capex are being sought) and Jemena's failure to meet these requirements leaves the regulator with only one option – that to base future capex on what was proven to be adequate in the current period.

The EMRF is concerned that, as did IPART in its 2005 decision, there has been too much capex included for new connections. Equally, the EMRF sees that Jemena will not readily accept the AER draft decision to significantly reduce the replacement/refurbishment capex claimed.

However, on balance the EMRF considers the AER and its consultant have carried out a difficult task under trying conditions. The final outcome of a slight increase in capex over the actual capex incurred in the current period would appear to deliver an amount of capex that should be adequate for Jemena's needs but reflects Jemena's own historic performance.

3. Forecast Operating Expenditure

3.1 Overview of Jemena opex

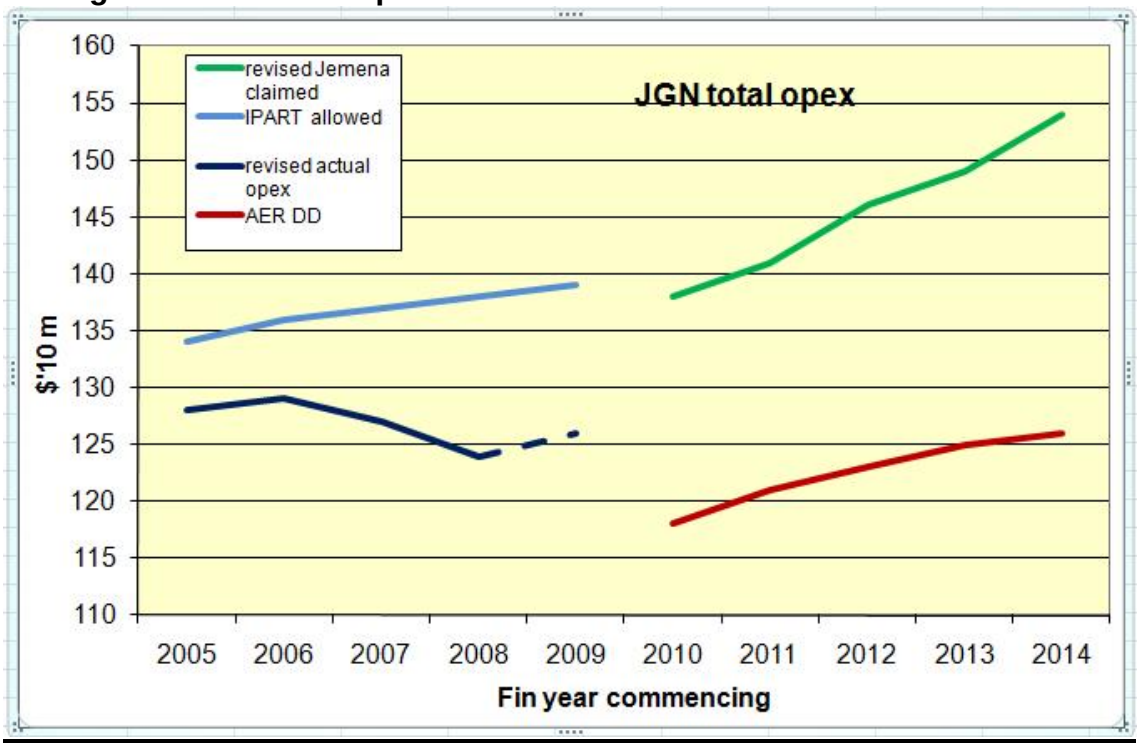
In its application, Jemena sought a massive increase in its opex allowance. Subsequent to its application, Jemena converted its estimated fourth year opex to an actual value from that estimated at the time of the application (in a downward direction) but increased its estimate of the 5th year opex.

After detailed review of the application Wilson Cook – the AER technical consultant – recommended significant reductions to the claimed opex to be allowed for the next AA period. The AER accepted most of the Wilson Cook recommendations and, in its draft decision, determined the opex for the next AA period should be slightly less than that based on the fourth year actual opex incurred in the current period (and some 15% less than Jemena applied for) to reflect a number of "one off" costs that Jemena had incurred in the base fourth year.

In response, despite the AER draft decision, Jemena provided a revised opex plan which results in **an increase** (albeit a very small 1% increase) to the opex it sought in its application

This is shown graphically in the following figure 7.

Figure 7: JGN total opex



Source: Jemena application, AER 2010 DD, IPART 2005 FD

In developing its view on the allowable opex, the AER noted that Wilson Cook had considerable difficulty in getting full and detailed information from Jemena and its corporately related operator of the network – Jemena Asset Management (JAM). It noted that JAM was operator of the network, directly carried out capital works and provided the management for all subcontracted capital works.

3.2 The Wilson Cook review

In its report, Wilson Cook observed a number of disturbing elements about the Jemena opex application.

- Jemena was not able or not prepared to provide the necessary data Wilson Cook needed to evaluate efficient opex levels from a "bottom up" approach, and as this data is not available to them, they are unable to assess the efficient opex level
- Up to a third of the supposedly actual costs incurred in the base year were forecasts
- An underlying cost breakup was not available of the first three years of the AA
- Jemena has not sought competitive quotes for O&M but negotiated bilaterally only with JAM in a non-transparent and, most likely, on a non-arms length basis.
- In addition to getting a management margin of 6%, JAM was also paid an additional fee as profit but the value of this profit share was considered to be commercial-in-confidence!
- Whilst the O&M component of opex is entirely JAM costs, overhead and administration (A&O) is a mix of Jemena and JAM costs, making separation of the two cost centres difficult and no reconciliation was possible to test the reasonableness of the figure.
- The indirect costs of A&O are rising at a much faster rate than O&M costs
- Despite the increase in opex claimed, JAM is not intending to increase its workforce from the numbers used in the base year, except perhaps to manage growth and the step changes.
- Jemena had not built into its forecasts any improvement in productivity
- Wilson Cook noted the report by Economic Insights on the total factor productivity results for Jemena, and concurred that these show that Jemena had significantly improved its efficiency in the past and should continue to do so, although at a lower rate
- Wilson Cook noted that the benchmarking comparison Jemena did comparing it to the Victorian gas networks was based on outdated data

- The growth escalation factor claimed by Jemena was based on the high growth rate assumption for the network
- Observed that the basis for sustaining the IT rebuild program was an expected improvement of 1% in productivity, but this had not been accounted for in the opex forecast.

Based on its assessment Wilson Cook made a number of recommendations:

- Marketing is needed in order to meet the forecast growth estimates
- Debt raising and self insurance are not step changes
- The future opex should be based on the base year actual opex with adjustment to exclude "one off" costs and the JAM profit margin excluded
- After examining the claimed step changes, considered that most were not true step changes as many were continuing activities already built into the base opex. Wilson Cook recommended acceptance of about 25% of the costs claimed by Jemena

3.3 Comparative studies

As noted by EMRF in its earlier response to the application Jemena provides substantiation for its opex by providing comparative **partial** factor productivity comparisons with the three Victorian gas distributors. This analysis was provided by Economic Insights (EI). As Wilson Cook notes, the analysis whilst indicating Jemena has improved its performance over time, there are certain limitations of the study – the main one being that it used out of date data.

What is not referenced by the AER or Wilson Cook is the performance study undertaken by IPART in 1999. This report is also dated but was a much wider study and indicated that at that time Australian gas networks were some 27% behind efficient performance levels. However, Jemena has still not made up this difference and it would be considered that its comparators would still be improving as well.

It must be recognized that even a mature business must continue to improve its productivity, just to "stand still" and the national productivity is continuing to operate at 1.5-2.0% annually. So at a minimum Jemena should be required to match this national outcome.

The EMRF considers that based on the comparative analysis to date, (including that of Economic Insight) Jemena opex could not be considered as being at the "efficient" performance level yet. To provide an incentive for if to get to the "efficient" level the AER should

build into the Jemena opex an explicit amount for future continuing productivity improvement

3.4 Step changes

Jemena provided details of a number of step changes that it considered applied to it and provided data about these to support an increase in its opex. It cited 16 step changes and sought an increase of $4.13 m pa to accommodate them.

In its response to the application EMRF queried whether most of the claimed step changes were, indeed, legitimate step changes. The EMRF response has been supported by Wilson Cook, and as a result the AER has agreed that many of the claimed step changes should be denied.

The EMRF agrees with the AER draft decision in regard to the decision to deny many of the step changes claimed.

3.5 O&M and employment of JAM

3.5.1 Outsourcing

As a matter of principle, EMRF does not oppose the concept of outsourcing some or even all of its operating and maintenance activities. In fact, many EMRF members contract out parts of its normal operating activities as it has been demonstrated that such an approach can be more commercially attractive than direct employment of staff and labour.

However, when such an approach is used, the outsourcing is conducted on a commercial basis, with competitive tendering and careful analysis against the costs of doing the work directly. Unless such an approach is used, there can be no certainty that the commercial benefits of outsourcing will be achieved.

In contrast to this commercially normal, arm's length approach, Jemena has decided that outsourcing will be more attractive and bilateral negotiations with a related entity to provide these services will deliver the most efficient outcome for Jemena. This may be true, but it does not guarantee that it will deliver the most efficient outcome for those using the Jemena services. Wilson Cook has reached the same conclusion, as does the AER in its draft decision.

What concerns the EMRF is that such non-transparent establishing of the outsourcing costs has the potential for Jemena to embed within

the contract with JAM, unjustifiable costs not available for scrutiny. To a degree this view is reinforced by the decision of Jemena to include in its non-O&M costs (O&A) for some of JAM management costs.

When a business outsources some of its O&M, it does this totally at an arm's length basis where all of the costs of the contract are clearly identifiable and there are no "hidden" costs. What Jemena seems to be doing is that it is opening itself up to perceptions (rightly or wrongly) of double counting and transference of hidden management fees and "profit shifting".

3.5.2 Outsourcing contractor overhead and profit

One major aspect identified by Wilson Cook about the approach used by Jemena is that of adding a management fee of 6% and a further profit component of commercial-in-confidence".

If Jemena had tendered the outsourcing of the O&M component, then the tenders received would have included the contractor's overhead and profit within the rates provided for the outsourced work. In contrast, Jemena has agreed basic costs with JAM and added overhead and profit, although it does seem from the Wilson Cook report that the profit component might be subject to some performance expectations.

What the Jemena approach totally overlooks is that the outsourcing contract not only has to be competitively tendered to ensure the arrangements are at 'arms-length' and therefore the lowest contract price is set, but that the cost of outsourcing needs to be compared to executing the work directly. The fundamental basis of outsourcing is that there should be an overall reduction in costs achieved by outsourcing compared to business as usual where the work is carried out internally. It is totally unacceptable to allow Jemena to outsource the O&M if the outcome is that higher costs will result.

Outsourcing must be competitively tendered and achieve a reduction in costs. Using assessed base rates, adding for overhead and profit, is not "in the long term interests of consumers" but more in the interests of the owner of both Jemena and JAM.

The EMRF agrees that the O&M costs should exclude the overhead and profit mark ups until Jemena can demonstrate that the base costs it uses for its efficient O&M costs do not already include these.

3.6 Non O&M costs

3.6.1 Marketing

In principle, the EMRF does not consider that a monopoly needs an allowance for marketing, and had argued for a significantly reduced budget for marketing by Jemena's forerunner at the time of the last revenue reset in 2005. The EMRF commented that marketing of gas should be left to gas retailers, and not gas network owners, and network owners should "follow the demand" rather than lead it.

However, the EMRF also acknowledges that existing customers using the Jemena network should benefit from an increase in usage of the assets provided by Jemena, as this might reduce the costs that existing customers might see. Whilst this theory has an attraction, the EMRF also accepts that there is a point where the costs to increase customer numbers is not offset by the savings existing customers should get by the addition of the new customers – there is an issue of declining returns implicit in such an argument. Unfortunately, Jemena does not provide such a cost benefit analysis in its application and neither does Wilson Cook, who supports the principle of providing capex for the growth identified by Jemena.

The EMRF accepts that marketing will be needed to achieve the forecast growth in **new** connections. As the EMRF notes in section 2 above and in section 7 below, the cost of new investments (including marketing costs) needs to be efficient. Thus in the assessment of the efficiency of the capex proposed for new connections, the cost of marketing needs to be included as part of the cost benefit study that needs to be carried out to demonstrate the efficiency of the capex involved.

The AER considers that the current level of marketing set by Jemena is indicative of what an efficient NSP might require. The EMRF tends to agree subject to the qualification in the preceding paragraph.

3.6.2 Administration and Overheads (A&O)

The EMRF notes that neither Wilson Cook nor the AER have been able to get sufficient breakdown of costs needed to segregate Jemena's O&M costs and A&O costs. As a result, Wilson Cook recommends that in order to assess efficient costs O&M and A&O costs should be combined in order to assess whether the Jemena costs are efficient.

The EMRF can appreciate the frustration Wilson Cook and the AER experienced and agree with the AER requirement that Jemena must in

future provide a detailed breakdown of its costs so that future revenue reset reviews are made more transparent.

3.6.3 Unaccounted for gas (UAG)

In its earlier response to the Jemena application the EMRF suggested that there should be an incentive program for Jemena to further reduce the loss of gas from its network (unaccounted for gas).

In its review of the Jemena opex, Wilson Cook considers (page 9)

> "The variances … in UAG show a declining overrun, reflecting the declining trend in the quantity of UAG over the period FY 2006 to FY 2008 shown in the graph on p. 8 of appendix 6.8 to the AAI."

Implicit in the Wilson Cook comment is that it considers that Jemena is at or close to best practice in terms of UAG and any incentive program is likely to have little value.

This suggestion has not been taken up by the AER as it considers that (page 209)

> "...that the recommended forecast level of UAG in the Wilson Cook report represents a reasonable basis to determine the best estimate or forecast possible in the circumstances, as required by r. 74(2) of the NGR."

It must be accepted that the cost of UAG is a significant element of the opex budget and its causes are many – leakage from pipelines, inaccurate meters, accidental penetration of gas mains, theft, etc. Just because the "gold lining" project is completed does not mean that there are still gains to be made in further reducing UAG.

Already consumers are seeing the price of gas increase and the impact of the national carbon emission reduction program is likely to exert more price pressure on gas supplies. This means that the cost of the UAG budget is likely to rise further over time even if the UAG rate remains at current levels.

The EMRF takes the view that an incentive regulatory approach must aim to drive the costs incurred by the service provider to the most efficient level. The EMRF approach provides such an incentive.

3.6.4 Carbon costs

The EMRF concurs with the AER draft decision to exclude potential carbon reduction costs until such costs are actually implemented and

costs and timing can be clearly identified. Treating the impact of carbon reduction programs as a pass through cost for this AA is supported.

3.6.5 Self insurance premium

The EMRF is not able to comment on the specifics of the AER draft decision in relation to the claimed allowance by Jemena for self insurance, because the matter is treated as confidential.

The AER proposes that Jemena will not be allowed an increase in its opex for self insuring but does note that the AER accepts that some insurance costs might be a pass through.

The EMRF is bemused by the way the AER has treated this issue and considers it unacceptable, in that consumers are exposed to potential hidden costs at some time in the future.

However, the EMRF considers that there are some immutable principles regarding insurance that need to be clearly stated, so the AER can consider its current stance on the Jemena insurance issue. These principles are:

- **As Jemena already has insurance costs embedded in its A&O, then only a step change in the external environment should be allowed as the basis for an increase in insurance**
- **If the costs for retaining insurance rise because of increased premiums, then actual insurance quotes should be provided to the AER to prove the cost increase.**
- **The costs of a decision to self insure should be clearly compared to costs to externally insure and the lower of the two should be used for setting the allowed opex.**
- **A decision to increase insurance coverage should be demonstrably efficient**.

3.6.6 Equity and debt raising costs

The EMRF agrees with the AER approach to assessing debt and equity raising costs, as essentially they reflect the way businesses operate in a competitive environment.

3.7 Summary

The EMRF expects that the AER will only allow opex costs which are those that an efficient service provider would incur. Wilson Cook has carried out, under quite difficult circumstances, a creditable task in developing a

recommendation which provides an indication of what efficient costs Jemena should be allowed.

Other than as specifically commented upon in previous sections, the EMRF considers that the AER has developed a reasonable assessment of the level of opex an efficient service provider would need to deliver gas through the Jemena network.

The EMRF considers that, with such a significant increase in reinforcement, replacement and renewal capex projects implemented by Jemena above that allowed by IPART, there should be a benefit to consumers realized in the opex allowance in the form of large efficiency savings in:

- Capex/opex trade-offs (i.e. larger opex savings)
- Larger productivity savings than the 1.5% applied by IPART in the current regulatory period (new and more capital assets)
- Savings from maintenance programs no longer required on replaced assets.

Unfortunately, the AER draft decision does not appear to require such benefits to be realized and is silent on this issue.

4. Cost escalators

4.1 Overview

Since the AER commenced operations under the AEMC revised chapter 6A rules and the MCE revised the chapter 6 rules following the same pattern, there has been an explosion of capex and opex increases being sought (and allowed) to accommodate increases in proposed expenditures based on a view that the rate of increases in material and labor costs used by electricity transport businesses is higher than general inflation.

Economic regulation is expected to replicate the pressures of competition on a monopoly network business, yet regulation as applied by the AER is taking a view that any "real" increase in costs (ie where costs exceed the general inflation rate) is justification for an increased allowance to be provided to a regulated business.

In previous decisions by state regulators and the ACCC, they did not build into their decisions a specific allowance into capex and opex, for the expected changes in wages and materials, other than implicitly through allowing the revenues allowed to increase by general inflation as calculated by the movements in CPI.

For example, in its April 2005 final decision, the ACCC observed (pages 42 an 43)

> "The ACCC recognises that transmission network service providers in the NEM face increasing regulatory, environmental and safety obligations. Furthermore there can be expected to be continual upward pressure on the expected range and quality of services that these businesses provide.
>
> However, transmission network service providers are not alone in facing these pressures. It is reasonable to assume that across the Australian economy, all businesses will face these pressures to various degrees. The escalation of the Consumer Price Index captures the net effect of these pressures (and others) and takes account of the response of firms, across the economy, to these pressures. Indexing TransGrid's allowed operating expenditure by CPI therefore already compensates TransGrid for the costs associated with these additional burdens.
>
> Indexing costs at a rate higher than the rate of inflation could only be justified if it could be argued that TransGrid (like other transmission network service providers) faces a disproportionately high increase in such compliance costs, compared with other firms in the Australian economy. It is not clear to the ACCC that this should be the case."

Where state regulators did include for forward labour cost escalation they did not allow for materials cost escalation but they also offset the forecast real labour cost increases against a compensating efficiency improvement factor.

The AER has taken the concept of allowing large increases in labour and materials costs but not offsetting this with any requirement to increase efficiency. The ACCC had previously put the counter argument succinctly – labour costs did increase faster than CPI but these cost pressures were no different to the cost pressures faced by every business operating in Australia and that an allowance should only be permitted if such compliance costs are higher than those faced by other businesses in Australia. Whilst this decision was made in 2005, the EMRF strongly considers that these very sound principles should still apply.

Likewise, in advice to the AER in its assessment of Jemena's application the AER consultant, Wilson Cook,[2] observes (pages 29 and 30):

> "The proposed step changes are reviewed below but we note the following general points. First, in a competitive market, businesses do not normally add to their own costs unless they are satisfied that there is a benefit to customers in terms of the product delivered or to the business in terms of efficiency. Regulation presumably ought to incentivise natural monopolies in a similar way. Second, businesses are dynamic, with variations occurring from year to year. Such variations ought not to form the basis of a claim for a step change, as the effect of that would be to allow costs to be passed on readily in contravention of the efficiency objective implicit in the regulatory framework.
>
> We consider that a methodology such as that used by Jemena that starts with a base year and then applies cost escalators, O & M workload escalators and step changes (which apart from some adjustments made elsewhere for abnormal items in the base year and for work that is discontinued are all additional costs) without any explicit consideration of business efficiency improvements or potential cost savings is likely to lead to a forecast of future costs that is above an efficient level"

These decisions and observations respectively by the ACCC (and State regulators) and Wilson Cook essentially reflect the same key principle – that building in escalation of costs is not reflective of how any efficient business operates.

[2] Wilson Cook report for the AER Review of Expenditure of ACT & NSW Gas Distributors, Jemena Gas Networks (NSW) Ltd, December 2009

The EMRF sought to develop this same principle in its response to the Jemena application, where it provided the view that (page 32):

> "[The] EMRF sees that in order to compensate for the real increases in wages, Jemena should be required to do what business in a competitive environment does – to improve efficiency to offset these real increases.
>
> IPART ensured that this occurred by the imposition of an efficiency saving on Jemena allowances for opex. In 2000, IPART included a 3% pa efficiency saving and in 2005, required a 1.5% pa saving. Jemena has stated that as it is now a fully efficient organization these efficiency savings are no longer possible.
>
> EMRF members have been in business longer than Jemena has been subjected to the regulatory price setting program after the NSW gas assets were "deregulated" in the mid 1990s. Using the same argument as Jemena does, EMRF members would be able to likewise aver they are mature and no longer has any efficiency gains to be made.
>
> Unfortunately, the competitive environment does not allow this, and continuous efficiency improvement is essential just to stay in business."

In this regard, the AER consultant Access Economics[3] makes the point (page 104):

> "Just as in the domestic inflation example, wages respond with a lag to changes in underlying CPI inflation, with the long run real wage tied to CPI inflation and labour productivity growth."

Effectively Access Economics makes the point that with a time lag, real wages growth equates to productivity growth, and therefore with CPI adjustments (with a time lag).

It is quite clear that if the AER decides (as it has in its draft decision) that it should allow forecast opex and capex to be escalated against estimates of future costs, then it should also include for the same pressures that competitive industry has to do – improve efficiency to offset these external price pressures that are likely to be applied.

The AER is required to ensure that allowed costs (opex and capex) are efficient. So far the AER has allowed just the increases and so (as Wilson Cook avers) future costs can no longer be considered to be efficient. This view is also effectively propounded by Access Economics.

There is a fundamental flaw in the AER's approach in respect of the application of cost escalators and efficiency offsets. It is diametrically

[3] Access Economics report for the AER, Forecast growth in labour costs, 16 September 2009

opposite to the approach taken by the ACCC and State regulators (such as IPART) and by so doing, the AER is introducing a major regulatory risk element in which consumers will continue to pay unjustifiable increased prices into the future.

4.2 Materials cost escalation

In its response to the Jemena application, the EMRF stated that the CPI adjustment (as used previously by the ACCC and state regulators) provided adequately for the change in the cost of materials. The AER responded by stating (page 62) that:

> "The AER notes EMRF's submission that CPI should be used to escalate materials. For operating expenditure the AER considers that the CPI provides a reasonable basis and the best estimate possible in the circumstances as required by r. 74(2)(b) of the NGR and is consistent with r. 79 of the NGR. For capital expenditure, however, the AER considers that there is no reason why the price changes of the materials considered cannot diverge from the CPI as the CPI is a far more broadly based index. Accordingly, increases in the materials considered may be offset by decreases in other items not used in gas distribution but which are used in calculating the CPI. The AER considers that it is appropriate to apply specific materials escalators for capital expenditure. This is because capital expenditure programs are project based and so allow for an estimation of the specific amount of each material that will be used in a project."

This observation might have some validity if the replacement indices were based on reality. But in fact they are **forecast** assessment of the material costs into the future, compounded with **forecasts** of exchange rates and further compounded with **assessments** of future inflation. For the AER to consider that its assessment of future materials costs (with their potential significant errors and inaccuracies) is a better forecast than using CPI with its ex post adjustments, is disingenuous in the extreme. Errors and inaccuracies are compounded using this approach.

The AER has developed its own set of expected materials real cost escalators which vary significantly from those initially requested by Jemena. In fact, the AER estimates are significantly higher than those estimated by CEG for Jemena in its August 2009 report. CEG revised these same material escalators for ACTEW in March 2010. The revised figures are much higher for steel and aluminium than assessed in August. The following table 1 summarizes forecast movements in two of the material costs at different times:

Table 1: Material cost escalators

Material	By	date	09/10	10/11	11/12	12/13	13/14	14/15	Cum
Steel	CEG	Aug 09	-18.0	8.4	6.3	1.5	0.9	0.8	**-2.5**
	AER	Feb 10	-27.7	34.6	20.9	5.1	1.0	-1.0	**23.6**
	CEG	Mar 10	-17.9	41.9	7.0	-1.9	-2.1	-1.8	**17.6**
Alum'm	CEG	Aug 09	-7.9	9.9	9.0	7.7	6.6	5.9	**34.1**
	AER	Feb 10	-4.9	30.0	16.2	6.6	2,5	-2.4	**53.2**
	CEG	Mar 10	-0.6	34.7	3.1	0.6	0.3	0.5	**40.0**

Source: AER DD, CEG for ACTEW

That such extreme variations in the forecasts of future material costs can occur in such a short period of time only confirms the extreme volatility in the forecasts and the extent to which they are impacted by assumptions made at different times.

This raises two fundamental key questions:

- To what extent can reliance be placed when there are such large movements in forecasts in only a (short) 9 month period?
- To what extent does the forecast value of the $A impact on the forecasts for material costs?

4.2.1 Impact of exchange rates

In its draft decision on ETSA Utilities made in November 2009, the AER forecasted expected values for exchange rates which underpinned the estimated materials prices.

In the ETSA draft decision appendix G, the AER provides the following table G.8 of forecast exchange rates:

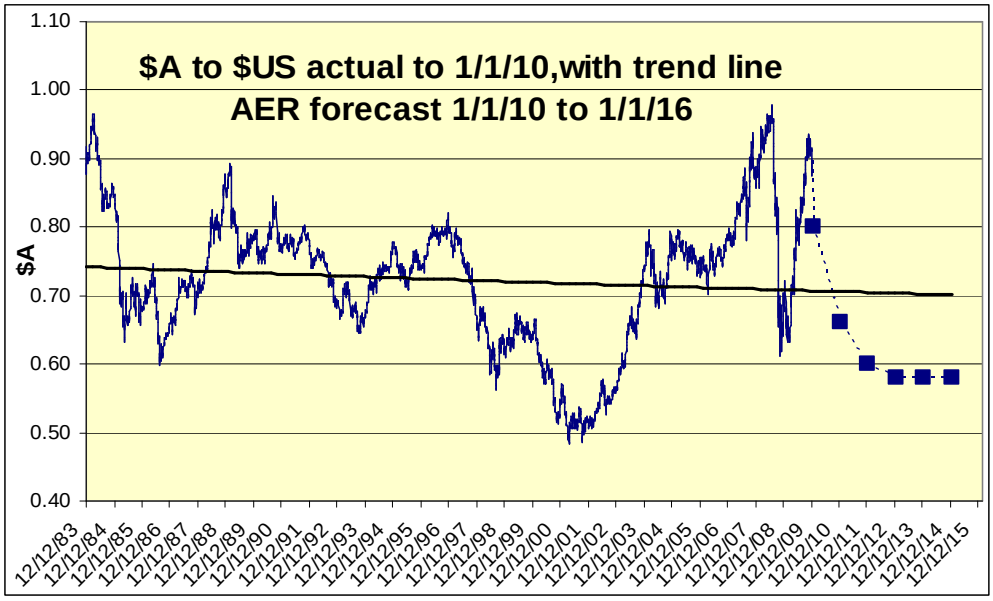
Table G.8: AER conclusion on exchange rate forecasts for ETSA Utilities (USD/AUD)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Exchange rates	0.744	0.800	0.656	0.603	0.585	0.581	0.580

Source: AER analysis; Econtech, *ANSIO*, 20 August 2009 p. 110

This seems to indicate a very conservative forecast, when the entire period of floating exchange rates is reviewed. The following figure 8 shows the historic exchange rates and the forecasts of the AER:

Figure 8: Movement of $A vs $US



Source: RBA, AER ETSA DD

For the expectation of the exchange rate for 09/10, the AER has forecast a value of $A0.80. The average exchange rate up to mid April 2010 (ie of more than nine months of data) shows that the actual current average exchange rate for 09/10 is $A0.88. This shows that the current AER estimate is significantly conservative for 09/10 and should be revised. To have an average of 0.80 for this year would require the exchange rate to immediately plummet to 0.56 for the rest of this year. This is not an expectation of the market (based on recent trends) as a whole and is an unrealistic forecast.

The forecasts of the balance of the new regulatory period (shown as a dotted line) shows that the AER estimates for the exchange rate are the lowest for the entire period of floating exchange rates except for a relatively short period from 2001 to 2002 where the exchange rate was lower that the AER forecasts for the next 5 years. Effectively, the AER forecast implies the $A will have a more sustained period of low exchange rates than has ever been experienced since the $A was floated. Again, we would severely question this forecast.

The overall trend of $A to $US is that there has been a slow reduction of perhaps $A0.04 pa over the entire period of floating exchange rates.

This conservatism in the exchange rates is significant as it flows to the price expectations for the price movements of steel, aluminium and polythene the AER has estimated for its draft decision, as the prices of these materials are all quoted in $US.

It is insufficient for the AER to state (page 63):

> "The AER acknowledges the EMRF's submission on exchange rates. The AER notes the difficulty associated with forecasting exchange rates, has analysed the approach used in the CEG cost escalator report and has considered alternative ways to forecast exchange rates. A reasonable method that produces a better estimate than the proposed method has not been identified."

Such a light dismissal of such an influential cost driver is unacceptable.

The EMRF has demonstrated that the AER is incorrect on this matter and this is acknowledged by the AER. It cannot then dismiss the EMRF submission simply by pointing out that a reasonable method "has not been identified". This is the type of regulatory risk that consumers are clearly afraid of.

- Firstly, there is no independent data available which gives the future price of these commodities five years out, so the forecasts are essentially "educated guesses" and, as they are likely to be wrong, set conservatively.
- Secondly, the fact that the AER has used such a conservative approach in regard to the exchange rate, this raises the spectre that as all other material forecast prices are equally too high, and they will be made more so because of the conservative approach to the exchange rate. There is a compounding effect that the AER seems to have overlooked.

4.2.2 Base dates for adjustments

The AER has allowed that the materials escalation rates apply from year 09/10. This presupposes that the base rates used for setting the capex and opex do in fact use 08/09 data in their formulation. Whilst this might apply in the case of wages it is most unlikely to apply on the case of materials. Rates set in one year are commonly assessed on sourcing the materials from stock and stock prices are based on the actual prices paid.

It is therefore safe (and is a conservative approach) to assume that the material prices are reflective of the indices that applied the year before.

4.2.3 Ex post adjustment for material indices

The AER has made the decision that it will allow regulated businesses to include in their forecasts the expected increases in the cost of materials. If the likely error in doing so is exposed to such large

potential inaccuracies, then it is incumbent on the AER to find an accurate method that will achieve the aims of the AER.

One such method is to take a long term view of materials price movements and determine (as have the ACCC, state regulators and Access Economics – (see section 4.1 above)) that materials prices will be accommodated within the CPI. This was the regulatory approach used by regulators for over 10 years before the AER introduced its current but flawed method for making adjustments to opex and capex allowances to accommodate future price movements.

As an alternative approach, due to the inevitable but significant errors that will occur due to the excessive inaccuracies in setting forward material price movements the AER could introduce a method for accommodating these movements which builds in an estimate for the capex and opex allowances but then is adjusted on an ex post basis once the actual values are known. This approach would provide adjustment for actual movements (meeting the regulated businesses needs for recovery of costs, but would not expose consumers to unnecessary and unjustifiable costs that will be introduced due to the conservative assessments made of these parameters.

This second approach is consistent with the approach to adjust tariffs on an annual basis to reflect the difference between forecast CPI and actual CPI, and used by the AER in resetting the regulatory asset base at each revenue reset.

Further the second approach eliminates the errors, uncertainty, regulatory gaming and regulatory risks so clearly demonstrated in the current AER approach.

4.2.4 Summary

The performance of Jemena over the past regulatory periods where there have not been allowances for increased material costs allowed for by regulators (such as the ACCC and IPART), shows that it has consistently been able to absorb increases and decreases in materials prices within its capex and opex allowances when adjusted by the CPI. The EMRF observes that other businesses must manage these price movements within a market that has price movements measured by the CPI. This is the real world.

The EMRF considers the AER approach in allowing larger than CPI adjustments for materials based on estimates only, further increases the regulatory risks consumers face under this regulatory process developed by the AER.

4.3 Wages cost escalation

In its submission to the Jemena application, the EMRF observed that the AER should build into its allowances, a productivity factor such as used by the ACCC and state regulators in previous regulatory decisions.

The AER responded to this that (page 62) by stating:

> "The AER considers EMRF's submission that Jemena has demonstrated an increase in efficiency offsetting real wage increases does not clearly establish that there has been such an increase in efficiency. The AER considers that, given the yearly variance in both operating and capital expenditure projects and the possibility of deferring proposed expenditure, it is extremely difficult to calculate an annual efficiency improvement from the high level data presented in the access arrangement information. Further, the AER considers that a more appropriate method to correct for productivity improvements would be to use a productivity adjusted real labour cost index for EGW and general labour."

The AER response raises some interesting issues:

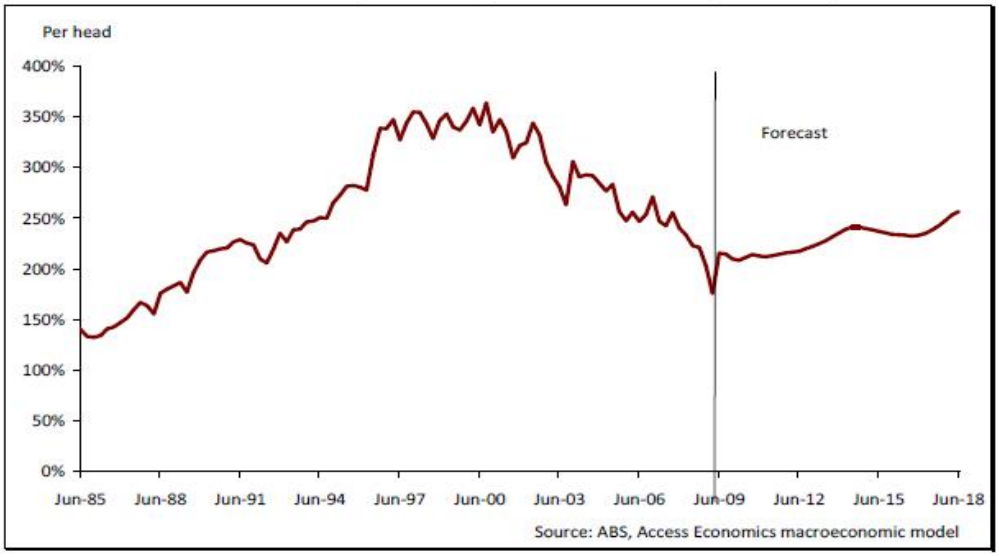
- That Jemena might not have increased their efficiency.
- Annual efficiency improvements are difficult to determine from the data provided as there is potential for deferral of opex and capex from year to year.
- The same outcome can be achieved by using productivity adjusted indices.

The EMRF responds to these observations as follows:

4.3.1 Was there a productivity/efficiency improvement?

Access Economics considers that the Utilities have shown much greater productivity than the average of all industry in their chart 7.3

Chart 7.3: Utilities productivity relative to national productivity



It is immaterial if Jemena actually did provide any productivity improvement in their application as the allowances for opex and capex are (under the National Gas Rules) for an efficient network services provider, not specifically Jemena. The AER is required to set what is the appropriate allowance for the efficient provider.

The Access Economics data is for productivity across all Utilities, not just Jemena. This means that the AER can assume that there have been productivity gains, and what is more they are greater than the national productivity gain.

The AER is incorrect to assess Jemena in isolation but must assess Jemena as if it is a notional network and therefore operates as efficiently as the notional network does. Access Economics has identified that the notional network does show productivity gains.

4.3.2 Annual productivity is impossible to identify

Access Economics comments (note 2 on page viii)

> "Labour costs to businesses are essentially driven by changes in wages plus changes in the efficiency of work (productivity). For the typical sector, wage growth averages around 4¼% a year, and productivity growth is 1¾%, meaning that growth in unit labour costs is 2½% a year. In turn, the latter lies in the middle of the Reserve Bank's target range for inflation."

Effectively, Access Economics confirms the EMRF contention that national productivity is the difference between national wages less national inflation.

In its chart 7.3 Access Economics identified annual productivity changes in the Utilities sector since June 1985 and then forecasts these to June 2018. For the AER to state that they cannot assess annual productivity changes is simply wrong!

What the AER states about annual productivity might apply to Jemena when it is assessed in isolation, but as noted above the AER is required to build into its forecasts allowances for the notional efficient provider of services (the whole basis of incentive regulation).

In 2005, IPART's decision is at odds with the AER contention, as IPART built into its decision an explicit productivity improvement requirement. That Jemena provided the required service and still underspent its opex allowance confirms that IPART was correct to include the productivity improvement. If anything, the actual performance of Jemena indicates that IPART might have underestimated the extent of productivity improvements possible!

4.3.3 Self benchmarking of productivity

The AER acknowledges that Jemena has underspent its capex and opex allowances, and as CEG and others have observed, this was during a period where growth in materials and wages costs exceeded the CPI. This means that effectively Jemena was able achieve the productivity level set by IPART in the 2005 decision, with greater productivity gains than IPART assumed.

There is clear evidence that Jemena has increased its productivity, and the AER has the obligation to attempt to ascertain this and, therefore, should continue to apply such productivity improvements.

4.3.4 Will real Utilities wages growth exceed the Utilities productivity?

On page ix, Access Economics adds in reference to real Utilities wages and productivity:

> "However... Access Economics projects a degree of unwinding of some of the key drivers of recent years such that wage growth in the utilities may ease below that seen nationally for a time.
>
> That is not because productivity in the sector has weakened. In fact it is Access Economics' assessment that some of the recent weakness in productivity in the sector is overstated, and we have therefore minimised the effect of productivity weakness on wages in the sector in our modelling of developments over the coming year."

As national productivity is the difference between national wages and national inflation, then if the productivity growth in the Utilities sector is greater than that for national productivity, implicitly Access Economics is stating it considers that whilst Utilities wages might grow, there is productivity growth in the Utilities sector that should more than offset the difference between Utilities wages growth and general inflation.

More simply stated, there should be no real wages growth adjustment allowed in the Utilities sector.

4.3.5 The impact of AER increasing real wages over time

If the AER allows an increase in Utilities wages above CPI, it is effectively providing the basis for its own expectation of real wages growth to become a fact. Thus if the AER has an expectation that as wages are expected to rise in real terms, they probably will.

Any negotiation between employer and the Union covering its members will reflect the information that is available in the market. The Unions will have read the AER decisions in relation to forecast wage growth, and the Unions will use this information in their negotiations with Jemena. If the Union is aware that the AER has allowed Jemena increases in wages then the Unions will seek to get this increase for their members.

Thus if the AER awards an increase in wages more than inflation, then the likelihood is that the increases will occur. It is a self-fulfilling decision.

From the EMRF's point of view, the AER should not be embroiled in any way for providing the impetus for any industrial action in the regulated utilities' sector.

4.3.5 Wages Growth as adjusted for productivity

The AER opines that rather than using an expressly stated expectation of productivity in its allowances (such as IPART did), it is preferable to use productivity adjusted real wage growth.

In its report to the AER, Access Economics opines that real EGW wages are likely to rise at a rate less than the real NSW state average (table 9.2) over the next regulatory period. This confirms the points made above, that in fact EGW wages after productivity adjustments are likely to be low and perhaps fall.

Access Economics provides productivity adjusted real EGW wages and they show that these do fall over the next regulatory period. This is clearly shown in the last section of the Access Economics table 9.2 shown below.

Table 9.2: NSW wage forecasts

Financial year changes in NSW nominal Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
NSW	3.8	3.6	4.2	4.3	3.9	3.9	4.0	4.1	4.3	4.3
Utilities	4.6	3.5	3.0	3.4	3.4	3.5	3.6	3.7	3.9	4.1
Mining	5.1	3.8	3.6	4.3	4.2	4.5	4.5	4.4	4.4	4.2
Construction	3.4	3.4	3.9	4.4	4.1	4.5	4.7	4.0	3.9	4.4
Manufacturing	3.5	3.5	4.8	4.8	4.5	4.3	4.4	4.5	4.6	4.4

Financial year changes in NSW real Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
NSW	0.7	1.8	1.2	1.4	1.4	1.9	2.0	1.6	1.6	1.8
Utilities	1.4	1.7	0.1	0.5	0.9	1.5	1.7	1.3	1.2	1.5
Mining	1.9	2.0	0.7	1.3	1.7	2.5	2.6	2.0	1.6	1.6
Construction	0.3	1.6	1.0	1.4	1.6	2.6	2.7	1.5	1.1	1.9
Manufacturing	0.4	1.7	1.8	1.9	2.0	2.4	2.4	2.0	1.8	1.8

Financial year changes in NSW nominal productivity adjusted Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
NSW	3.6	2.9	3.1	2.7	2.0	1.8	2.7	3.1	2.8	2.6
Utilities	5.3	2.4	1.7	1.8	1.6	1.3	2.2	2.8	2.6	2.2
Mining	6.7	1.2	2.0	2.6	2.3	2.2	2.8	3.0	2.7	2.6
Construction	3.4	2.6	2.6	3.0	2.5	2.2	2.8	3.5	3.0	2.7
Manufacturing	3.5	2.6	3.7	3.3	2.7	2.3	2.8	3.1	3.0	2.8

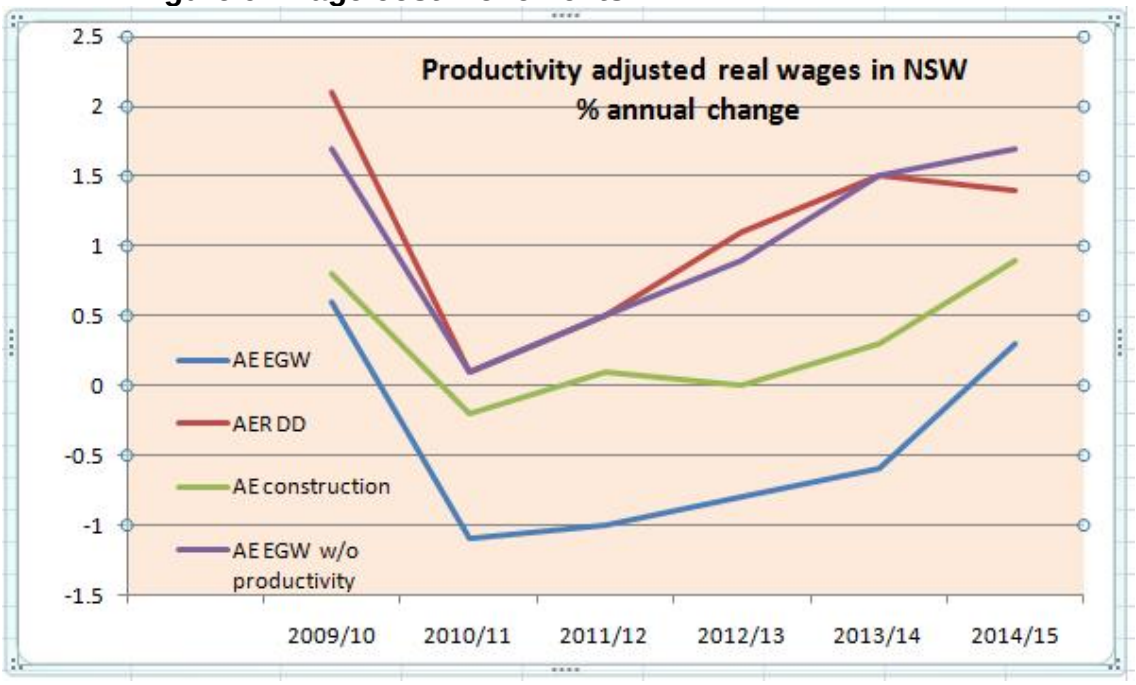
Financial year changes in NSW real productivity adjusted Labour Price aggregates

Annual % change	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
NSW	0.5	1.2	0.2	-0.2	-0.4	-0.2	0.8	0.7	0.1	0.0
Utilities	2.2	0.6	-1.1	-1.0	-0.8	-0.6	0.3	0.4	-0.1	-0.3
Mining	3.5	-0.5	-0.8	-0.3	-0.2	0.2	0.9	0.6	0.0	0.0
Construction	0.3	0.8	-0.2	0.1	0.0	0.3	0.9	1.0	0.3	0.2
Manufacturing	0.4	0.9	0.8	0.4	0.2	0.3	0.9	0.7	0.3	0.3

As Access Economics is able to provide forecasts of labour movements with and without productivity estimates, it is expected as the AER had observed in response to the EMRF criticisms of the Jemena application) that they preferred to use productivity adjusted real wage growth (see introduction to section 4.3 above) rather than use an explicit value for expected productivity increases, then it would be expected that this is what the AER would do.

However, this is not the case. In its draft decision table 3.11, the AER uses the real wage growth but not one adjusted for productivity. On the following figure 9, the plot of the AER draft decision on wage growth escalators closely matches the Access Economics forecasts for real wage growth **without productivity**. The Access Economics forecasts for EGW with productivity reveal a much lower (and in many cases negative) productivity adjusted real EGW wage growth for the next regulatory period!

Figure 9: Wage cost movements



Source: AE report, AER DD

The figure above clearly shows that the AER has not used productivity adjusted real wage growth movements to adjust the forecast wages, but used unadjusted wage growth predictions contrary to its stated views.

4.3.6 Summary

The EMRF has significant concerns with the rigour of aspects of the AER's draft decision. The EMRF continues to consider that just allowing inflation as measured by the CPI should be the only adjustment for wage growth.

However as a second best option, the EMRF accepts that the AER has an option of using either productivity adjusted real wage growth forecasts or explicitly stating a productivity improvement. But it must do one or the other.

The AER draft decision includes only for real wage growth specific to the EGW industry and has not built in any adjustment for productivity. This is totally unacceptable and contrary to the AER expressed approach.

5. Service Performance and Incentives

5.1 Overview

As the EMRF noted in its response to the Jemena application, Jemena is not subject to service performance targets in the way electricity distribution businesses are. To a large degree this is an outcome of the technical arrangements that impact gas distribution.

The EMRF also notes that the AER has sought information from Jemena about the incentives applying to its O&M contractor Jemena Asset Management (JAM). The revised documents do not provide this information for review by stakeholders. The EMRF is therefore not able to comment on this proposal. Whilst in practice, the EMRF supports incentives for greater efficiency for opex, it totally opposes consumers having to provide any incentive or benefit to a related party which is not totally transparent.

In its revised application Jemena proposes there be only one incentive mechanism – that for its Market Expansion Mechanism (MEM) which is intended to incentivise growth in geographic coverage of the network.

One of the single largest costs consumers incur in a gas network is the cost of unaccounted for gas (UAG). Jemena proposed a form of incentive to address UAG but this has been denied by the AER, for reasons the EMRF supports. Notwithstanding this, the EMRF considers that the introduction of an incentive scheme to reduce the amount of UAG in the Jemena network should be an essential element of the Jemena access arrangement.

In a like manner, the EMRF considers that there should be a clear incentive scheme (such as an efficiency benefit sharing scheme (EBSS)) should be introduced to assist in driving Jemena towards greater efficiency in opex.

The EMRF acknowledges that the AER cannot introduce such schemes unilaterally under the NGR, but it considers that the lack of them is a significant detriment in the AA proposal made by Jemena.

With the non-acceptance of the MEM, the Jemena AA proposal does not contain any formalized incentive scheme to drive improved performance by Jemena. This is a major shortcoming of the Jemena AA.

Despite this the EMRF does reiterate its concerns that in the current structure of the Jemena proposal and the NGR, there is an implicit incentive on Jemena to underspend the allowed opex and capex and retain the full benefits of the underspend.

The current approach of the AER to declare and then use the fourth year opex and capex as the benchmark for the next revenue reset, provides an

incentive to Jemena to underspend opex and capex in the early years of the AA period and to maximize opex and capex in year 4 of the period. This is a perverse incentive and one which is to the detriment of consumers. The EMRF continues to be of the view that there should be an averaging of the four years data.

5.2 Incentives for Market Expansion

In principle, the EMRF considers that exposing Jemena to the risks and rewards associated with market expansion has merit.

Equally, the EMRF accepts the AER argument that the NGR does not readily allow such a scheme as proposed by Jemena to be implemented.

As the AER has decided that proposal by Jemena is not feasible, the EMRF would encourage Jemena and the AER to identify an approach that addresses the concept of the MEM but that is permitted by the NGR to be implemented.

5.3 Incentive for financial performance

The EMRF notes that Jemena has decided to delete the KPIs for financial performance and the associated benefits that might accrue through their achievement.

In its response to the Jemena application, the EMRF queried the value of these KPIs and recommended that a more robust approach to incentivizing better opex performance could and should be developed. We continue to see value in this.

6. Cost of capital

The EMRF is aware that under the recently released NGR and NER the AER is somewhat constrained in what it is permitted to do in regard to the inputs for the development of the weighted average cost of capital (WACC) to be used in a revenue reset review for regulated gas transport and electricity distribution.

In particular, the NGR allows the applicant considerable latitude in what methodology is permitted and what inputs to be used in the methodology that might be allowed. Notwithstanding these constraints, the AER still has an obligation to ensure that the allowed WACC is appropriate for the purpose it is used.

In response to the AER draft decision on the SA electricity distribution assets (for ETSA Utilities) Credit Suisse[4] in December 2009 commented:

- **Nominal Vanilla WACC of 10.02% a good result:** The AER in its draft has allowed a WACC of 10.02% versus ETSA's proposed 9.52% and CS assumption of 9.31%. While the market based components (risk free rate and debt margin) are still subject to market movements between now and the final decision, we believe the draft WACC is a good result for ETSA (particularly the debt margin). Key points to note:
  - **AER has denied an increase in MRP as expected:** ETSA as part of its submission requested an increase in the market risk premium (MRP) to 8.0%, 150bps above the 6.5% set in the AER draft WACC decision in April 2009. The AER has concluded there is no persuasive evidence to warrant a change in MRP.
  - **Debt margin of 427bps well above CS expectations:** The AER has decided to use CBASpectrum BBB+ fair value curve to benchmark 10year BBB+ corporate bond yields giving rise to a 427bps debt margin. ETSA locked in 5, 7 and 10 year debt at an average margin of ~295bps in July-09. On that basis ETSA will be making a ~130bps benefit than the regulated allowance reflecting its higher credit rating (A-) and also shorter duration debt (5,7 & 10 year) against the regulated allowance (BBB+, 10 year). We had assumed a debt allowance of 300bps. Given the final decision is still 5 months out, this debt margin will change with market movements.
  - **ETSA request for 0.50 Gamma denied:** ETSA requested a reduction in the gamma to 0.50 from the 0.65 established in the AER final WACC decision. This has been refused.

This assessment has relevance to the Jemena review as the AER has issued a draft decision providing a nominal vanilla WACC of 10.19%, based

[4] Credit Suisse, Company Update1 December 2009, "Draft ETSA decision positive for SKI", Page 3. SKI is the ASX code for Spark Infrastructure, part owner with CKI of ETSA, Powercor and Citipower

on a RFR of 5.52%, an equity beta of 0.8, MRP of 6.5%, DRP of 4.32% and gamma of 0.65.

Against this Jemena sought a WACC of 11.2% based on a RFR of 5.60% and a DRP of 5.04%.

Although the Jemena WACC is excessively high, the AER draft decision WACC is also too high when compared to market expectations such as that contained in the Credit Suisse analysis.

The EMRF provides below its views on specific elements of the WACC parameters.

6.1 Fama French model

Jemena has proposed that the WACC be developed using the Fama-French three factor model (FF model) for setting the equity return. Even after the AER draft decision was released Jemena has reiterated is desire to use the FF model and provided advice from NERA that the model is "widely used" as the NGR requires that in developing the rate of return on capital, it uses:

> "...a well accepted approach that incorporates the cost of equity and debt, such as the Weighted Average Cost of Capital, is to be used; and a well accepted financial model, such as the Capital Asset Pricing Model, is to be used." (r. 87(2)(b))

6.1.1 The AER view

In its draft decision the AER provides a detailed and comprehensive set of arguments pointing out that the FF model does not meet the requirements of the NGR. It summarizes these arguments on page 121:

> "The key reasons for the conclusion that the FFM is not a well accepted financial model are:
>
> - The FFM is not used by regulators to establish a rate of return, either in Australia or amongst equivalent regulatory bodies overseas
> - The FFM is not used by Australian finance managers to assess a rate of return
> - The FFM does not have a solid theoretical premise, and the form of the FFM proposed by Jemena does not accord with the original specification or context of the FFM. This may limit its applicability as outlined in determining a rate of return in the regulatory context
> - The empirical evidence does not present consistent findings for the risk factors used in the FFM

- Well established parameter inputs in an Australian market context are not available for use in the FFM."

6.1.2 NERA response to the AER DD

In a response to this critique by the AER, NERA provided a supplementary response addressing the aspects detailed by the AER. To support their arguments countering the AER draft decision NERA provides the following additional evidence indicating why the AER should change its view. NERA posits in its report of 9 April 2010 that:

- The FFM is taught at Australian universities and that citations of the model in academic papers indicate acceptance by academics. Further, that it is used as part of the course curriculum for Chartered Financial Analysts adds credence to the support of academics.
- Data to utilize it has been published by Morningstar in the US but NERA adds there is little data on FFM in the Australian context.
- There is evidence that the FFM provides a better estimate of the cost of equity than the SL CAPM
- NERA can provide Australian FFM data for the nine listed regulated energy utilities based on actual results since 2002.

6.1.3 The EMRF assessment

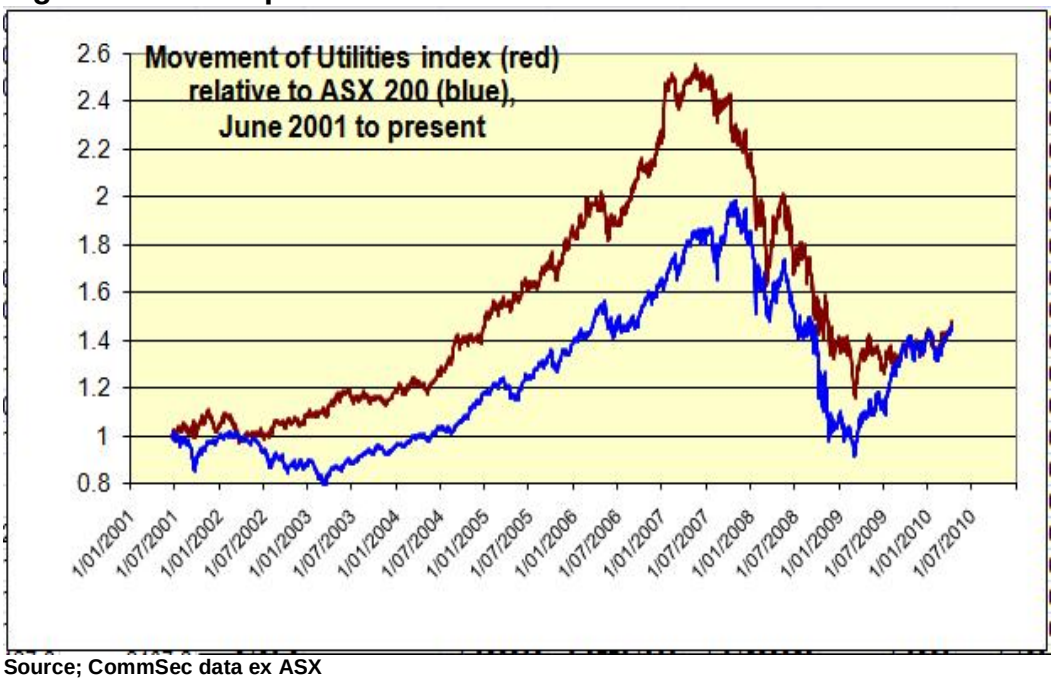
The EMRF is of the view that a well accepted model needs to be more than a tool used in teaching. It accepts that over time, the FFM might become the main tool used by financial practitioners as the current students might decide to use the tool in the future, but until this occurs, the FFM must be considered to be limited in use. In this regard it must be noted that use by academics does not expose the user of the model to the effect of the financial outcomes. A well accepted model must be one where practitioners widely use the tool **and** are exposed to the financial outcomes of the tool used.

Further, the EMRF considers that unless there is well accepted long term data available and applicable to the Australian market then use of a financial model must be considered to be limited. Again, the EMRF accepts that over time, there will be developed a long term set of inputs but until this occurs, the use of the model must be considered to be limited. For example, the AER has accepted that in assessing a value for market risk premium, it has seen the data calculated for over 100 years. In the case of use of the SL CAPM, asset betas have been calculated for well over 40 years.

The calculation of the rate of return using the FFM is shown to be significantly higher than that calculated by the SL CAPM method. Regulators have been applying the SL CAPM to regulated utilities since the mid 1990s up to the present time. A view of the outcomes from this regulatory practice can be seen by comparing the outcomes of regulation against the wider market. The following figures 10 and 11 show the relative movements of the Australian equities market (using the S&P ASX 200 index) compared to the related S&P Utilities 200 index.

It should be pointed out that the ASX 200 index is used in preference to the wider All Ordinaries as the Utilities index is calculated from utilities in the ASX 200 range of companies. Notwithstanding this, the outcome is much the same regardless of the comparator used.

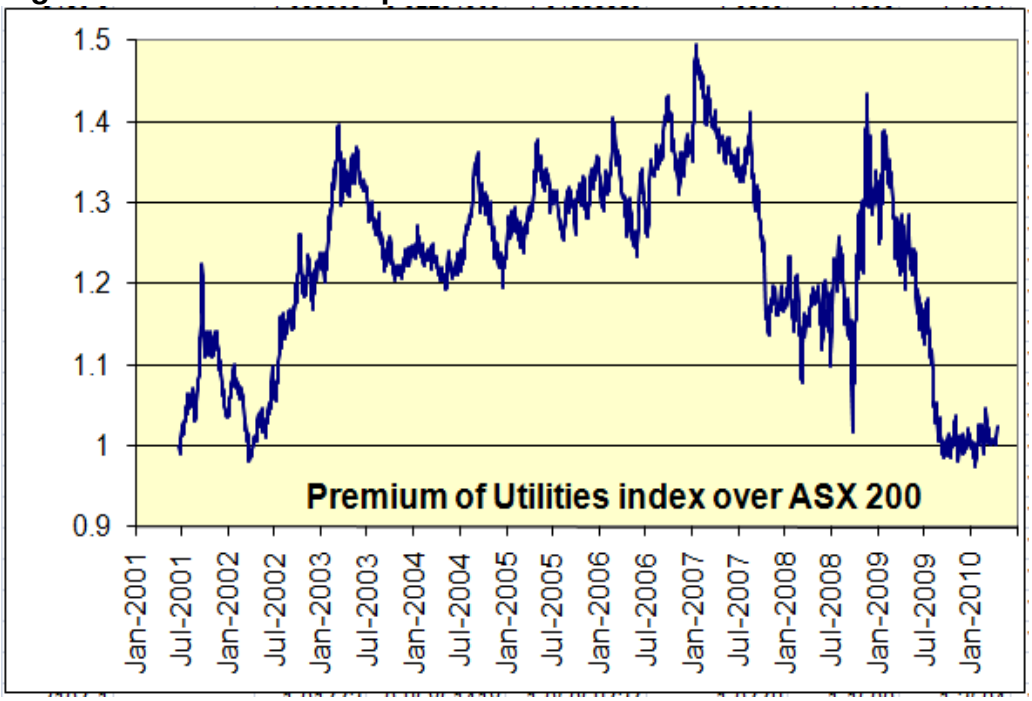
Figure 10: Share price index movements



Source; CommSec data ex ASX

As can be seen since the inception of the Utilities index, utilities have consistently outperformed the general ASX 200. This outperformance is better demonstrated in the following figure which shows the actual premium of the Utilities index compared to the ASX 200.

Figure 11: Utilities index premium over ASX 200



Source: CommSec data, MEU calculations

What this data provides is that even with regulators using the SL CAPM, the market has seen the Utilities as a more attractive long term option than the general market which is subject to strong competition.

In practice, Utilities are seen by the market as a defensive stock (low risk, low growth and low return) and as a result there is an expectation that the market would value regulated utilities at a discount to the market, yet in reality Utilities have consistently exceeded the general market.

This raises the question that if the Jemena proposal to use the FFM in lieu of the SL CAPM had been used by regulators in the past, then the WACC regulators awarded would be higher than what was actually awarded and the market outperformance would be even greater.

It is quite clear that the market sees the use of the SL CAPM more than adequately rewards regulated entities, In fact, the SL CAPM could be assumed to over-reward as the expectation is that Utilities would be valued less than stocks where significant growth is expected, such as in the current time as the market reflects the emergence from the 2008/09 “recession”. The fact that currently the market values utilities in equal measure to the market in general despite the defensive nature of Utilities supports the EMRF contention that the SL CAPM is more appropriate than the FF model

6.1.4 Other users of forecasting models

The EMRF has attempted to identify whether its members (i.e. customers of Jemena) use the FF model for their forecasting needs. No member has advised that they do use the FF model and this provides support for the AER survey included in the WACC review (table 8.13)

Table 8.13: Practices adopted by Australian firms in estimating the cost of capital for capital budgeting

Method	No. of responses	% of total
(Sharpe) CAPM[772]	53	72
Cost of debt plus some premium for equity	35	47
Cost of debt	25	34
E/P ratio	11	15
Average historical returns	8	11
Dividend yields plus forecast growth rate	7	9
By regulatory decisions	3	4
Multi-factor asset pricing model	1	1
Fama and French three factor model	0	0
Other technique	0	0
	143	**100%**

Source: Truong, Partington and Peat[773]

Source: AER FD WACC review

It is apparent from the actual data as presented by the AER and the corroborative feedback from EMRF members, that the FF model is not widely used in the Australian environment.

6.1.5 Conclusion

The EMRF sees that the AER has provided a very comprehensive and convincing analysis to reject the use of the FFM at this time. The response from NERA and Jemena to the AER draft decision adds little new information to the debate.

The EMRF considers that the equities market (as opposed to academics) has provided its own view as to whether the SL CAPM is appropriate to use by Australian regulators as the outcomes of its use are more consistent with market expectations outcomes than a model which would deliver a significantly higher WACC for regulated businesses..

6.2 Market risk premium (MRP)

In its draft decision the AER observed that although it considered the long term value of MRP to be 6% but that in the wake of the global financial crisis a value of 6.5% is more reflective of the conditions that applied at the time of the AER WACC final decision made in May 2009.

Then, the impact of the global financial crisis (as measured by the stock market) was at its greatest and there was widespread concern the GFC impact was to be a long and deep recession. In fact, at the time the AER final decision was released, the stock market was at its lowest, and subsequently the impact of the GFC as seen in Australia was determined that there was no recession and the stock market has since recovered well, with the accumulation index returning to levels applying in early 2007. This is shown in the following figure 12.

Figure 12: Movement of ASX accumulation index

Source: RBA

Already, the accumulation index has reached 81% of its peak, which occurred in October 2007.

In its final decision on the WACC parameters the AER observed (page 238):

> "The AER considers that prior to the onset of the global financial crisis, an estimate of 6 per cent was the best estimate of a forward looking long term MRP, and accordingly, under relatively stable market conditions—assuming no structural break has occurred in the market—this would remain the AER's view as to the best estimate of the forward looking long term MRP."

That is, the AER considers that MRP in Australia (in the absence of the recent global financial crisis – GFC) should be 6%. The AER went on to observe (page 238)

> "However, relatively stable market conditions do not currently exist and taking into account the uncertainty surrounding the global economic crisis, the AER considers two possible scenarios may explain current market conditions:
>
> - that the prevailing medium term MRP is above the long term MRP, but will return to the long term MRP over time, or
>
> - that there has been a structural break in the MRP and the forward looking long term MRP (and consequently also the prevailing) MRP is above the long term MRP that previously prevailed.
>
> Whilst it cannot be known which of these scenarios explain current financial conditions, both are possible, and both suggest a MRP above 6 per cent at this time may be reasonable. However, having regard to the desirability of regulatory certainty and stability, the AER does not consider that the weight of evidence suggests a MRP significantly above 6 per cent should be set.
>
> Accordingly, the AER considers that a MRP of 6.5 per cent is reasonable, **at this time**, and is an estimate of a forward looking long term MRP commensurate with the conditions in the market for funds that are likely to prevail at the time of the reset determinations to which this review applies. " (our emphasis added)

In fact, the assumptions made by the AER effectively never eventuated and the current market conditions, with rising interest rates, falling unemployment, a rising dollar, are all likely to provide a significant dampening on the MRP

The AER decided that an MRP of 6.5% was needed to reflect the expected concerns that the Australian economy was headed for significant trouble and that a higher MRP was needed to ensure that the regulated businesses would have an adequate ability to secure funding for needed investment. In fact, the economy has shown to be extremely resilient and the AER concerns about the future would seem to be disappearing, and probably, with hindsight, never were substantiated.

In its consultants reports, (especially Handley) used in the development of the AER's final decision on MRP, Handley[5] points to the potential that recent values for MRP might be exhibiting a slight rise from the long term average and he provided the following Table 4 based on using a gamma of 0.65.

TABLE 4

Historical Equity Risk Premium 1883 - 2008

Assumed Value of Imputation Credits	0.65

Relative to 10 year Bonds

				95% Confidence Interval			
Period	Years	AM	SE	Low	High	p-value	GM
1883 - 2008	126	**0.061**	0.015	0.032	0.090	0.00	0.048
1937 - 2008	72	**0.057**	0.023	0.011	0.103	0.01	0.037
1958 - 2008	51	**0.062**	0.032	-0.001	0.124	0.05	0.036
1980 - 2008	29	0.058	0.043	-0.030	0.146	0.19	0.031
1988 - 2008	21	0.050	0.041	-0.035	0.134	0.24	0.031

Note: Refer to report for data sources and variable definitions
Estimates in Bold are significant at the 5% level using a 2-tailed test.

Source: Handley report to AER

What the recent data shows is that MRP over the past 20 years has fallen below the long term average of 6%. Handley attributes this to the greater impact of the 2008 data due to the shorter time periods. Equally, the EMRF would cite that the introduction of compulsory superannuation as a likely cause of some of this impact.

Because of this the EMRF remains of the view that the conservatism applied by the AER in its setting of MRP to 6.5%, was never necessary and it should have remained with the value assessed for its WACC decision, at 6.0%.

[5] Further Comments on the Historical Equity Risk Premium, John C. Handley Final 14 April 2009

6.3 Equity beta

In its submission to the AER in response to the Jemena application, the EMRF highlighted that the use of an equity beta of 0.8 was excessively conservative and was significantly higher than what the empirical data from the market indicated is appropriate. As a result the use of this higher value for equity beta places an unnecessary cost burden on consumers.

The AER responded to this by observing (pages 130 and 131):

> "While relevant to business specific risks and therefore relevant for consideration of aspects of the regulatory framework other than in applying the CAPM for the benchmark service provider, the submissions made by Jemena about gas networks being riskier than electricity networks do not justify a higher equity beta. As discussed in section 5.9.3, the benchmark gas distribution service provider has the same level of financial leverage as the benchmark electricity business (60 per cent gearing), ensuring that the effect of leverage on equity beta is similar. Further, as outlined above, the reasons put forward to justify a higher equity beta based on the specific business risks of Jemena are not sustained for a market based parameter such as the equity beta.
>
> As outlined, the AER notes that setting a value for the equity beta slightly higher than the empirical estimates is conservative and allows for any uncertainty to account for any volume risk that may influence exposure to systematic risk. For example, setting an equity beta of 0.8 allows a buffer over the empirical estimates of the equity beta from the WACC review (between 0.4 and 0.7) The AER considers that such a conservative approach ensures that the network service provider has the opportunity to recover at least its efficient costs, in accordance with s. 24(2) of the NGL.
>
> **Conclusion**
>
> The AER considers that the best estimate of the equity beta for a gas distribution service provider, based only on an empirical assessment of market data, is between 0.4 and 0.7.
>
> The AER has also considered other factors, such as the need to reflect prevailing market conditions, the risks involved in providing reference services and the importance of regulatory certainty. Although reliance on market data suggests a value of between 0.4 and 0.7, the AER concludes that a conservative approach has merit, ensuring that the efficient network service provider has the opportunity to at least recover efficient costs."

The EMRF makes the following observations in response to this assessment.

1. There is no need to include a specific premium on the beta equity for gas over that used for electricity. The actual market data used to develop equity beta for Australian utilities is based predominantly on gas businesses, as there are few electricity businesses listed on the Australian stock exchange, but many more gas businesses. This is because most of the electricity businesses are still held by state governments.

   So if there is any credence to be given for the need for gas businesses to be assessed as more risky, then in actual fact (in terms of equity beta values) electricity businesses should be assessed as less risky and therefore be granted a lower equity beta to reflect this differential. The AER must be internally consistent in its approach to regulating electricity and gas pipeline businesses.

2. The AER comments that it is setting equity beta slightly higher than empirical estimates in order to be conservative. This raises the question as to how much conservatism the AER gives regulated businesses. The empirical evidence shows that the equity beta lies between 0.41 and 0.68[6]. As the AER is required to set parameters for the notional business, it could be assumed that the equity beta would lie at the midpoint of this range ie at 0.55. By deciding that the empirical evidence shows equity beta should be 0.68 (ie at the upper value of the range) is itself taking a conservative view. To then further increase the value to 0.8 adds a second layer of conservatism.

   The first level of conservatism (from mid range to high end value) increases the mid range empirical value point by some 24%. The second level of conservatism (taking the upper range value to 0.8) increases the conservatism from the mid range by another 22%. In all, the AER has added conservatism of some 45% to the level of the notional mid range business.

   Usually conservatism of more than 10% is seen as excessive, so on this basis the AER should use an equity beta of 0.61 in order to provide an appropriate value for equity beta. The EMRF accepts that the AER has issued its final decision on WACC parameters for electricity transmission businesses, but as there is flexibility in setting the WACC parameters for gas distribution, the EMRF considers that the AER should use this opportunity to demonstrate that an equity beta value of 0.8 is still too high in relation to the energy transport business

[6] AER WACC review final decision pp 321-324

3. The AER considers that conservatism is needed to allow for volume risk. This is totally unnecessary. Volume risk applies already to every gas pipeline business and those listed electricity businesses, as all (except the Victorian electricity transmission business element of SP Ausnet) are subject to price cap regulation which imposes volume risk on each business. Therefore, implicitly the equity beta derived from market information already includes for volume risk.

   To add a premium onto equity beta to allow for volume risk is totally inappropriate and is double counting.

4. As noted in section 5.2 above, the market evidence is that regulated utilities are currently achieving a better market asset price than would be expected of such defensive stocks. This shows that the energy transport service providers are being more than compensated considering the risk profile of their businesses. In part, this is because the AER and other regulators have provided excessive conservatism in their regulated revenues and in the market returns being granted.

   Providing an equity beta at the upper end of the empirically derived range continues this conservatism but not to the excess currently provided.

The EMRF considers that an equity beta of 0.7 still provides significant conservatism above the notional business equity beta set at the midpoint of the empirical range, but accommodates the need for regulatory certainty.

6.4 Debt Risk Premium (DRP)

In its application Jemena sought a DRP of 5.04%, arguing that the current market conditions warranted such a high level. In its draft decision the AER argued that the DRP should be at the lower level of 4.32%.

The EMRF has reviewed the AER final decision for the ACTEW/Jemena gas distribution network for the ACT and Queanbeyan. In its decision the AER assesses DRP at 3.35%.

In the Credit Suisse commentary on the ETSA draft decision (see introduction to this section 5) CS comments that they consider the AER DD value for DRP of 427 bp well above expectations as they consider ETSA really has a DRP of ~295 bp.

It is quite clear that the DRP is falling as the effects of the GFC have been much less severe than was expected and Australia never really fell into the financial problems exhibited in other OECD countries.

Whilst we can agree that the AER has approached the valuation of DRP on a sound basis, the EMRF is concerned that the outworkings of the AER approach has consistently resulted recently in very large valuations of DRP, almost equating the cost of debt with the cost of equity. For example, the AER draft decision for Jemena has the cost of equity at 10.72% and the cost of debt only 88 bp less at 9.84%[7]

Intuitively, this significant closing of the gap between the cost of debt and equity would appear to be excessive, as the theory behind corporate financing is that the cost of debt is significantly lower than the cost of equity – this is because debt ranks much higher in certainty of return. Because of the lower cost of debt and the high certainty of a return, this has resulted in regulated businesses with their highly certain monopoly based cash flows being able to gear up much more so than businesses in the competitive arena with their lower certainty of cash flow.

The EMRF recognizes that the cost of debt has undergone a recent shift to higher margins as a result of the global financial crisis, but the evidence is showing that this shift is transitory and already debt premiums are falling (as evidenced by the ACTEW decision). Notwithstanding the debt premia awarded by the ACCC and AER in recent years show the following pattern in table 2.

Table 2: Change in DRP awarded over time

Regulated entity	Decision	Time	DRP
SPI	ACCC FD	Dec 02	1.20*
TG	ACCC FD	Apr 05	0.90*
SPI	AER FD	Jan 2008	2.11
TG	AER FD	Apr 09	3.27
ETSA	AER DD	Nov 09	4.29
ACTEW	AER FD	Mar 10	3.35
* These DRP amounts were based on rating A- used by the ACCC prior to the AEMC ruling in 2006 that a rating of BBB+ was to be used			

Source: ACCC and AER decisions

The AER needs to provide a DRP which is typical for the next regulatory period, usually five years and uses as a benchmark an estimated 10 year debt term. What is concerning is that there is clear evidence of significant fluctuations over time with the assessed DRP at each regulatory reset. To use a DRP calculated at the peak of the global financial crisis to apply for the next five years is to provide the regulated business with a wind fall benefit, as the market historically has shown that such reversals last for much less than the regulatory period.

[7] AER DD Table 5.7

That this is the case is obvious from the most recent AER calculations for DRP. In a period of some 14 months (Jan 08 to Apr 09) the awarded DRP increased by 116 bp or 55% but in a period of less than four months the DRP has fallen by nearly 100 bp, or nearly 25%. Such volatility does not support the goal of regulatory certainty.

Whilst regulated businesses would welcome the recent increases in DRP awarded, they would be quite disappointed with the even more recent falls. Such volatility raises the question as to whether it is in the "long term interests of consumers" or even of the network service providers.

The CS estimate of ETSA debt premium is much more closely aligned to the debt premium awarded ACTEW/Jemena. The EMRF sees that the AER needs to address empirical market evidence of debt premiums actually incurred by regulated businesses.

6.5 Taxation

As is becoming standard practice by regulated businesses when addressing their revenue reset programs, they make every effort to increase their revenue above a reasonable level. In the case of taxation Jemena has attempted to skew the tax asset base roll forward and the value for gamma in the post tax revenue model.

The EMRF supports the approach by the AER in both of these aspects as is addressed in the draft decision. The AER approach is consistent with regulatory practice and with the outcome of the debates in the WACC review.

As Jemena has seen fit to readdress the valuation of gamma (and to vary it from that developed in the WACC review, the EMRF considers that its views should also be put.

The AER is required to assess the Jemena revenue, not as its ownership is currently structured, but as a notional energy transport business.

The bulk of energy transport regulated businesses in Australia are owned by governments and a significant amount of the remaining businesses (privately owned) businesses are held by Australian investors, with a large element of the private ownership held by superannuation funds holding Australian employees superannuation cash benefits. This indicates that the vast majority of Australia's energy transport assets are held within Australia and the dividends are paid to benefit Australian tax payers. Intuitively this supports the view held by the AER that the payout ratio would be 100%.

Again, on the assumption that the ownership of the assets is overwhelmingly held by Australian taxpayers, then as the process of imputation is to benefit Australian tax payers then they would benefit from utilizing the outworkings of imputation. This again indicates that utilization of tax credits would be 100%.

The studies undertaken by Jemena's consultants and others to indicate there is a significant drop of utilization, examine the entire range of all businesses paying tax in Australia. Many of these businesses are owned overseas and therefore might not be able to utilize the tax credits. This was a decision those owners made at the time, fully recognizing that they would not be beneficiaries of imputation. This then raises the question as to why there should be any accommodation made within the WACC development to reward those overseas owners for a higher rate of return than they would earn if they invested in an Australian business where they could not benefit from tax credits. Essentially by allowing for the WACC to be increased for a regulated business because across all businesses in Australia some are not able to benefit from the imputation tax credits, is fundamentally wrong.

Effectively by allowing gamma to be 0.68 accepts that consumers should pay an overseas owner of monopoly assets a higher rate of return just because there are some businesses operating in Australia who are not able to use the benefits of imputation.

The EMRF considers that conceptually the AER is wrong to use a value for gamma less than 1.00.

6.6 Summary

The EMRF considers:

a) The use of the FFM does not comply with the NGR
b) MRP should be 6.0%
c) Equity beta should be 0.7
d) DRP should be in the range of 200-300 bp
e) Gamma should be 1.0

7. Demand and consumption forecasts

The EMRF was very concerned that the forecast growth for gas consumption provided by Jemena was quite biased. This perceived bias would have two main outcomes:

1. Overstating the expected growth in new connections gives credence to a large increase in capex for growth, and
2. Understating the forecast growth in gas consumption provides Jemena with the basis to seek very large tariff increases which would increase the revenue actually received without justification.

Because of these concerns the EMRF provided considerable analysis of its assessment of the forecasts for future demand in its response to the Jemena application.

As suggested by EMRF in its response to the Jemena application , the AER has obtained an independent assessment of expected forecasts for consumption (ACQ) for each customer class, the expected changes in customer numbers and new connections, forecast MDQ for demand customers and forecast residential load per site. This independent assessment supports the EMRF view that Jemena had significantly underestimated future consumption.

Overall, the EMRF considers that the ACIL Tasman assessment provided to the AER, and the AER assessment of the forecast growth in consumption, are both well developed and reflect the actuality of past usage of gas in the Jemena network. These assessments are in stark contrast to the very clear underestimates developed by NIEIR and Jemena and included in the Jemena application.

7.1 Investment must be efficient

The EMRF notes that there is a trend that residential sites are using less gas per site per annum than in the past, primarily due to the reduction in heating degree days (HDD) observed. This point is made more stark by the observation made by the AER on page 249 of its draft decision where the AER comments:

"Based on the information provided by Jemena, the forecast average annual growth in new customer connections over the access arrangement period is 4.6 per cent. This annual growth rate is significantly higher than the forecast annual average demand growth of 0.8 per cent implicit in the demand forecasts approved by the AER."

Implicit in this is the statement that a large increase in new connections is needed to even retain much the same demand by volume customers.

This raises the basic question as to whether the capex required to connect new customers to the network is efficient. Whilst it is acknowledged that if demand is falling with existing customers, this loss in demand needs to be made up by connecting new customers.

The question posed by EMRF is as follows: is the cost to connect new customers sufficiently small to be more than offset by the increased revenue the demand of the new customers provides? This is an aspect that the AER has not addressed in its draft decision.

7.2 Demand customer's demand is constant

The AER assessment of forecast demand by demand customers indicates there is relatively a constant demand for gas over the new AA period, rising by an average of some 0.6% pa with the number of demand customers remaining effectively constant. As the assets used to provide for the demand customers therefore remains effectively constant, this leads to the conclusion that the net revenue Jemena receives from demand customers should remain constant. That is, as the numbers of customers and their use of the assets remain basically constant, so too should the revenue remain constant.

This element is further developed in other sections of this submission.

7.3 First response tariff

The first response tariff is considered to be a positive step by the EMRF, as it provides consumers with the ability to receive a benefit for being the first customers having involuntarily load shed when there is a shortage of gas in the network.

The AER makes the assumption that there will be limited customers that utilize this discounted tariff. Jemena states that it has assumed that all demand customers having a chargeable demand >1800 GJ will take advantage of the tariff. Jemena makes this assumption based on the discounted tariff being 50% of the standard tariff.

The AER disputes this and considers that only 50% of such customers will take advantage of the discounted tariff, and that the discounted tariff should be 25% of the standard tariff.

The EMRF considers that the AER decision to reduce the discount will be self full-filling prophecy as the lesser discount will not provide the necessary incentive to increase the number of those prepared to take up the offer. Equally, the EMRF agrees with the AER that not all demand customers with a demand >1800 GJ will take up the offer for 100% of their demand.

The numbers of those customers prepared to take up the offer will be totally dependent on the size of the discount and the proportion of their gas demand that can be shed without too great an impact on production processes.

This means that the AER should not arbitrarily decide on the extent of both numbers involved, the proportion of gas that can be more readily shed by each and size of the discount. In fact, the EMRF considers that in this instance, Jemena probably has a better concept of the likely numbers of its customers that will take up the offer and to what extent of their normal gas demand.

The EMRF considers that the program should be strongly supported by the AER and that more examination is needed to identify how much gas is likely to be voluntarily load shed when a shortage occurs.

8. Pricing Methodology and tariff development

The AER in its draft decision has essentially accepted the cost allocation and pricing approach used by Jemena. The AER has conceded that the tariff structure currently used by Jemena should be simplified, but does this without understanding the history as to why the current (albeit rather cumbersome) structure was developed in the first place. The AER would do well to review the reasons why the current structure was developed.

The AER observes that it has less involvement in tariff development under the NGR than under the NER. This is not correct. Whilst r. 94(3) requires the tariff to be developed must lie between stand alone and avoided costs, r. 94(4) clearly requires the tariffs to be cost reflective. R. 93 requires the allocation of revenue and costs to be:

> "...directly attributable to reference services are to be allocated to those services." (r. 93(2)(a))

Therefore the AER must ensure that cost reflectivity is the basis of the tariffs determined.

Aggregation of customers into specific classes has the potential to cause aberrations for certain customers as the value of the assets they specifically use might be considerably less than the aggregated value of assets used for all in the same class.

The EMRF is not convinced that the AER has required an equitable tariff outcome for many of Jemena's customers as it does not fully appreciate the details of the structure of the actual gas network.

8.1 Allocating the cost of the trunk line

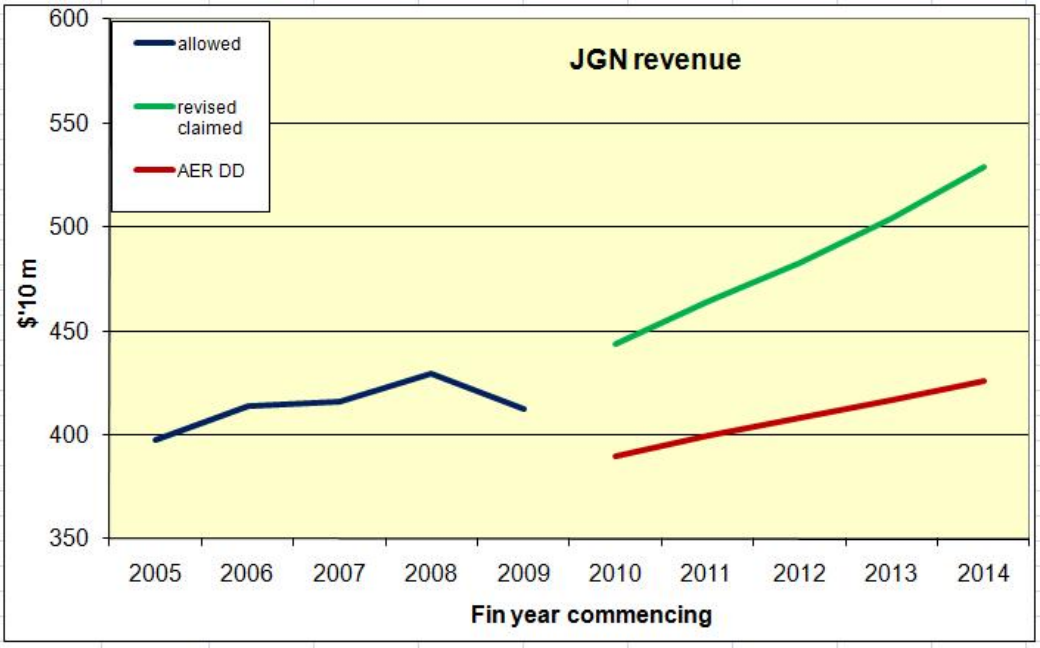
The EMRF supports the inclusion of the Wollongong-Newcastle trunk line into the overall tariff base as this is essential to make the STTM effectively independent of where gas is injected. The approach allows gas to be injected at any point along the trunk line from Newcastle to Wollongong and so maintains neutrality as to the source of gas. This is a basic requirement for the structuring of the STTM. Whilst there are currently only two main sources of gas into the NSW market (Moomba via MSP and Longford via EGP), it is probable that during the life of this access arrangement gas could be injected from the Sydney Basin (CSG) directly into the network, and from supplies north of Newcastle (from Queensland via a Queensland-Hunter gas pipeline or from the coal seams near Gunnedah). The proposed approach provides gas source neutrality.

However, the cost of the trunk line needs to be effectively amortized over all gas customers (volume and demand customers) in proportion to the total MDQ booked by all. All gas customers from Newcastle to Wollongong are beneficiaries of the trunk line and all should pay their share of its costs in proportion to the MDQ each has.

If the costs of the trunk line are fairly allocated, then the net impact on each customer tariff of the inclusion of the trunk line should be modest. Essentially the cost of the trunk line is already recovered by Jemena in aggregate from the share for it in volume tariffs and the share paid by demand customers.

In its draft decision the AER determined that the total revenue Jemena should receive is to be much as it is now, as shown graphically in the following figure 13.

Figure 13: JGN revenue



Source" AER DD, Jemena appl

This allowed revenue includes the capex necessary to connect the new customers to the network. The AER has allowed that there will be almost no new demand customers and there will be a negligible change in ACQ for demand customers, so therefore the revenue needed from demand customers should be even less than it is under the current AA, so over all the revenue contribution from demand customers should be less than it is now

Although it is recognized there will be some reallocation of the costs for each demand customer between different geographical sectors, so that

some will pay more and others less, the aggregate cost to demand customers should be no greater than it is now,

This is in contrast to the AER draft decision where the AER observes on page 268

> "The AER has received submissions from large energy users outlining that, based on site specific volumes, demand network tariffs have changed substantially from the earlier access arrangement period. In some cases, these users outline that tariffs may increase by as much as 69 per cent, while others may decrease by as much as 42 per cent. Some submissions question the reason for the large increase in tariffs.
>
> CSR outlines concerns about the cost allocation within the demand tariff class leading to differential tariffs across tariff classes.
>
> Jemena proposes a significant increase in its total revenue requirement which largely accounts for the proposed increase in tariffs of 34.3 per cent. In relation to submissions which question the overall increase in tariffs, much of the increase is explained by this factor. The AER has not accepted the total revenue increase as outlined in total revenue chapter 10 and has made adjustments. Further, as outlined in the demand chapter 11 certain adjustments are made to demand that also impact tariffs."

This assessment raises four key concerns for demand customers:

1. That the revenue has been allocated by Jemena on a net basis. That is, the total revenue has risen by 34.3% and therefore demand customers need to pay an additional 34.3%. This is incorrect. Demand customers should only pay for the costs they incur in using the services and those costs associated with volume customers (such as the reduction in volume and the costs to connect new volume customers) should not be averaged across all customer classes.

2. That the demand tariffs will reduce in line with the AER final decision on allowable revenue and to reflect the small expected increases in demand customer volume.

3. The extent of the tariff changes (as high as 69% increase and as low as 42% decrease). The EMRF does not have the detailed costing data used by Jemena, but it questions whether the inclusion of the costs of the trunk line into the current tariffs should result in such wide swings in tariffs for the new AA period.

4. Whether in the desire to simplify tariffs and aggregate demand customers into a single haulage rate based on 12 separate regions, Jemena and the AER have overlooked the reality of the network design and the cost reflectivity that such a design results in.

The EMRF seeks assurances from the AER that it will investigate the tariffs developed by Jemena for demand customers and that the key concerns raised have all been addressed equitably.

8.2 The first response tariff

Jemena has advised that it will introduce a discounted tariff (the interruptible supply tariff) which will provide a discounted tariff to large users prepared to be "first cab off he rank" when there is a need for involuntary load shedding. This approach recognizes that historically large gas users are always requested to curtail demand when there is a gas shortage[8].

The EMRF supports such a discounted tariff being introduced, and considers that a number of its members could be interested in discussing the discounted tariff with Jemena in more detail, and to assess the implications of its requirements.

The AER has stated in its draft decision that the discount for the first response tariff should be 25% (not 50% as proposed by Jemena) and that the cost that providing such a discounted tariff premium will incur should be allocated to those demand customers not involved.

This assessment by the AER is probably not appropriate, partly as noted above in section 7.3 (the AER could be underestimating the potential use of the discounted tariff) and because the benefit of the tariff accrues to all customers who continue to use gas when there is a shortage.

In the current AA period, when there is a shortage of gas, the decision is made to load shed specific customers under a schedule established between Jemena and the NSW government. The basis of the schedule is that large customers can provide a faster and more certain response to a requirement to load shed as the cost and certainty to load shed

[8] This recognises that it is more efficient to require large gas consumers to curtail than small gas users. Traditionally the curtailment tables always have large consumers as first to be curtailed and because of this, large users tended to have lower gas supply tariffs. With the segmentation of the gas market into supply, retail, transmission and distribution the discounted tariffs previously available to offset the lower reliability were eliminated.

small customers is considerably more difficult to manage. Therefore, regardless of the cause, it is always the large customers that have involuntary load shedding imposed on them as a first response to a gas shortage. Most large customers have an agreement with Jemena that in the event of involuntary load shedding, most customers will be permitted to consumer some gas to allow the orderly shutdown of their processes and others (such as glass manufacturers to clear molten glass out of their process equipment) need an extended time to allow the clearing of product through their process equipment.

This then raises two issues:

1. Not all the gas used by large customers will be provided immediately as load shedding but it can be provided over a period of time. Depending on the arrangement with Jemena, the discounted tariff might be provided for a portion of the gas demand to each large gas user, or Jemena might allow the discounted tariff to be used even if the load shedding is provided in agreed tranches over an agreed period of time.

   Thus before the AER makes a decision that only 50% of the large gas users will contribute to load shedding and therefore be eligible for the discounted tariff, it needs to identify under what basis Jemena will require the load shedding to occur over time in order to qualify for the discounted tariff.

2. Although it will be the large customers that will load shed in order to qualify for the discounted tariff, the load shedding by them benefits all customers – volume and demand – who remain using gas when there is a shortage[9]. Therefore the cost of the discounted tariff needs to be carried by all consumers that do not load shed, including large users not constrained and all volume customers.

   Under the traditional vertically integrated gas supply model used before deregulation, large consumers were provided with a discounted tariff (commonly called an interruptible tariff) to recognize the reality that when a gas shortage occurred they would be required to load shed. Under the deregulated model, there is no ability for the market to provide a discounted or

[9] For example, when the gas shortage in NSW occurred in 2007, it was only the large gas consumers that were curtailed, allowing all other gas users to continue to operate as normal. In Victoria in 1998, when the severe gas shortage occurred large consumers were the first to be load shed, and only after it was determined the shortage would be extremely severe, that small consumers were asked to load shed, Despite this wide spread load shedding, there were still many small consumers using gas, along with those consumers (such as hospitals) that were identified as essential services and permitted to use gas.

interruptible tariff. The approach by Jemena goes partly towards redressing this need[10].

Before the AER reaches its final conclusion into the first response tariff, it needs to carry out much more research and gain a better understanding of why it is needed, what it is intended to achieve, how it achieves its purpose and how its costs should be allocated.

As a first step the AER should examine the Jemena schedules of involuntary load shedding used in the current AA, and the amount of gas this approach releases for use by other consumers. It is this schedule that the AER should use as a basis for assessing the extent of gas that will be covered by the first response program.

8.3 Prudent discounts and bypass

The EMRF is aware that the increases in tariffs (especially in the Sydney area) might encourage large consumers located near the trunk line, to seek to bypass the network as a bypass might be more economically efficient. In the past, assessment of this option was relatively straight forward due to the trunk line having its own tariff. The cost of haulage on the trunk line is no longer readily available.

However, the existence of the STTM and the approach taken by Jemena in its pricing indicates that withdrawing gas at any point along the trunk line would imply direct withdrawal of gas from the STTM and therefore any party withdrawing gas directly from the trunk line would be considered to be bypassing the entire Jemena network and would not be subject to any Jemena network requirements.

The AER should make it clear that Jemena is required to allow customers to connect directly to its trunk line and, if they do so, what the import of such connection results in.

[10] The STTM also assists in this by providing an ability for large consumers to offer "contingency gas" as a form of voluntary load shedding when there is a need.