

# *Energy Users Coalition of Victoria*

**Australian Energy Regulator**

**Victorian Gas Distribution Revenue Reset**

**Applications**

**from**

**Investra, Multinet and SP Ausnet**

**A response**

**by**

**Energy Users Coalition of Victoria**

**June 2012**

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The views expressed in this document do not necessarily reflect the views of the Consumer Advocacy Panel or the Australian Energy Market Commission.

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

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## Executive Summary

The Energy Users Coalition of Victoria (EUCV) welcomes the opportunity to provide comments on the review of the Victorian gas distribution revenue rest. The EUCV is an affiliate of the Major Energy Users Inc, which comprises over 20 major energy using companies operating across Australia.

In marked contrast with the earlier Access Arrangement (AA) periods, the applications for the AA4 period show considerable increases in proposed tariffs, especially those of Envestra. AA2 saw step decreases in starting tariffs, while AA3 saw moderate step increases for Envestra and SP Ausnet and a small step decrease for Multinet.

The applications for AA4 all seek large step increases in tariffs and, except for SP Ausnet, large increases for each year thereafter. These claims for increased tariffs reflect increased claims for rates of return, higher claims for capex and opex and an expected reduction in consumption of gas.

The increases for opex and capex are being claimed notwithstanding under-spends in opex and capex (effectively causing higher allowed tariffs) in AA3.

A key feature of the applications for AA4 is the difficulty stakeholders have faced in light of the poor and inadequate presentation of historical and forecast data by the businesses, coupled with the extensive amount of information that has been classified as confidential. It is very disconcerting (and disappointing) that the AER has permitted the businesses to avoid the necessary transparency of information in their AA applications.

There is a consistent theme in the capex approach by the businesses. All under-spent their capex in the early years of AA3 and show high capex in the forecasts of the two final years of the period.

Envestra (both for their Victorian business and for Albury) consistently underspent their capex allowances considerably, yet have sought very large increases in capex (by some 140%) for AA4 above their actual capex incurred in AA3. This increase is against a background of a projected reduction in gas consumption.

Multinet underspent capex in the early years and then signals a massive capex over-run in years 4 and 5 of AA3 – an amount of 100% above the average capex for the first four years of AA3. It is now seeking a 70% increase in average annual capex for AA4 against a background of a projected reduction in the amount of gas transported.

SP Ausnet matches the allowance for capex in AA3 over the first four years but then forecasts a doubling of the average four year capex for the final year.

Capex claims for AA4 are more than 50% more than the average annual spend so far incurred.

The EUCV has identified in this submission areas of concern in relation to both capex incurred in AA3 and forecast for AA4

As for total opex in AA3, the trends are as follows:

- All DBs under run their allowances except for Multinet which over spent on opex
- Opex in the first three years was lower than the average over the 5 year period
- Opex in year 4 and year 5 show considerably higher opex than the 5 year average.

In AA4, opex claims by all businesses show a significant increase from the actual opex incurred in AA3, by about 45% higher than the actual average opex in AA3, except for SP Ausnet where the increase proposed is 25% higher.

The EUCV has identified areas of concern with opex claims from all four businesses, particularly those from Envestra and Multinet. Data limitations have, however, limited the EUCV's ability to contest many claims.

The EUCV notes the WACC claims by the businesses but provides its own assessment of the values for the WACC parameters

<b>Actual DRP (bp)</b>	Credit rating <sup>1</sup>	Debt/assets	2008	2009	2010	2011	Av'ge
ACCC allowed			299	299	299	299	299
ESCV allowed			215	215	215	215	215
APA (Gasnet)	BBB	69%	100	310	240	300	235
DUET (Multinet)	BBB-	80%	80	160	190	200	160
SP Ausnet	A-	66%	-50	80	60	50	35
Envestra	BBB-	81%	150	330	220	290	250
Arithmetic Average	BBB	74%	70	220	180	210	170

The EUCV draws the AER's attention to the need for a careful balancing of incentives, cost allowances and risk allowed the businesses, particularly in light of the considerable outsourcing of significant portions of the opex and capex programs by all the businesses. Specifically the issue of passing risk to a contractor for a higher price than what the efficient internal cost might be creates potential for the "laying off" of risk which is effectively borne by consumers in higher opex and capex allowances. If this risk is transferred to consumers then the allowed WACC should be reduced to reflect the lower risks faced by the business.

<sup>1</sup> Sourced from ERA draft decision on Western Power Table 71, page 174

The EUCV noted that the DBs make extensive use of related parties and this continues to be a vexed issue on a number of counts, such as limiting access to information (considered to be commercial in confidence) thereby avoiding scrutiny, and for the costs of holding companies to be transferred to regulated firms with the goal of consumers carrying a greater proportion than is warranted.

## 1. Introduction

### 1.1 The EUCV

The Energy Users Coalition of Victoria (EUCV) is a forum representing large energy consumers in Victoria. The EUCV is an affiliate of the Major Energy Users Inc (MEU), which comprises over 20 major energy using companies in NSW, Victoria, SA, WA, NT, Tasmania and Queensland.

The EUCV welcomes the opportunity to provide comments on the AER's review of the revenue reset for the Victorian gas transmission business.

Analysis of the gas usage by the members of EUCV shows that in aggregate they consume a significant amount of the gas used in Victoria. As such, they are highly dependent on the transmission and distribution networks to deliver efficiently the gas so essential to their operations. Many of the members are heavily dependent on local suppliers of hardware and services. As a consequence, members consider they have an obligation to represent the views of these local suppliers. With this in mind, the members 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.

The companies represented by the EUCV (and their suppliers) have identified that they have an interest in the **cost** of the energy networks services as this comprises a large cost element in their electricity and gas bills.

The widespread use of gas throughout Victoria renders it to be almost an essential source of energy required by each member company in order to maintain operations, a failure in the supply of effectively will cause every business affected to cease production, and members' experiences are no different. Thus, **reliable supply** is an essential element of each member's business operations.

With the introduction of highly sensitive equipment required to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly important with the focus on the performance of the distribution businesses because they control the quality of electricity and gas delivered. Variations in the supply of gas by even small amounts now have the ability to shut down critical elements of many production processes. Thus member companies have become increasingly more dependent on the quality of energy services supplied.

Each of the businesses represented by EUCV has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy supplies is

required. If sustainable supplies of energy at a reasonable cost are not available into the future these investments will have little value.

Accordingly, EUCV (and its affiliate MEU) are keen to address the issues that impact on the **cost, reliability, quality** and the long term **sustainability** of their gas and electricity supplies.

The members of EUCV have identified that gas transmission plays a pivotal role in the gas market. Consumers recognise that the cost of providing the transmission system is not an insignificant element of the total cost of delivered gas.

## 1.2 The scope of this review

EUCV recognizes that the AER is required to carry out its review in accordance with the new Gas Law and Gas Rules. These new Rules need to be seen as being pro investment for gas businesses, as this was a feature of the development of the Rules. Equally, consumers have assessed the new Rules (for both transmission and distribution) to be biased and unbalanced, as they clearly favour the gas transport businesses and their use to date has seen very large increases in costs to consumers.

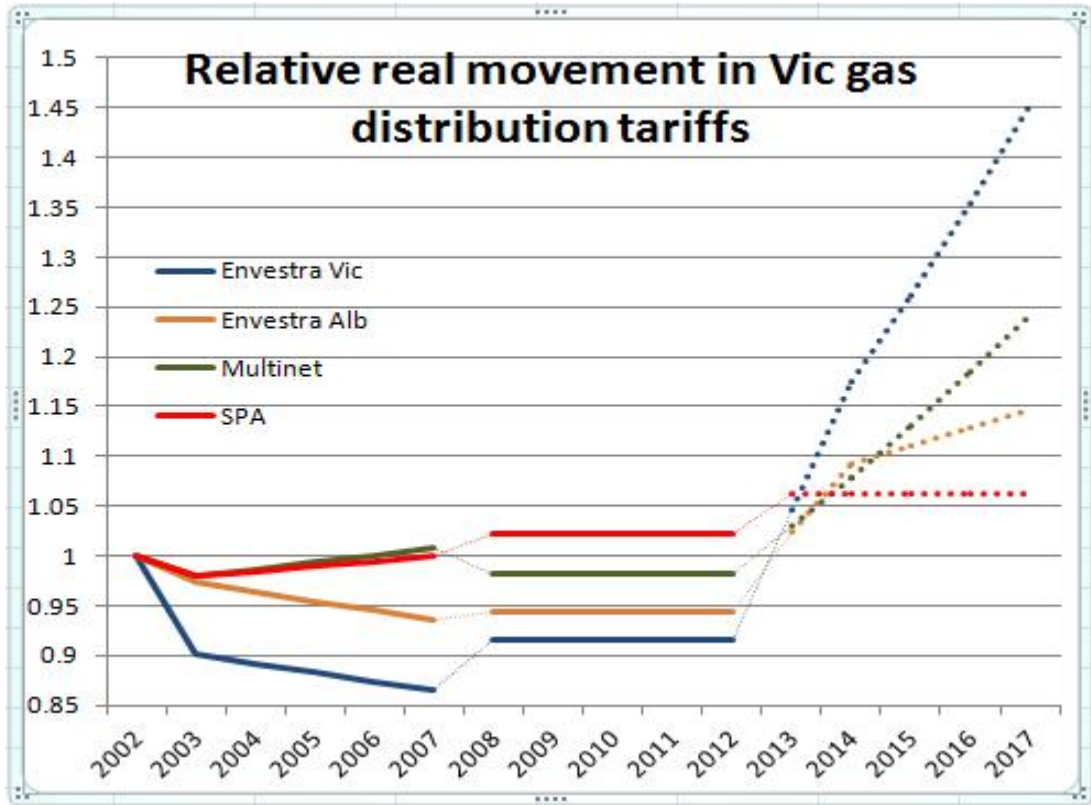
In principle, the Rule changes result in considerable scope for the exercise of independent regulatory judgment by the AER but despite this, consumers have seen the AER take a quite prescriptive approach to regulation in other recent gas transport decisions – this especially relates to the way the AER has set debt risk premium where it persists in using a flawed mechanistic process and in its lack of benchmarking the opex and capex allowances sought by gas pipeline companies..

## 1.3 A review of the ESCoV reset activities in 2002 and 2007

The first two revenue reset reviews of the Victorian gas distribution networks were undertaken by the Essential Services Commission of Victoria (ESCV) under the requirements of the Gas Code as the new Gas Rules were not introduced until well into 2008, by which time the ESCV had issued its Final Decision on the DB applications.

In the ESCV decision for AA2 (made in 2002), consumers saw step reductions in the starting tariffs followed by a small annual real reduction for Envestra and small real annual increases for Multinet and TXU (now SP Ausnet). The ESCV decision in 2008 for AA3 reflected moderate step increases in tariffs for Envestra and SP Ausnet and only small step reductions for the other two DBs as the costs for FRC were added to the tariffs. There were no annual real changes in tariffs for AA3

In marked contrast, the DB applications for AA4 show considerable increases in tariffs, especially those of Envestra (although other applicants are also seeking substantial increases), as the following chart shows.



Source: P<sub>0</sub> and X factor changes in ESCV FDs, DB applics

To assess the reasonableness of the forecast massive increases in tariffs sought, the AER needs to assess whether the forecasts for gas consumption are projected to show a large reduction for AA4, whether costs are increasing as claimed or whether a combination of both elements are operating.

It is important to note that despite the ESCV controlling tariff movements in previous AA periods, the actual revenues received by the DBs in AA# have not been included in the proposed AA Information other than by Envestra. This is unacceptable, as access to the detailed revenues actually achieved is an essential step to verify whether the tariffs movements allowed were adequate, especially in a period where there are identified attempts by Governments to reduce the use of energy, such as through the implementation of energy efficiency programs and the carbon emission reduction program. The AER must require that the relevant information is made transparent for stakeholder scrutiny.

Envestra provides data for its actual revenue compared to the ESCV allowance and this shows that Envestra actually achieved less revenue than



was forecast by the ESCV by about 3%, indicating that perhaps the Envestra tariffs were understated by this amount.

Attempting to assess actual revenues compared to allowed revenues in AA3 for Multinet and SP Ausnet using the limited data available in annual reports is difficult, but based on the information that is available from regulatory compliance reports and segment data from corporate annual reports shows that revenue outcomes during AA3 imply that both companies, in contrast to Envestra, received more revenue than was allowed by the ESCV.

On this basis there is little justification for increasing tariffs to the extents proposed by SP Ausnet and Multinet, although an increase in Envestra tariffs by 3% might be necessary for it to receive an appropriate revenue stream. However, the claimed increases in excess of 3% by Envestra would not be warranted.

#### **1.4 An overview of the DBs application**

It is quite clear that the pipeline companies have taken to heart that the new Rules are to encourage investments. Across the board capex demands are significantly inflated from the current period, as are the claims for opex. Against this backdrop, it is noted that AEMO is forecasting a very modest increase in gas consumption in Victoria, with only slightly increasing forecasts in daily gas usage.

For the increase in expenditure sought by the companies, consumers will have to pay considerably more, but ironically, will pay more for the same or lower service and delivery quantities. The regulatory bargain is now so unbalanced that it has undergone a major shift in favour of the network businesses. What is totally missing from the applications is an assessment of value for money for consumers.

All the DBs have requested a real step increase in revenue at the start of the next period (AA4) followed by real increases for each of the following years, except for SP Ausnet, which does not see the need for further increases. What is not addressed in their applications is the impact this will have on gas consumers – specifically as regards whether prices are at efficient levels or even if they have the ability to pay for such large proposed annual increases.

The applications from the DBs seek to further increase tariffs based on higher rates of return, higher capex and higher opex allowances. As a result, all tariffs would increase in AA4 above AA3 levels, with some DBs seeking considerable increases compared to others, which are a little more moderate.

However, with the net aggregate under-spends in opex and capex achieved by the DBs, the allowed tariffs for AA3 were clearly overstated as they include allowances provided by the ESCV that were not expended by the DBs.

When these factors are included, there is little doubt that the DB forecasts are greatly overstated and lead to significantly inflated, but unnecessarily high average tariffs for AA4.

### 1.5 The EUCV'S General View

The EUCV is supportive of the requirement for reliable security of gas distribution and is not opposed to network augmentations and additions, provided the investments are **efficient** and they are implemented by a **prudent** network business.

Against that background, it is instructive to refer to the Minister's Second Reading Speech (on the National Gas Law)<sup>2</sup>:

"The alignment between the objectives of the gas and electricity regime is an important foundation for the regime. A single consistent objective across gas and electricity will increase the prospect that the regimes remain closely aligned over the long term, even in light of the capacity in both regimes for interested parties to make applications to change rules through the Australian Energy Market Commission.

The national gas objective is to promote efficient investment in, and efficient use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, reliability and security of supply of natural gas.

The national gas objective is an economic concept and should be interpreted as such.

The long term interest of consumers of gas requires the economic welfare of consumers, over the long term, to be maximised. If gas markets and access to pipeline services are efficient in an economic sense, the long term economic interests of consumers in respect of price, quality, reliability, safety and security of natural gas services will be maximised. By the promotion of an economic efficiency objective in access to pipeline services, competition will be promoted in upstream and downstream markets."

It is pertinent to recognize that the gas and electricity objectives are the same and are aligned to ensure the same outcomes **for consumers**. This is because the Minister's second reading speech for the National Electricity Law provided a more detailed explanation as the meaning of "efficient"

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<sup>2</sup> Hansard, SA House of Assembly - Wednesday, 9 April 2008, Page 2884

In the second reading speech for the National Electricity Law (where the objective was described in more detail) the Minister stated<sup>3</sup>:

“For example, **investment in and use of electricity services will be efficient when services are supplied in the long run at least cost**, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.”(emphasis added)

**To permit expenditure (or allow recovery of actual costs or of costs never incurred such as indexation adjustments) that is inefficient or unnecessary, or for costs previously charged to consumers as expenses of a business, could not be described as supplying services at least cost or maximizing the welfare of consumers.**

The EUCV would expect the AER to have regard to the requests of the DBs (with their ex ante allowances for capex) to significantly increase capex allowances from AA3 to AA4 against the background of a projected gas usage that increases at less than 1% pa according to AEMO but will fall according to the DBs.

The overwhelming challenge for both the DBs (and the AER) is to ensure that the investments (in capex) it proposes are **efficient** (i.e. that there is a need “in the long run at least cost” to the consumer), that they are being undertaken by a **prudent** network business and that consumers accept the need for the investment, given the cost involved.

Businesses in a competitive environment make judgments on investment based on such requirements as the:

- Potential to recover the planned return on the costs needed for the investment,
- Ability to deliver a project on time and to budget appropriately,
- Cost (including short term supply pressures),
- Ability of customers to absorb cost increases<sup>4</sup>,
- Ability to defer the investment and the risks associated with deferral.

In the case of a regulated business, prima facie, it only has to convince the regulator it needs to expend the funds and effectively does not take responsibility for whether the investment will generate the required revenue, or even whether it over-runs on costs, as the Rules effectively allow actual

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<sup>3</sup> Hansard, SA HOUSE OF ASSEMBLY, Wednesday 9 February 2005, page 1452

<sup>4</sup> This aspect of assessing the ability of its customers to absorb costs associated with expenditures is an element that has been totally lacking in assessments by the AER in previous regulatory decisions yet is fundamental to sound business decisions made in a competitive environment

costs to be rolled into the RAB, with little deep assessment as to whether the costs were truly prudent let alone efficient.

Unfortunately, gaining regulatory approvals for capital expenditure has been observed to be far too easily obtained, with greater emphasis given to the stated wants of the business rather than the imposition of strong development of capital controls (such as occur in businesses subject to competition) in the interests of consumers.

In this regard, it is to be noted that one of the many reasons given by regulated businesses for needing to invest more capital now, is that under previous government ownership and control, the businesses were starved of capital, due to the competing needs within the government budgets. Another construct that could be applied though, is that governments (just as do businesses in the competitive environment) applied very strict requirements on capital expenditure.

As can be seen from the regulatory decisions made since governments handed over the responsibility (via economic regulation) of providing the necessary discipline on monopolies to jurisdictional and national regulators, the obtaining of approval to incur capital expenditure (based on a requirement that consumers have to pay regardless) has seen an explosion of new capital works undertaken, combined with very large increases in opex claims. This clearly demonstrates that regulators are failing consumers and not acting in accord with the NGL objective by not applying the same level of discipline on regulated gas network providers as was applied by governments themselves, when acting as owners of the assets.

## **1.6 Outsourcing of activities**

All of the gas DBs outsource considerable portions of their opex and capex programs – Envestra to its part-owner APA, SP Ausnet to Tenix and Multinet to Jemena.

The EUCV is well aware of the benefits of outsourcing, as many of its affiliated members employ this process. Equally, the EUCV is aware that outsourcing can lead to unnecessarily higher costs, and therefore would not replicate (efficient) costs that a prudent owner would seek to incur.

The issue as to whether the costs under outsourcing will be lower than those of a prudent and efficient asset owner is a vexed one. From affiliated members' direct experience, this can only be decided in a two part approach – the first part is that there must be competition for gaining the outsourced contract, and then the most attractive outsourcing offer must be benchmarked against the internal costs for delivering the same service. Where there is no competitive element in identifying the best outsourcing arrangement, then there can be no legitimate conclusion that outsourcing is

necessarily more effective, or that the internal costs have reached the level of a prudent and efficient asset owner.

Regulators have debated, at some length, about the incentives and risk transference that outsourcing provides. Specifically, the issue of passing risk to the contractor for a higher price than the internal cost might well be attractive to the DB if it retains a WACC which reflects its total risk profile, yet the DB has “laid off” some or all of the risk for a higher operating expense, which the DB passes onto the consumer. This is effectively “double dipping” by passing a risk premium to consumers (via higher approved opex through outsourcing) yet retaining the risk premium within the WACC.

The EUCV has identified that regulators have decided to address outsourcing on a case by case basis using a series of specific aspects to assess each outsource proposal. Whilst this is a pragmatic approach, the EUCV would strongly recommend that the AER include in its criteria whether:-

- The opex contracted out has transferred risk to the contractor. If this is the case, then the AER needs to assess whether it will accept the outsource contract as the basis for opex and if it does then the AER should also address whether there has been a transfer of risk between amounts included for opex and the WACC. If there has been a transfer of risk, then the WACC must be reduced accordingly to reflect this transfer of risk and any higher costs associated with the activity.
- There has been competitive tendering for the outsource contract. If there has been no competitive tendering, there can be no confidence that the outsource process has delivered an opex which is prudent and efficient and is in the interests of gas consumers.
- The provision of an outsource contract has, or should have impacted on the internal costs. The purpose for outsourcing is to utilize a more efficient provider than the asset owner – the outcome should be that opex is prudent and more efficient. All costs must be taken into account when comparing the options. In particular, all costs incurred by the contractor must be included in the outsource contract, including overheads and profit. Equally, the outsourcing must result in lower overheads within the asset owner’s cost structure. The concern is that the outsourcing might result in apparent opex reductions but there needs to be a reduction in the overheads of the asset owner to reflect the transference of the responsibilities to an outside provider.

Specifically, the EUCV notes that the relationships between Envestra and APA Group and Multinet and Jemena were outcomes of financial

engineering, whereby the long life assets were transferred to a vehicle (securitized) which could raise (debt) funds at a lower rate than an integrated entity might be able to do, and without the same level of capital constraints applying to an integrated corporate structure. The development of the inter-relationships between asset owner and provider of operation services was one which was specifically crafted to allow the operation of the service provider with a tied arrangement at the time of the asset spin off. This financial engineering provides the originator of the arrangement with all of the benefits (including the “staggering” profit of selling the long life assets into a financial vehicle where such assets have a greater value) and few of the detriments of holding long life assets.

Because of the origin of these securitization/service arrangements there can be no possibility that these arrangements should be regarded to be “at arm’s length” and established in a competitive environment. Thus they do not comply at all with the principle that they are *ipso facto* prudent and efficient. The EUCV considers that until there has been an open and competitive tender process for providing these operational services, then the AER should be very skeptical about whether they comply with the Gas Rule requirements.

Due to a lack of transparency in how these costs have been incurred, the AER must decide where costs have been inflated as a result of the unique approaches used by each to allocate responsibility and costs to others.

In addition, the AER must interrogate the transfer of corporate costs from the holding companies to subsidiaries. This particularly applies in the case of SPA gas network and Multinet gas network, which are subsidiaries of SP Ausnet and DUET respectively. APA Group holds some 30% of Envestra and is its “operator”. This means that the AER must ensure that there has been no transfer of costs from the unregulated provider of services or the holding company that are not efficient. To assess efficiency the AER should examine what the costs for a standalone entity would be and ensure that allocated costs to the gas network business do not exceed the costs a standalone efficient gas network provider would incur.

In its final decision in 2008, the ESCV recognized that there was the potential for the transfer of costs to the regulated entity from related parties. The AER must continue to ensure that the issues identified by the ESCV are still being addressed appropriately. With this in mind, the EUCV recommends that the AER sets a limit on the duration each distribution business can award an operation services contract without calling new competitive tenders. This will achieve two prime outcomes:-

1. It will provide ongoing evidence that the costs incurred are prudent and efficient

2. It will provide evidence that there is an “arms’ length” arrangement between asset owner and service provider, and that there is no undisclosed arrangement between owner and contractor.

## 1.7 Summary

It is essential that regulatory price reviews do not lose sight of the basic fact that if the regulator keeps on allowing increases in capex and opex, the prices the networks will charge for providing what is effectively an essential service will help take the cost of gas beyond the ability of competitive industry and many consumers (especially disadvantaged consumers) to pay.

We are already seeing price pressures on the supply of gas as a commodity as a result of the movements in domestic gas prices towards export parity. To this is added the cost of the price on carbon which imposes both direct and indirect<sup>5</sup> cost increases.

The national and jurisdictional regulators have permitted large increases in their recent distribution revenue reviews and if a similar approach is taken in relation to the Victorian gas reviews, gas will become unavailable to many consumers and cause manufacturing to migrate off shore, resulting in the de-industrialization of the Australian economy.

Regulators need to recognise that as more and more large gas users either move off shore or close down, this will result in those fewer consumers remaining having to carry an even greater share of the gas supply chain prices, driving unit prices up even higher.

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<sup>5</sup> Indirect cost increases in gas result from the move away from coal fired power generation to gas, increasing the demand for gas with resultant price pressures

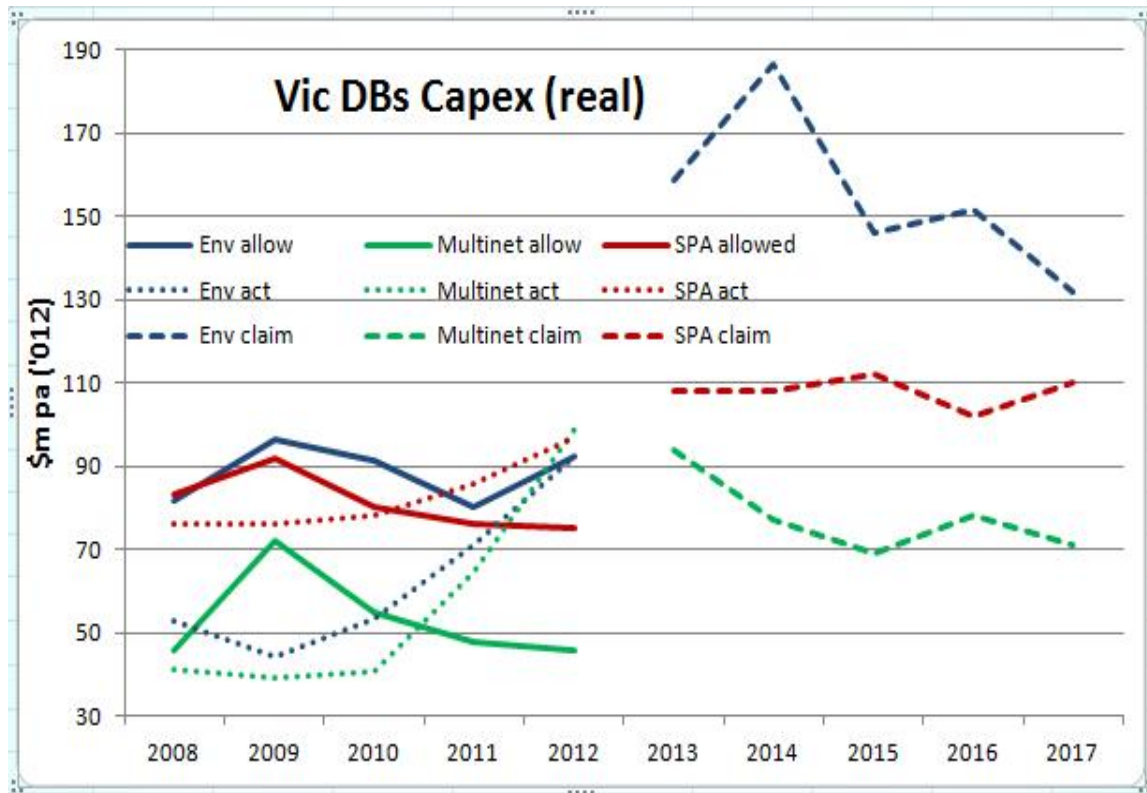
## 2. Total Ex-Ante Capital Allowance

The presentation of historical and forecast data by the DBs makes it extremely difficult to demonstrate the trends of capex over time. The EUCV considers that the AER needs to require the DBs to provide historical and forecast data in tabular form when presenting access arrangement information. Whilst the graphical presentation does provide a pictorial view of change, data in tabular form allows stakeholders to develop detailed trends. In the absence of these trends, the EUCV is of the view that stakeholder input into the review process is severely limited.

Whilst some of the DBs have provided forecast and historical data in a form that can be used (eg Envestra) others have not. The way the data has been provided by Envestra should be set as a standard for all applications. We are surprised that a fundamental matter such as the transparency of basic data necessary for analysis in the AA4 period should have been ignored by the AER in terms of its acceptance of the AA applications.

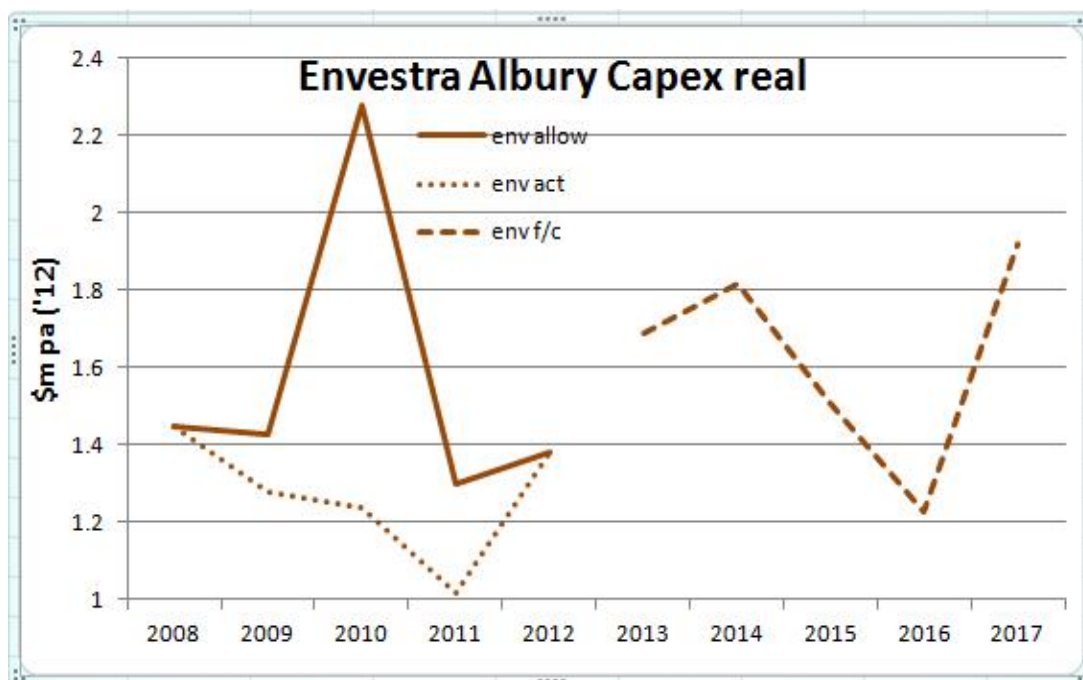
### 2.1 An overview of the DB capex claims

The forecast total capex for AA4 can be seen in comparison to the much lower actual capex for AA3 in the following charts.



Source: ESCV FD 2008, DB applications





Source: ESCV FD 2008, DB application

There is a very disconcerting and consistent theme in the capex approach by the DBs. All DBs underspent their capex in the early years of AA3 and show high capex forecasts for the final year of AA3, presumably in an attempt to indicate a need for a much higher capex claim for AA4.

Intriguingly, Envestra (both at Albury and across their Victorian region) consistently underspent their capex allowance considerably throughout AA3, yet have sought very large increases in capex for AA4 above their actual capex for AA3. The underspend of capex for AA3 will have delivered Envestra a considerable financial benefit. Envestra had an average annual capex during AA3 of \$64m pa yet is seeking an average annual increase of some 140% for AA4, against a projected reduction in the amount of gas transported!

Multinet underspent its capex in the early years but has signaled a massive capex over-run for year 5 of AA3 of an amount of 100% above its average capex for the first four years of AA3. Excluding this massive final year increase, Multinet is seeking a 70% increase in average annual capex for AA4, also against a forecast reduction in the amount of gas transported!.

SP Ausnet capex basically matches the allowance for capex in AA3 except that this will be achieved by a doubling of the average annual spend of the first four years in the as yet uncompleted year 5. If this does not occur, then SP Ausnet will have underspent its allowance for capex, and thereby have gained a considerable financial benefit. SP Ausnet is forecasting a capex for AA4 which is more than twice the average annual spend actually incurred in AA3.

In summary, across all capex claims, there is a number of common themes:

- All firms invested in total terms less capital in the first four years of AA3 than they were allowed, ie the average actual capex in the first four years of AA3 was less than the average allowance for this period
- Capex for all firms for year 5 of AA3 is about two times the average actual capital investment provided for the first four years of AA3
- The expected capex for year 5 of AA3 is similar to the capex claimed for AA4, except for Envestra Victoria where capex for AA4 is about 50% more than the capex forecast to be used in year 5 of AA3

The clear conclusions that can be drawn from the approach each firm has taken with regard to capex is to underspend for four years, then ramp up year 5 expenditure to substantiate a larger capex need for AA4. What this approach fails to reconcile is recognise that all firms are forecasting a reduction in the amount of gas being transported for AA4 and therefore there is little justification for capex for augmentation and expansion of each of the gas networks.

## 2.2 The breakdown of the capex claims

The DBs tend to group their capex into five main groups:

- Customer driven (new connections and augmentations)
- Mains replacement
- IT/SCADA
- Meter replacements
- Other

The EUCV has attempted to identify those groups where each DB has identified where the increased capex is to be allocated, but this is made difficult by the presentation of the information of the historic information, especially by Multinet and SP Ausnet.

The AER needs to assess very closely the drivers for changes in capex (changes in the rate of additions of new connections, rate of change in increases in demand and rate of change in volumes of gas being transported). The existing levels of capex reflect the current **rate** of customer driven capex and it is only where this rate of work has to change to warrant a change in the base cost of capex.

Mains replacement is driven by two key aspects – the overall length of replacement of mains and the complexity involved. Again, the historic capex provides good guidance as to what are efficient costs and these should be used as the basis for calculating new allowances.

## 2.2.1 Envestra Victoria and Albury

The following table shows the increase in real terms of the capex for each category of capex from the actual AA3 performance to the AA4 claimed amount, recognizing that across all capex, the increase is some 240%.

There is only one element in the capex claim that reflects a lesser amount than was incurred in AA3 – ad hoc service renewal.

<b>\$m ('12) Victoria</b>	<b>AA4</b>	<b>AA3</b>	<b>Increase</b>	<b>Forecast driver</b>
Mains Replacement	356.7	72.4	493%	50% increase proposed in length of mains replaced
Ad Hoc Service Renewal	5	9.2	54%	
Residential Connections	170	138.1	123%	No rate increase forecast
I & C Connections	30.7	16.9	182%	No rate increase forecast
Augmentation	57.2	36.8	155%	Forecast fall in consumption
Information Technology	23.5	5.7	412%	
Residential Meter Replacement	33.7	13.4	251%	No rate increase forecast
I & C Meter Replacement	9.2	4.2	219%	No rate increase forecast
Other Non Demand	64.9	8.6	755%	
Gas Extensions	23.6	18.8	126%	No rate increase forecast

Source: Envestra (Vic) application

<b>\$m ('12) Albury</b>	<b>AA4</b>	<b>AA3</b>	<b>Increase</b>	
Ad Hoc Service Renewal	0.05	0.07	71%	
Residential Connections	4.66	3.19	146%	No rate increase forecast
I & C Connections	0.23	0.82	28%	No rate increase forecast
Augmentation	0.64	1.25	51%	Forecast fall in consumption
Information Technology	0.8	0.05	1600%	
Residential Meter Replacement	0.46	2.05	22%	No rate increase forecast
I & C Meter Replacement	0.18	0.2	90%	No rate increase forecast
Other Non Demand	1.16	0.2	580%	

Source: Envestra Albury application

Envestra points out that its decision not to expend its full allowance of capex during AA3 was driven by the advent of the GFC, causing it to constrain its capital program. Despite the clear under-run in capex during AA3, Envestra was able to maintain its services at acceptable levels, and to connect all customers seeking connection. That this occurred implies that the actual capex was indeed efficient and that no step increase in capex is warranted against each element of capex, perhaps with the exception of

mains renewal. On this basis there should be no increase in connection costs nor meter replacement work from AA3 to AA4.

It is accepted that despite a forecast reduction in the total amount of gas to be transported, there may be some areas where short term gas demand peaks are higher than at present causing a small increase in the amount of augmentation but this is not a new phenomenon as there has been a consistent increase in peak demands over many years. It would be expected that the historic use of capex to provide the needed augmentations to permit these small increases in peak demand would have already been included within the historic capex.

There is one element where there appears to be a real cause for the increase in capex. During AA3, Envestra was expected to include for the renewal of some 570 km of mains but it advises that due to the GFC it has not achieved this goal and expects that it will achieve replacement of some 400 km of mains. Envestra has been advised that it is required to replace all of the old lead sealed mains (some 1100 km of mains) by 2020, 9 years hence. This will require the replacement of about 120 km of mains each year to have all replaced by 2020. Thus, in AA4, there is an expectation that about 600 km of mains will be replaced, which is 50% more than will be achieved in AA3. On this basis the cost (in constant \$ terms should be about 50% more than the cost incurred in AA3.

Envestra has forecast a cost increase of nearly 5 times the AA3 allowance to do 50% more work in replacing mains. In AA3, Envestra incurred a cost of \$72.4m for mains replacement. Allowing for 50% more work this would add a further \$36m. Conversely, Envestra forecasts that in AA4 it will replace 635 km of mains for \$283m, or a cost of \$445/m of main. In AA3 Envestra replaced 400 km of mains for a total of \$72.4m, or at a cost of \$181/m of main. The forecast cost for replacement in AA4 reflects a 250% increase in cost! Envestra does not explain how this massive cost increase has occurred.

To assess the reasonableness of these costs relevant benchmarks could be looked at and Multinet provides cost data for replacement of similar mains at \$184/m of mains. Multinet also advises that replacement of mains in AA4 will cost \$225/m (20% more) as these are in much more difficult areas and therefore incur a higher cost. This is a far cry from the \$445/m of mains that Envestra advises is its cost. Further, Multinet points out that it has already replaced the bulk of its mains, whereas Envestra has considerably more mains yet to replace, implying that it is still addressing the "more accessible" mains in its network in AA4.

The other element of Envestra capex that needs close attention is the large increase in IT and SCADA costs. ESCV allowed in AA3 for Envestra to invest some \$22m for IT yet Envestra only spend some \$6m. This provided

Envestra with a significant financial benefit, yet the IT claim for AA4 effectively seeks the same amount that ESCV allowed for AA3. It is probable that the IT investment is needed (as the ESCV considered this was the case in 2008) but the deferral of the capex has brought no benefit to consumers despite the fact that they have incurred costs for this.

Allowing that more mains replacement is needed and that the IT expenditure is still needed, it would be expected that the overall capex needs would have increased from the current level of about \$324m actually used in AA3 to perhaps \$380m in AA4, by maintaining the same level of efficiency displayed in AA3

However, it should be noted that Envestra has sought a capex allowance of \$774m, more than double what is demonstrably an efficient level of capex.

### 2.2.2 Multinet

The following table shows the increase in real terms of the capex for each category of capex from the actual AA3 performance to the AA4 claimed amount, recognizing that across all capex, the increase is some 37%. The information provided by Multinet does not provide historical data against each of the main categories, resulting in the category of mains and services comprising the bulk of the capex for AA3.

\$m ('12)	AA4	AA3	Increase	Forecast driver
Mains and services	<b>318.90</b>	<b>195</b>	<b>164%</b>	Cost premium of 20% more for difficult access No rate of increase in other forecasts
Metering	<b>14.70</b>	<b>16.80</b>	<b>88%</b>	No rate increase forecast
IT and SCADA	<b>52.20</b>	<b>72.60</b>	<b>72%</b>	
Non-network – Other (incl land & building)	<b>4.10</b>	<b>0.30</b>	<b>1367%</b>	

Source: Multinet application

Of the costs for mains and services, Multinet points out that the two main drivers of cost are for customer driven and replacement requirements

Customer driven capex includes customer initiated, demand related, and performance capex and comprises some 57% of the mains and services budget. Multinet points out that its increases in demand are much as occurred in AA3 and that there will be less gas transported on the network. Thus there is no real change from the cost drivers that applied in AA3 implying that the allowance in AA3 should reflect the needs of AA4 and not a massive increase, as is being sought.

As noted in section 2.2.1 above, Multinet is forecasting a 20% increase in the cost of mains replacement due to more difficult access conditions. Pipeworks and replacement comprises 43% of the mains and services budget. Allowing a 20% increase in the cost of pipeworks and replacement due to more difficult circumstances would cause an increase of 8.6% in the mains and services category overall.

Overall, there is a possibility that the mains and services category might need to increase by about 10% yet Multinet has sought an increase of 64%, well in excess of the expectation that is expected for a network that is seeing declining amounts of gas to be transported

### 2.2.3 SP Ausnet

The following table shows the increase in real terms of the capex for each category of capex from the actual AA3 performance to the AA4 claimed amount, recognizing that across all capex, the increase is some 50%. The presentation of the information provided by SP Ausnet does not provide clear historical data against each of the main categories, perhaps resulting in some minor inaccuracies in EUCV's costing each of the categories. But the calculations that have been made do provide some very clear trends.

\$m ('12)	AA4	AA3	Increase	Forecast driver
Mains Replacement	140	70	200%	
Connections	250	230	109%	No rate increase forecast
Augmentation	25	15	167%	No rate increase forecast
Meter Replacement	28	15	187%	No rate increase forecast
Information Technology	60	50	120%	
Other	37	30	123%	

Source: SP Ausnet application

The largest increase in the proposed capex program relates to mains replacement. In the current period, SP Ausnet advises that it replaced 76.4 km pa of mains, implying a replacement cost of \$183/m of mains. This compares well with the current rate costs for Envestra and Multinet which are in the range \$184-\$225/m of mains.

SP Ausnet advises that it is intending to increase the amount of mains from the 76.4km pa in AA3 to 90 km pa in AA4 – this is an increase of 18%, an amount well short of the doubling of the capex forecast. Whilst it is accepted that replacement of LP mains will cost differently to the replacement of MP mains, the proportion of MP mains replacement is about 25% of the total, so the price impact of MP mains replacement is quite muted in the average cost.

The largest category of capex is customer related in terms of connections and augmentation. SP Ausnet is forecasting a similar rate of new connections to that in AA3 yet costs for connections and augmentations have risen by 12% in real terms.

The same observation can be made in relation to the rate of meter replacement. With no step increase in the numbers of meters to be replaced, it is strange that the cost for meter replacement has nearly doubled!

#### **2.2.4 Step increases in costs**

The main drivers for increases in capex relate to increased customer connections, increased consumption and increased demand. There is no indication in any of the applications that these are factors, other than a comment that despite the decrease in consumption, there has been an increase in demand. This comment is similar to those put by electricity network firms. While there is some justification that increased demand despite falling consumption in electricity networks causes increased capex, this is not as much an issue for gas networks as gas is compressible and this accommodates some ability to more easily manage short term higher demands. It must also be noted that the periods for the short term higher demands for gas are much longer than those exhibited in electricity markets. When these factors are integrated into the forecast needs of the gas networks, the need to build networks to accommodate short term peak demands is not as great as for electricity networks.

In AA3, the networks experienced falling or flat gas consumption and therefore the falling demand forecast for AA4 reflects the past trends. The trend for small increases in demand was also experienced in AA3. Because there is no significant change in the rate of new connections and the increased demand and consumption by these new customers is to a large degree offset by falling demand and consumption by existing customers, there appears little support for the large increase in capex for the augmentation to address the small changes.

All three DBs seek increased rates for each new connection. This raises two basic questions.

1. Are the increased rates for each new connection justified? Are the costs for connection prudent? There must be a time when the increasing costs for new connections is greater than the benefit created by the new connection. In light of the massive increases in tariffs forecast for AA4, this question needs to be answered.
2. There must be a time when the costs for new connections do not warrant existing customers to subsidize the network costs associated

with the costs of the new connections. In light of the proposed large increases in tariffs, it appears that this point might have occurred.

All the DBs noted the need to increase the rate of mains replacement as the amount of unaccounted for gas is increasing. The EUCV agrees that this increasing fugitive gas needs to be addressed, and supports the increased programs for mains replacement. What is not supported is the very large step increases in the costs proposed for this replacement program. While relatively small increases in costs might result from more difficult access conditions, the large increases proposed are not warranted and need to be examined in great detail.

The EUCV is quite intrigued at the very large amounts of capex devoted in AA3 to IT and SCADA and that similar amounts are proposed for AA4. The AER needs to examine in great detail the actual needs and costs associated with this aspect of the capex programs.

Cost increases as a result of input price movements are addressed in section 4.

### **2.2.5 Summary**

Overall, the capex claims for AA4 bear little relationship to the actual capex used in AA3. The EUCV has identified a number of areas of concern in relation to both capex incurred in AA3 and in capex forecast for AA4.

The EUCV is very concerned that the current Rules provide a strong incentive for regulated businesses to over-state their capex needs and retain the benefit of any under-run as the DBs have in AA3, noting that the actual capex for the first three years has under-run allowances, and all DBs have massively ramped up capex in the fourth and as yet completed fifth year. This under-run has been quite beneficial to all the DBs

Increased capex has been encouraged by the new Law and Rules but as been pointed out in a number of forums on this issue, the AER has apparently a much greater ability to interrogate and determine allowances than it has used in recent times. The EUCV expects that the AER will use the recognized powers it has in setting prudent and efficient capex allowances

The EUCV is very concerned that capex already incurred has not been demonstrably efficient nor prudent in that there is no evidence that the cost of the capex is offset by the necessary increase in revenue to pay for the cost of the investments. This needs to be carefully investigated.

A common theme by all the DBs is to increase the capex devoted to mains replacement. As noted, the EUCV accepts that failing mains is both a safety



hazard and a cause of increased cost as does the need to pay for fugitive gas – a cost that is increasing rapidly. There is, however, a need to balance the cost of mains replacement to ensure that the risk and the other costs are properly balanced and prudent. The AER needs to ensure that there is a compensating cost reduction as a result of the mains replacement program.

The EUCV notes that the payment for fugitive gas (UAFG) is carried by retailers and not the distribution networks that cause the problem. The ESCV introduced an incentive program to reduce UAFG and if the AER decides to continue with this program, the performance targets need to be set to reflect the amount of capex already committed and the amount of capex included in AA4 for mains replacement.

Increases in capex have two main impacts – they have an immediate impact as there is a step increase in tariffs, but they also have a long term effect as consumers continue to pay for them for many decades. The AER must ensure that the capex already incurred and to be allowed is both prudent and efficient

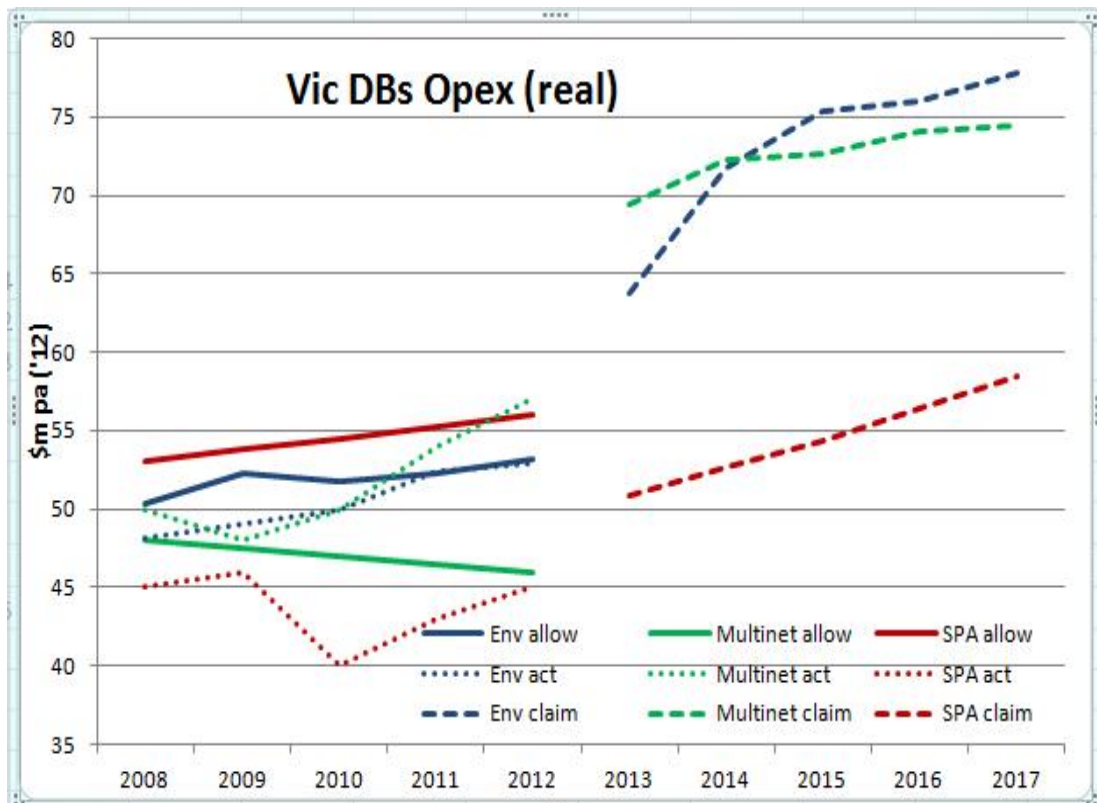
### 3. Forecast Operating Expenditure

The presentation of historical and forecast data by the DBs makes it extremely difficult to demonstrate the trends of capex over time. The EUCV considers that the AER needs to require the DBs to provide historical and forecast data in tabular form when presenting access arrangement information. Whilst the graphical presentation does provide a pictorial view of change, data in tabular form allows stakeholders to develop detailed trends. In the absence of these trends, the EUCV is of the view that stakeholder input in to the review process is severely limited.

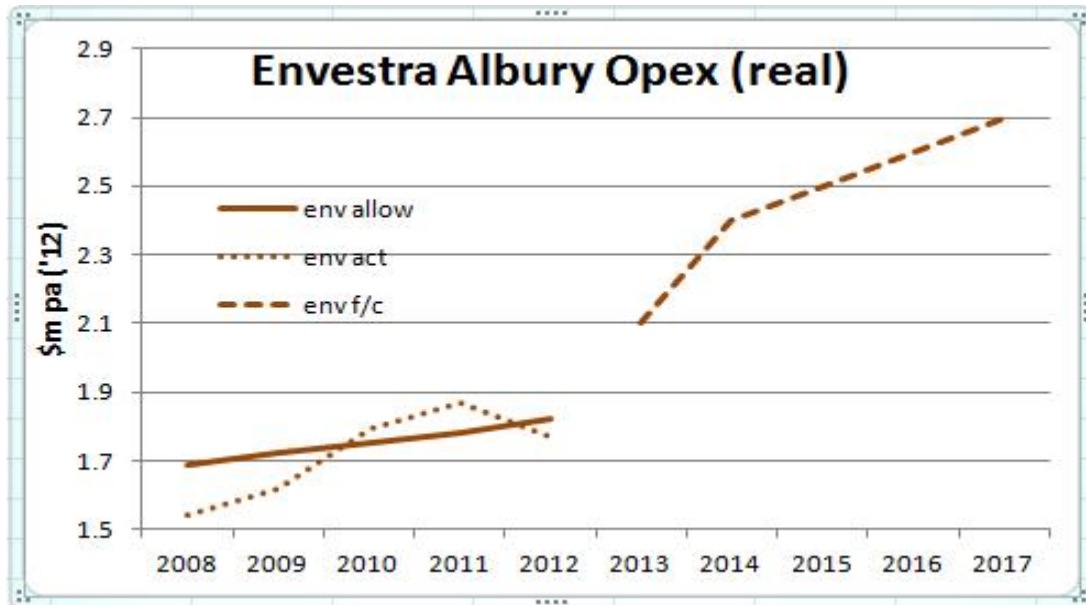
Whilst some of the DBs have provided forecast and historical data in a form that can be used (eg Envestra) others have not. The way the data has been provided by Envestra should be set as a standard for all applications.

#### 3.1 An overview of the DB opex claims

The forecast total opex for AA4 can be seen in comparison to the much lower actual opex for AA3 in the following charts.



Source: ESCV FD 2008, DB applications



Source: ESCV FD 2008, DB applications

The trends in total opex in AA3 are that:

- All DBs under run their allowances except for Multinet which over spent on opex
- Opex in the first three years was lower than the average over the 5 year period
- Opex in years 4 (the “benchmark year”) and year 5 (the “forecast year”) show considerably higher opex than the 5 year average.

Opex claims for AA4 show a significant increase from the actual levels of opex in AA3. Accepting the year 4 opex is demonstrably efficient, increases claimed range from between 20% and 30% for the first year of AA4.

In its rule change application for network regulation, the AER has suggested that using a fourth year opex as the efficient level might be subject to regulatory gaming and have intimated that perhaps using an average of actual opex the first four years might provide a clearer indication of efficient opex for the period. On this basis, the claims for opex in AA4 are all about 45% higher than average actual opex in AA3, except for SP Ausnet, where the increase is 25%.

The DBs have sought independent advice<sup>6</sup> as to the efficiency of their opex. This advice implies that their 2010 actual opex is “middle of the road” efficient on world standards, and still well away from the efficient boundary. This research implies that the DBs are all reasonable performers but can still achieve greater efficiency. As the average opex in the early years was less than that in the final two years, it would be an interesting analysis if the

<sup>6</sup> CS Marchment Hill and Economic Insights

research done to “prove” the 2010 opex was efficient was carried out over the average of the four years where actual opex was known. The EUCV considers that this might indicate that the DBs could be seen as more efficient.

The regulatory environment in Australia is intended to incentivise the firms to reach the efficient boundary, but in practice it provides the regulated firms with an opportunity to “game the regulator” and provide greater financial rewards.

In the case of opex, the “game” is to “prove” the year 4 opex is efficient and then to “prove” that there are a number of step changes that have occurred since that time to warrant a higher opex for the next period. Once the next period opex is set at an unnecessarily high level, the opex is under-run for the first three years, with opex in the year 4 being higher (and forecast even higher for year 5) “demonstrating” that the early years of improvement were unsustainable.

Top down analysis indicates that the opex claims for AA4 from the DBs are excessive.

### **3.2.1 Envestra Victoria and Albury**

The following two tables show the increase in real terms opex for each category of opex from the actual AA3 performance to the AA4 claimed amount, recognizing that across all opex, the increase is some 240%.

There is only one element in the opex claim that reflects a lesser amount than was incurred in AA3 – billing and revenue collection in Victoria and regulatory costs in Albury.

Opex Summary (Victoria) \$m (real 2011)	AA4	AA3	Increase
<b>Operating Costs</b>			
Network Operating Costs	21.7	19.1	114%
Billing and Revenue Collection	2.4	3.1	77%
Network Development	18.3	8.3	220%
Regulatory Costs	6.6	4.4	150%
Other Operating Costs	188.1	159.8	118%
Operating - Non Base Year Costs	24.1		
<b>Total Operating Costs</b>	<b>261.2</b>	<b>194.7</b>	<b>134%</b>
<b>Maintenance Costs</b>			
Distribution Pipelines	12.9	10.5	123%
Cathodic Protection	3.2	2.8	114%
Network Control	3.5	2.4	146%
Other Maintenance Costs (incl. Leak Repairs)	50.3	42.2	119%
Maintenance - Non Base Year Costs	22		
<b>Total Maintenance Costs</b>	<b>91.9</b>	<b>57.8</b>	<b>159%</b>
Total Ancillary Reference Services	11.7		
<b>Total \$m</b>	<b>364.8</b>	<b>252.5</b>	<b>144%</b>

Source: Envestra application

Opex Summary (Albury) \$m (real 2011)	AA4	AA3	Increase
<b>Operating Costs</b>			
Network Operating Costs	4.9	4.63	106%
Billing and Revenue Collection	0.1	0.02	500%
Network Development	0.6	0.54	111%
Regulatory Costs	0.3	0.66	45%
Other Operating Costs	3.7	2.3	161%
Operating - Non Base Year Costs	0.6		
<b>Total Operating Costs</b>	<b>10.3</b>	<b>8.13</b>	<b>127%</b>
<b>Maintenance Costs</b>			
Distribution Pipelines	0.2	0.1	200%
Cathodic Protection	0.1	0.09	111%
Network Control	0	0.07	0%
Other Maintenance Costs (incl. Leak Repairs)	0.6		
Maintenance - Non Base Year Costs	0.4		
<b>Total Maintenance Costs</b>	<b>1.3</b>	<b>0.36</b>	<b>361%</b>
Total Ancillary Reference Services	0.7		
<b>Total \$m</b>	<b>12.3</b>	<b>8.76</b>	<b>140%</b>

Source: Envestra application

Overall, Envestra seeks an additional \$116m in opex as a result of changes from the costs incurred in AA3. One third of this increase is a result of increased costs from the base year, one third in increases for “other operating costs” which are not better defined and the balance over a range of smaller increases.

The Envestra explanations for why there are such large increases in opex are extensive on what it considers are the cause of the increased cost but light on the development of the cost impacts of these changes. This makes stakeholder input into an assessment quite difficult.

As well as base year changes, Envestra explains the complexity the management and incentive fee arrangement has in forecasting the base year opex and explains why using the base year approach does not work for some elements of the opex (such as network development).

Envestra claims there are considerable costs associated with the imposition of the NECF. When the costs claimed for the imposition of NECF are compared across all of the DBs, there is considerable disparity. The AER is encouraged to examine the costs claimed in detail and to compare between the DBs.

Envestra details where capex projects will cause an increase in opex (but fails to highlight where capex leads to a reduction in opex) and a number of step changes that have occurred since the base year (such as the introduction of a price on carbon). While some of the changes will have an impact on opex (such as the price on carbon addressed in section 5.4) Envestra highlights a number of issues where opex increases yet it doesn't explain why the additional opex is needed.

One of the most contentious elements in the forecast opex claim is for network development, apparently aimed at increasing the number of natural gas connections and increased usage. Between Envestra Victoria and Envestra Albury, there is an intention to spend a total of about \$20m over the five years (an increase in opex of about 10%) to increase the use of the network. Unfortunately, Envestra has kept “confidential” its explanation of what this program is to achieve and how it will be achieved. What is clear from the forecast of new connections and gas consumption, the benefits of the program are not exhibited in the forecasts of usage.

The issue of networks incurring costs for “marketing” has been addressed by jurisdictional regulators<sup>7</sup> at length in the past and they have concluded

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<sup>7</sup> The ESCV provides considerable discourse on the issue in its draft decision in 2007, although large amounts of the text are deleted in relation to incentive payments associated with the Envestra proposal. It would appear from the allowances for step changes in the final decision (see table 7.20) the ESCV did allow for some opex for this task

that this is not a role for networks as there is a considered view that networks have little ability to actually cause an increase in consumption. In this regard, Envestra would be acting in the opposite direction to governments and their energy efficiency programs which are focused on consumers using less energy, and not the increase Envestra would be seeking to drive. The AER should not allow for this cost to be included.

Examples where costs are to be incurred such as additional training or improved safety need close attention or a change in practice.

The EUCV recognizes that training is needed, yet this is an ongoing issue and there is no “step change” as such. Such training should result in opex reduction because staff is better equipped to carry out their tasks.

Envestra notes a number of activities related to safety (and the EUCV supports having a safe environment) but the changes are nor the result of changes in Laws or Rules. This means that the requirements for safety have not changed and the costs to meet these requirements are already embedded in the base year opex.

Envestra has identified that it will carry out some of its work via an external provider. The EUCV has no opposition to outsourcing work, but if the costs to outsource are higher than in the past, it makes no sense to outsource the work –unless of course, the regulator allows such to occur at the expense of consumers!

Envestra notes that the introduction of NECF changes the relationship it has with its customers and retailers. This is true, but Envestra does not recognise that even if the formal relationships change, the practical relationships are not affected as it seems to indicate.

The absence of the quantification of the costs involved in each of these “changes” Envestra has identified makes more detailed stakeholder commentary impossible.

Envestra notes that it will incur additional costs as a result of an increase in the size of the network and the increased number of customers. It cites that it will have 12000 more customers pa and at a rate of \$19.90/customer. Envestra cites that adding new customers costs \$19.90/customer, or \$240,000 pa. In its summary it cites that the cost of adding new customers will cost \$3.7m pa or \$1540/customer.

Envestra advises that its new opex allowance for Victoria is calculated on the following bases<sup>8</sup>:

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<sup>8</sup> Envestra follows a similar pattern for Albury

Vic Base year cost	\$54.2 m
Deduct NMF and incentives	<\$5.8m>
Add escalation of base year to 2013	\$1m
2013 base cost	\$47.6m

The first issue is that the base year cost used is well inflated above the costs of the first three years and is overstated by some 10%

Envestra then provides a table adjusting this base year cost

Opex Summary (real 2011)	2013	2014	2015	2016	2017	Average Increase on base
Base Year Roll-forward (Steps 1 to 3)	47.6	47.6	47.6	47.6	47.6	
<b>Add:</b>						
NMF and Incentive Payments (Step 4)	3.4	3.7	3.8	4	4.3	8%
Network Development (Step 4)	3.2	3.2	3.6	3.5	3.7	7%
Non-Base Year Opex (Step 4)	4.9	7.4	7.4	7.6	7.8	15%
Incremental Growth Opex (Step 5)	0.2	0.5	0.7	1	1.2	2%
Cost Escalation (Step 6)	2.2	7.1	9.9	9.8	10.8	17%
<b>Total Operating Costs (excl. ARS)</b>	<b>61.5</b>	<b>69.5</b>	<b>73</b>	<b>73.6</b>	<b>75.4</b>	148%
<b>ARS</b>	2.3	2.3	2.3	2.4	2.4	
<b>Total including ARS</b>	<b>63.8</b>	<b>71.8</b>	<b>75.4</b>	<b>76</b>	<b>77.8</b>	

Envestra deletes \$5.8m for NMF and incentives and other non base year opex (11%) and adds back in 23%. Envestra adds 1% increase for escalation adjustment from 2011 to 2013 (ie for two years) yet then adds in an average 17% for the next five years. There is considerable inconsistency in its numbers.

Overall, Envestra is seeking a massive increase in its opex despite falling consumption and other modest growth. The EUCV does not consider that the opex claim is sustainable but due to the retention of so much information as “confidential” the EUCV examination of the claims is limited to a top down assessment. This clearly highlights many inconsistencies.



### 3.2.2 SP Ausnet

SP Ausnet does not provide any breakdown of its actual opex, so comparison of actual opex and claimed opex is impossible. The EUCV commentary on the claims is therefore limited.

SP Ausnet provides advice from Economic Insights that its opex for 2010 is efficient, although as stated in section 3.1, SPA is not yet at the efficient frontier so there is still scope for improvement. Despite this SPA uses the base year approach to setting its opex for AA4. What SPA does not make clear that its opex in 2010 (comparison data used by the Economic Insights) this was perhaps 8% below the data used as the base used for setting the AA4 opex. Thus, there is a clear indication that the data used for the AA4 opex calculations is not at an efficient level when compared to international benchmarks.

As SPA opex costs in the early part of AA3 were higher than occurred in the third and fourth years, it sets its base year opex on a “normalized basis” incorporating the early years of opex in setting its “base year” opex. This is contrast to the approaches of Envestra and Multinet and eliminates the effect of the benchmark comparisons based on 2010 data (which as is noted was the lowest annual opex incurred in AA3).

SPA proposes to use a rate of change model to adjust its opex. Unfortunately the appendix it refers to, to explain this model, is “confidential” and therefore EUCV cannot comment on its appropriateness. This rate of change model is driven by input cost escalation (some 65% of the cost increase) with growth rates and improvements in productivity leading to the balance of the increase.

Intriguingly, SPA claims that increases in growth will cause opex to increase by some 1.7% annually which is lower than the increase claimed by other DBs

SPA claims that there are step changes to the base cost related to network operations, introduction of NECF and a price on carbon. Whilst it provides a summary of the 5 more network operations, the details (appendix 6F) are kept confidential so informed comment on the need for these changes or their cost cannot be made.

The cost of NECF would appear to be high when it is considered that in reality NECF merely reflects what actually occurs – SPA has always had a relationship with customers and the interposing of a retailer between the two would always have added costs. The EUCV is not convinced that the costs SPA claims will actually be incurred. In this regard, comparison of all

the DB claims should be made including indepth analysis of the actuality of these costs.

SPA also claims an increase in opex to manage the new legislation imposing a price on carbon. As noted elsewhere, the EUCV is not convinced that this requirement will impose the costs claimed.

SPA has claimed a step increase in relation to the allocation of corporate costs (SPIMS) and other overheads. This issue is addressed in section 1.6 and the EUCV does not consider that a change in corporate policy should result in the opex for a regulated subsidiary increasing by such means. SPA also points to the opex increasing as a result in capitalization policies. If opex increases as a result of this then the amount previously capitalized should reduce – there should be no net gain as a result.

Overall, the opex claim by SPA is mostly driven by the escalation element of the rate of change input. The EUCV comments about the escalation of costs are provided in section 4.2.

Whilst the EUCV has some concerns with specific elements of the SP Ausnet claimed opex, it is quite clear that of the claims from the three DBs, the sought after increase in opex by SP Ausnet is the most reasonable and provides a clear comparison with the claims by the other two DBs which are seen as unnecessarily excessive.

### **3.2.3 Multinet**

Multinet does not provide any breakdown of its actual opex, so comparison of actual opex and claimed opex is impossible. The EUCV commentary on the claims is therefore limited.

Multinet provides advice from Marchmont Hill that its opex for 2010 is efficient, although as stated in section 3.1, Multinet is not yet at the efficient frontier so there is still scope for improvement. Despite this demonstration that it's past opex (albeit higher than the ESCV allowance) compares well with other gas DBs, Multinet opex in 2011 rose significantly from 2010 opex and is forecast to rise further in 2012. This shows that Multinet opex is not demonstrably efficient when viewed in comparison with other DBs.

Because it significantly over-ran the allowed opex for much of AA3, Multinet has proposed that historic opex should not be used as the basis for setting opex for AA\$ and proposes that a bottom up approach be used for setting AA4 opex. This is contrast to the approaches used by Envestra and SP Ausnet.

The EUCV considers that this approach totally rejects the basic thrust of incentive regulation and tends to convert it to a cost of service model. The

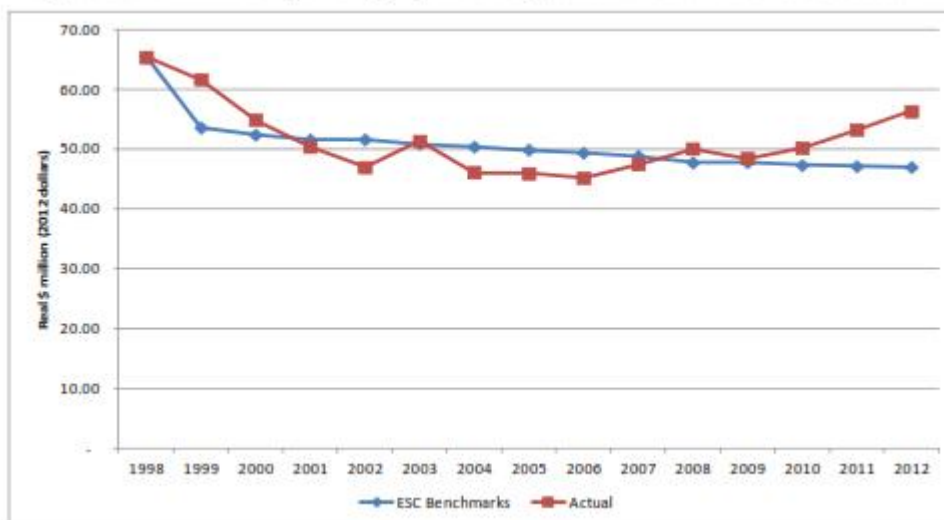
EUCV considers that Multinet might have been driven to this conclusion because the incentive payments it would receive in AA4 would amplify the losses it is has already incurred by consistently over-running the allowed opex in AA3. The EUCV is not able to examine the reasons for the over-runs and the AER must find out why the ESCV apparently got the opex costs so wrong for AA3.

A review of the ESCV final decision on Multinet in 2008 indicates that ESCV had based the Multinet allowance for AA3 on actual costs incurred in AA2 which was adjusted to reflect a rate of change. What is particularly of great interest in regard to the Multinet opex, is the long discourse and adjustments ESCV made to the Multinet allowed opex in regard to the outsourcing arrangements.

There is no explanation by Multinet as to why its actual opex so greatly exceeded the opex allowed by the ESCV but the EUCV considers that the issue of the way Multinet outsourced its opex needs to be closely examined. Multinet is required to operate efficiently and if its outsourcing arrangements do not achieve this outcome, there should be no requirement on consumers to make payments that are not efficient and cannot be justified. Until this analysis is provided the EUCV cannot assess the legitimacy of the actual opex incurred.

The history of Multinet past opex performance against the ESCV allowance shows a recent increase (see figure 2-5 from Multinet's application)

**Figure 2-5: Multinet's operating expenditure performance relative to ESC benchmarks**



For AA1 and AA2, Multinet opex shows a continual reduction in real terms and only in AA3 does it show a strong upturn. The ESCV allowances indicate that it expected the decade long trend to continue into AA3. Multinet needs to explain in detail why this trend has reversed when

considering that there was very modest change in gas demand and consumption during AA3.

Multinet seeks to increase the opex for AA4 by some 40% above the actual recorded opex for 2010 which Marchmont Hill advises provided a reasonable level of efficiency (but not at the efficient boundary) and by 50% above what the ESCV considered was an efficient allowance for 2012. This large step increase ignores that fact that the drivers for increased opex do not indicate that such a large step increase is warranted.

The Multinet claim for AA4 is not developed from past opex and is a new “bottom up” calculation. The EUCV considers that as Multinet has been subject to an incentive to achieve efficient opex, the approach to discard past performance is basically contrary to the concept of incentive regulation. The AER should apply the principles of past performance as providing the basis for the next period opex, appropriately adjusted. This is the approach used by the ESCV for the AA3 period. As Multinet implies that the 2010 actual opex provides a reasonable indication that it might be classed as efficient, the AER should use the 2010 data as its base year and make adjustments to that year costs and develop a new forecast of opex based on this.

Because the EUCV is not privy to the detailed cost breakdown in the historic opex, it is impossible to assess the reasonableness of the new values for each element of opex claimed by Multinet. The EUCV notes that Multinet is about to implement a new management model and to seek new outsourcing contracts for its activities. This is presumably a result of the total acquisition of Multinet by DUET.

Notwithstanding the fact that a new management approach is to be implemented, there remains a basic premise that the allowances for opex must be efficient. A demonstration of such efficiency is not provided by a bottom up assessment of opex, but by comparing cost performance of Multinet with its historic performance and with external benchmarking. Multinet comments (page 66) that:

“It should be noted that the cost incurred by JAM in the current OSA does not necessarily provide a reasonable indication of the lowest sustainable costs for the forthcoming Access Arrangement Period, primarily because:

- JAM has a strong incentive to minimise operating expenditure below a sustainable level – a phenomenon known as cost over-shooting. Therefore, JAM’s current costs are not necessarily a good guide to the future costs of delivering sustainable Network Operations.
- It should be noted that JAM has incurred a loss in providing Network Operations to Multinet. Therefore, neither JAM’s actual costs nor the OSA fee paid by Multinet provides a reasonable estimate of the future costs of

providing Network Operations following the expiry of the OSA in June 2013.”

This may be true, but it does not lead to the conclusion that JAM was efficient in the delivery of its current services – in fact, JAM operations might be very inefficient and so caused the losses it apparently did.

On page 74 Multinet comments:

“Multinet’s forecast operating expenditure for Network Operations shows a step increase of approximately 10% compared to JAM’s 2011 costs of providing these services. An important element of this increase is attributable to the increased work volume and enhanced reporting requirements placed on the new service providers. In addition, as Multinet ramps up internal resources to improve its strategic input to Network Operations, it is likely that cost efficiencies and service improvements will be achieved in subsequent regulatory periods.”

The proposal does not provide the evidence that there has been a rigorous competitive tender exercise nor that the increased work volume has contributed to this increase. The amount of new work that has been added to the Multinet gas network is modest at best (a comment similar to those made in sections above) and whilst Multinet comments that the new cost is 10% above the JAM costs for 2011, these were already higher than the 2010 data that Multinet uses to “prove” its costs are efficient.

Multinet advises that its customer and market services claim is 10% above the 2011 JAM cost for this element and comments that the additional cost (apparently some \$2-\$2.5m pa is due to NECF and the EEO requirement. Large firms affiliated with EUCV have been exposed to EEO for some years and can advise that the costs are very modest and nowhere near the amounts implied by Multinet. The cost of NECF would appear to be high when it is considered that in reality NECF merely reflects what actually occurs – Multinet has always had a relationship with customers and the interposing of a retailer between the two would always have added costs. The EUCV is not convinced that the costs Multinet claims for EEO and NECF will actually be incurred.

It is impossible to comment on the other aspects of the customer and market services (such as outsourced work and in-house services because there is no comparative data.

In relation to the IT services, Multinet comments that the new allowance is below the costs that JAM incurred. This does not show that the new allowance is efficient but it does show that the JAM costs were inefficient and this provides a view that there may be other aspects of the Multinet opex that are inefficient.

Multinet claims increased corporate costs and overhead compared to current levels but notes that bringing a number of previously outsourced functions into this category makes comparisons invalid. Multinet attempts to “prove” that its new corporate structure and costs are efficient by reference to a management consultant review. However there is no certainty that the new costs are efficient nor that the parent company costs passed through to Multinet are efficient.

Overall, Multinet has approached its opex on a bottom up basis and claims a massive increase in opex from the 2010 level which independent benchmarking shows, at best, that Multinet opex exhibits middle of the range performance. Certainly the 2010 opex is not at the efficient boundary.

The new opex is a massive 40% increase above the 2010 opex level, implying that the 2013 opex claimed will be at the higher end of its comparators. On this basis alone, the Multinet opex claim must be considered to be ambit.

The AER needs to understand better the reasons why Multinet opex rose so strongly in 2011 from 2010 levels and why it is forecast to be higher again in 2012. The EUCV has a concern that the cause of this increase might be associated with its related party costs and the way JAM has operated. The view that the ESCV took in its 2008 final decision implies that this was a major concern of theirs.

### **3.3 Unaccounted for gas (UAFG)**

Initially the ESCV included the cost for unaccounted for gas (also called fugitive gas) in the opex for the gas DBs. This is a sensible approach and used widely as it imposes on the networks responsibility for the gas that is lost from their networks, and they are the only party able to manage the risk.

During AA3, the ESCV changed this approach so that the cost for UAFG was passed through retailers to consumers. To maintain the incentive on the DBs to minimize the loss of gas, the ESCV imposed an incentive program such that if a DB allowed less gas to escape, then it would earn a bonus and if more gas escaped then the DB would pay a penalty.

The EUCV accepts that as the price of gas is increasing rapidly, the risk on DBs attempting to forecast the amount and cost of gas needed to make up for the losses increases risks for both consumers (as the DBs would seek higher allowances and prices) and the DBs.

The EUCV supports the retention of this approach to managing the cost of fugitive gas.

### 3.4 Benchmarking

Other consumer groups have raised with the AER the need to use benchmarks to set opex allowances. The EUCV has sympathy for this view as industry wide benchmarking is the only tool which provides a regulator with the tools to assess the principle behind incentive regulation – that of competition by comparison. Unless a monopoly is compared to another as a core requirement to assess the reasonableness of a monopoly's claim, a regulator has little ability to impose the strictures of competition on the monopoly.

The three DBs have provided some benchmarking to demonstrate that their 2010 opex is within the bounds of reasonable levels of opex, but none of the benchmarking studies support that the DBs are near the efficient boundary, so there is room for improvement.

The AER has consistently used year 4 of a five year regulatory period as being efficient when there is an efficiency sharing scheme in place which the AER assumes drives the regulated firm to maximise efficiency. Envestra used this approach, SP Ausnet used the average of a number of years of opex and Multinet used a bottom up approach.

From this basis, the DBs approached the setting of opex for AA4 differently – Envestra argued for large step changes, SPA used the rate of change model used by ESCV for AA3 and Multinet effectively excluded all reference to previous opex.

The AER relies on technical support to assess the reasonableness of an opex claim. This support to the AER is usually provided by engineering consultants who examine the costs from a “bottom up” approach. What external benchmarking provides is a “top down” assessment as to what is the most effective approach to assessing whether the allowances are at the efficient boundary.

The EUCV considers that self benchmarking coupled with the application of an EBSS for the last decade, should allow the AER to use self benchmarking as its primary tool for setting opex. External benchmarking provides a discipline to ensure that cost allowances represent efficiency.

### 3.5 The relationship between capex and opex

There is general agreement that there is a relationship between capex and opex, and the AER consultants and even some of the DBs have observed this. With the increase in capex for refurbishment (especially gas main

replacement) there must be a proportionate reduction in opex, as this is what justifies the replacement of old assets with new assets. Notwithstanding this inverse relationship, Victorian DBs all propose to increase their opex from current levels despite very modest growth in numbers connected and falling net consumption.

Where there is growth in a network there is an expectation that there would be additional opex attributable for new capex, but where capex is about replacing old assets with new, or replacing old with something new but larger, there is little justification for added opex.

The AER must recognise the inter-relationship between capex and opex, as far as the Victorian DBs applications are concerned. It is a fundamental matter for any business that much of its capital investment should result in a reduction in opex. The other reason for capex is to match increasing demand for products.

Victorian DBs have all claimed an increase in capex, in part, due to escalation of costs. If this is the case then the commercial relationship between capex and opex becomes even more important. If the cost to replace the assets increases, then from a consumer viewpoint it is more economically efficient for the opex to be maintained rather than pay a higher cost as a result of new assets replacing old (*ceteris paribus*).

In section 2 above, it is pointed out that there is a commercial driver for Victorian DBs to replace assets rather than continue with incurring opex. It is the building block approach which provides this driver, as opex is recovered at cost, whereas assets achieve a return which provides the profits for the regulated business.

The AER must ensure that the capex used does result in opex being proportionately reduced.

### **3.6 Summary of opex cost claims**

The limited analysis that is possible due to the difficulties caused by pictorial presentation with no data and a lack of detail has pointed out that the opex claims from all four DBs are excessive – this particularly applies to the Envestra claims and that from Multinet.

Incentive regulation requires accurate historical data which is used for comparison with other providers to assess the closeness of the efficient boundary. Unfortunately neither SP Ausnet nor Multinet provides this information other than to examine on a global basis 2010 actual opex against a number of benchmarks. In all cases, after using the 2010 data to “prove” their opex is efficient, none of the firms used this year performance as the basis for showing their 2013 opex claim is efficient.



The AER must only allow for efficient opex to be included in the regulatory bargain, and there is no compelling evidence that the claims from any of the four regulated businesses complies with this requirement.

## 4. Forecasts gas demand and consumption and escalation

### 4.1 Gas demand and consumption forecasts

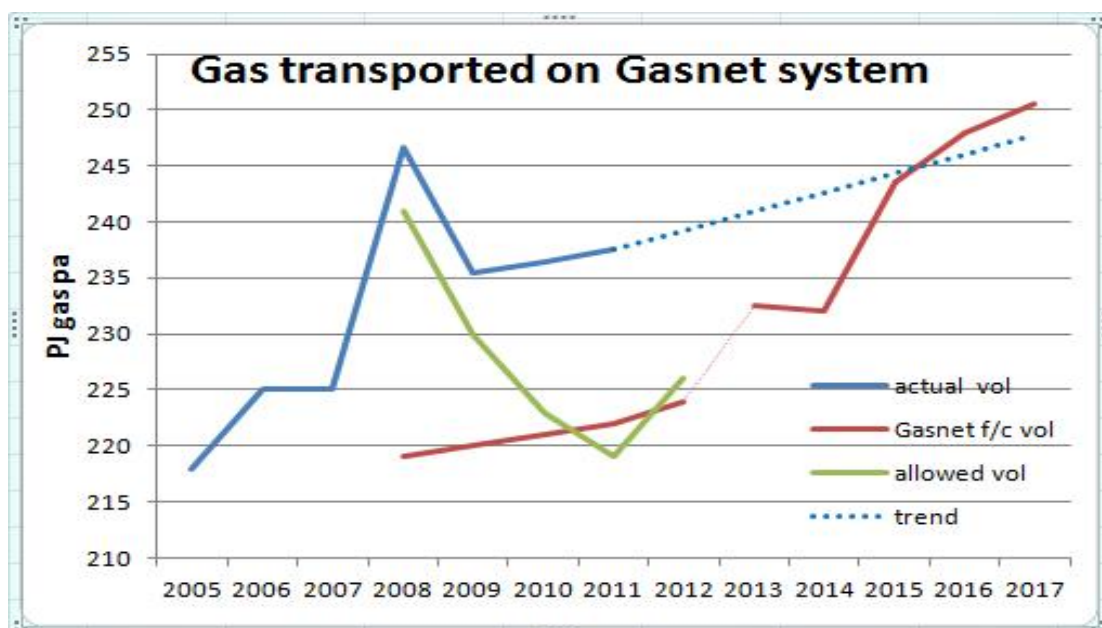
In the current period (AA3), there was less gas transported on some networks and more on others. At the same time, there was variance in both directions on the amount of gas transport paid for under demand contracts compared to the benchmarks assumed in the derivation of the AA3 tariffs.

What appears to be a consistent theme is that the usage of gas per customer is reducing although this is being partially offset by increasing numbers of new connections.

As the regulatory approach uses a price cap calculation and the tariffs are set for AA4 using a  $P_0$  and X adjustment of AA3 tariffs, it becomes critical that the forecasts of future gas consumption and demand are realistic. A price cap approach incentivizes the network to forecast future use as low as possible as this increases the tariff prices and provides a mechanism for increased revenue if the forecast is lower than the actual usage.

Each of the networks explains the reasons for its forecasts of gas usage in AA4 but as the forecasts of gas usage are critical to the setting of future gas tariffs on each network, there is a need for an independent assessment of the future consumption of gas in each.

In the current period (AA3) the amount of gas transported on the transmission system was greater than forecast for AA3 as the following chart shows



Source: Gasnet applies (2007, 2012), VENCORP APR 2007,

Whilst it is accepted that the amount of gas transported on the transmission system includes gas to power generation and for export to adjacent regions, it does imply that forecasts made for the four DBs for AA3 might be understated when compared to the actual. Over period AA4, AEMO has forecast a modest increase in gas usage as the following excerpt from the AEMO 2011 GSoO shows.

**Table A1-6 — Annual system demand forecast (excluding GPG), all scenarios (PJ/yr)**

	2011 <sup>a</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average Annual Growth (%/yr)
<b>This year's system demand forecast</b>												<b>2012–2021</b>
High	205	204	204	204	206	208	210	212	214	218	221	0.9
Medium	205	202	200	199	199	201	202	202	203	205	207	0.2
Low	205	200	196	193	192	192	191	190	189	188	188	-0.7
<b>This year's system demand forecast by market segment (medium growth scenario)</b>												<b>2012–2021</b>
Tariff D	82	79	77	76	76	76	76	75	75	75	76	-0.5
Tariff V	123	123	123	123	124	125	126	127	128	130	131	0.7
<b>Last year's system demand forecast by market segment (medium growth scenario)</b>												<b>2011–2020</b>
Tariff D	85	86	86	86	86	87	87	87	87	87	n/a	0.3
Tariff V	123	125	127	128	128	128	129	130	131	132	n/a	0.8
<b>Total</b>	<b>208</b>	<b>211</b>	<b>213</b>	<b>214</b>	<b>214</b>	<b>215</b>	<b>216</b>	<b>217</b>	<b>218</b>	<b>219</b>	<b>n/a</b>	<b>0.6</b>

a. The calculations for the year 2011 involve eight months of weather-normalised, actual metering data, to the end of August 2011, and then forecasts for the rest of 2011.

Source: AEMO 2011 GSoO page A1-15

This data is not segmented into each of distribution networks so it can only provide a global view of what is expected. The global view provided by AEMO is that there is likely to be an annual increase in gas, albeit small. This is in contrast to the view expressed by some of the DBs that gas usage will fall.

The EUCV does not have any more accurate data than the AEMO forecasts, but considers that the AER needs to obtain independent advice as to the forecasts for gas usage in each of the distribution networks in order to obtain an unbiased view as to the expected usage of gas. AEMO should have more segmentation of the gas usage in each DB area.

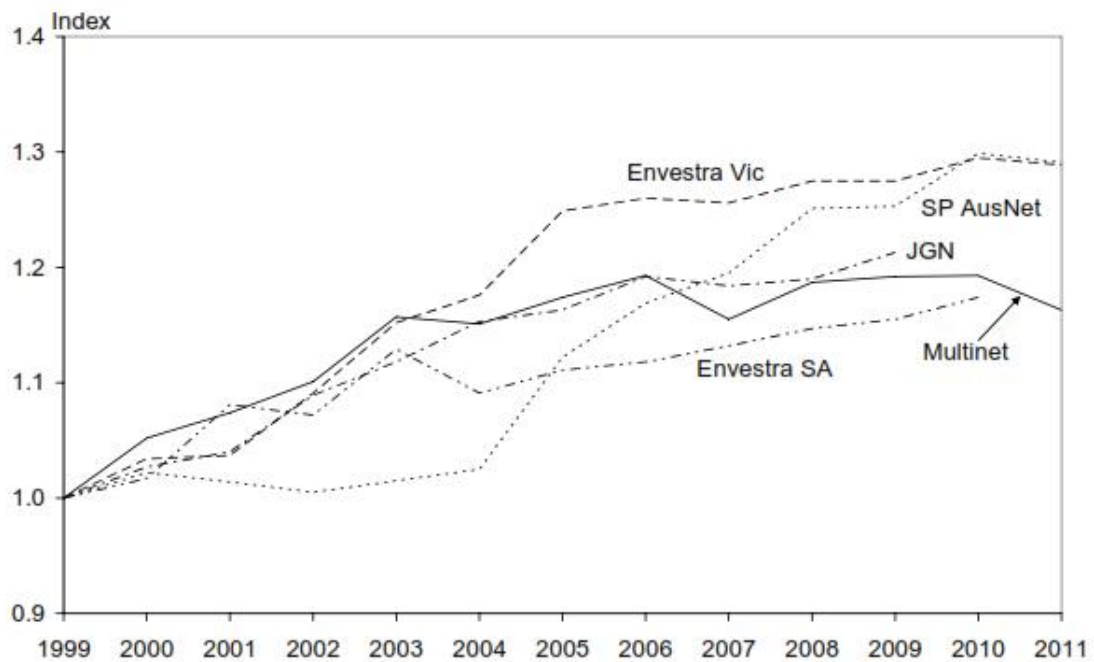
The gas DBs did commission Economic Insights to identify the total and partial factor productivities. EI in its report page (ii) comments:

“The TFP measure used includes three outputs (throughput, customer numbers and system capacity) and 8 inputs (opex, lengths of transmission pipelines, high pressure pipelines, medium pressure pipelines, low pressure pipelines and services, meters, and other capital). For productivity level comparisons transmission pipelines and associated opex are excluded.

The Victorian gas distribution industry as a whole has exhibited relatively steady TFP growth over the past 13 years. The average annual growth rate was 1.7 per cent for the last 10 years although this has slowed to 0.7 per cent for the last 5 years. This TFP growth has been driven largely by significant reductions in opex.”

EI then plots the change in TFP indexes against time.

Figure A: Victorian GDB, JGN, and Envestra SA TFP indexes, 1999–2011



Source: Economic Insights GDB database

This supports the view that the three Victorian DBs are mature businesses and that there was flat or declining growth supporting the AEMO global observations that growth in consumption of gas is modest at best.

It is also important to ensure that, as a considerable portion of the revenue is obtained from demand tariffs (ie based on maximum hourly usage and maximum daily usage) rather than consumption (ie based on volume alone) that great care needs to be taken to ensure that the tariffs are not biased towards one or the other measure.

Overall there is considerable doubt as to whether the forecasts by each of the DBs for gas usage are too conservative and as a result liable to lead to an overstatement of gas tariffs for AA4.

## 4.2 Escalation forecasts

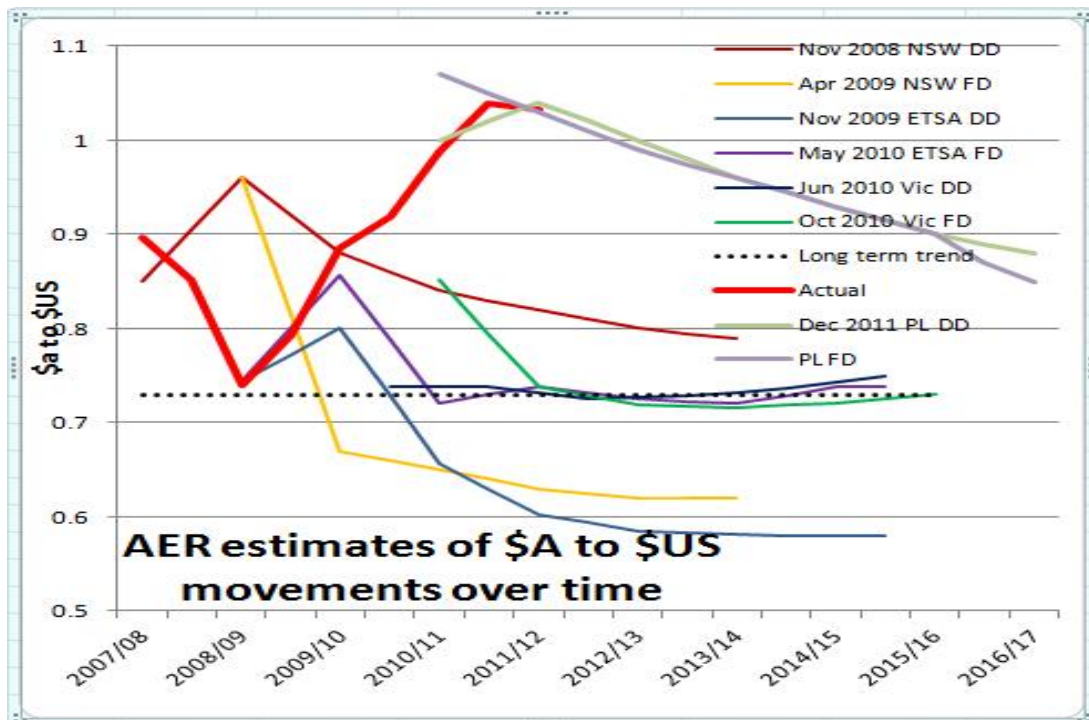
The DBs (other than Multinet which forecasts its needs from a bottom up approach) have provided a view that its forecasts for capex and opex are based on costs applying at 2012. As such, they aver that there is a need to assess the likely increases in the cost of labour and materials above the nation’s rate of inflation. Multinet, on the other hand, would have appeared to escalate its materials costs but used actual forecast labour costs, although this is not clear from the proposal

As usual, the DBs have all forecast that there will be real increases in labour and materials.

### 4.2.1 Movement in the price of materials

Historically, changes in the cost of materials used by gas firms have been accommodated within changes made through the CPI adjustment, although in recent times, the AER has permitted electricity networks to have their capex costs adjusted for future movements in materials.

There is little doubt that the AER has provided an over-compensation to the electricity networks through this mechanism as these forecasts have tended to consistently overstate the future movements. The EUCV affiliate Major Energy Users has tracked the movements in the \$US to the \$A over time compared to AER decisions which have used experts to forecast \$A movements. The following chart highlights this.



Source: RBA data, AER draft and final decisions

The forecasting of movements in real costs of materials (and labour) relies on many factors which change frequently.

In its report to the gas DBs, SKM provided the following table to indicate its best estimate as to the future real prices for a range of material used by electricity and gas networks.

■ **Table 1 Average annual real change in underlying network materials cost drivers**

Cost Driver Name	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17
<b>Without emissions trading</b>							
Manufacturing costs (CPI)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aluminium	-4.80%	-7.96%	6.30%	8.45%	4.65%	2.03%	12.28%
Copper	1.30%	-8.30%	1.08%	-0.39%	-2.79%	-3.22%	7.72%
Steel	3.40%	-6.24%	2.21%	3.67%	-1.11%	-0.54%	12.98%
Oil	3.03%	5.91%	1.85%	9.15%	6.89%	5.19%	13.51%
HDPE	1.82%	3.54%	1.11%	5.49%	4.14%	3.11%	8.11%
General Labour	0.65%	1.10%	1.15%	1.65%	1.60%	1.85%	2.50%
Site Labour	0.80%	0.90%	1.30%	1.80%	2.05%	2.05%	2.20%
Construction Costs	-0.24%	-1.30%	-1.24%	-1.08%	-0.40%	0.08%	0.56%
<b>With emissions trading</b>							
Manufacturing costs (CPI)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aluminium	-4.80%	-7.96%	7.26%	8.59%	4.81%	2.33%	12.37%
Copper	1.30%	-8.30%	1.11%	-0.39%	-2.78%	-3.21%	7.73%
Steel	3.40%	-6.24%	2.60%	3.75%	-1.01%	-0.38%	13.02%
Oil	3.03%	5.91%	1.85%	9.15%	6.89%	5.19%	13.51%
HDPE	1.82%	3.54%	1.51%	5.49%	4.14%	3.15%	8.10%
General Labour	0.65%	1.10%	1.15%	1.65%	1.60%	1.85%	2.50%
Site Labour	0.80%	0.90%	1.30%	1.80%	2.05%	2.05%	2.20%
Construction Costs	-0.24%	-1.30%	-1.24%	-1.08%	-0.40%	0.08%	0.56%
<b>Underlying CPI</b>							
CPI	3.3%	3.3%	2.7%	2.5%	2.5%	2.5%	2.5%
<b>Marginal impact of emissions trading</b>							
Aluminium			0.95%	0.15%	0.17%	0.31%	0.08%
Copper			0.03%	0.01%	0.01%	0.01%	0.01%
Steel			0.39%	0.08%	0.10%	0.16%	0.03%
HDPE			0.40%	0.00%	0.00%	0.04%	0.00%

From this data SKM also prepared a forecast in the movement of various project types for the DBs to integrate into their capex forecasts. The EUCV does not have better credentials than SKM and affiliated members are likely to use consultants like SKM to forecast future movements in materials for their own use. However this does not mean that SKM will be accurate in its forecasts – only that it is a best estimate.

Neither the DBs nor SKM explain how these forecasts have been integrated into the DB forecasts for capex. The mix of projects and the relative weighting of each of the projects, as a part of the capex estimates, is not made clear and clarity is needed. Without definition of these aspects there is potential for the DBs to bias the outcome so that a higher forecast results.

#### **4.2.2 Movement in the cost of labour**

The DBs advise that their labour costs are related to movements in the EGW labour cost sector.

They advise that they consider the best indicator of labour cost movements is by using the Average Weekly Ordinary Time Earnings (AWOTE). The AER has consistently used productivity adjusted Labour Price Indices (LPI) and has provided extended dialogue as to why it considers this the better way to provide for regulatory adjustment of future labour price movements.

The AER and other gas and electricity businesses have had a long running debate as to whether AWOTE or LPI provides a better forecast of future labour costs, and this issue has been raised at almost every reset. The AER has consistently provided a strong case as to why the LPI adjustment is a better indicator for future labour cost movements and the EUCV cannot add to these. The EUCV does support the AER in its continued use of productivity adjusted LPI.

What the DBs and others have all failed to recognize is that consistently the outcome of using LPI has not disadvantaged the regulated firm because consistently, actual opex costs have, over time, been less than the regulated allowance. On this basis alone, there is no sound reason for the AER to vary from its present practice of using productivity adjusted LPI to forecast future labour cost changes.

The reason that regulated firms seek to use AWOTE is that this appears to give a higher cost forecast than LPI and would therefore provide the regulated firm with a larger profit.

There is a continuing debate as to whether forecasts of labour cost movements should be productivity adjusted because this is not consistent with the principle of incentive regulation (which allows the regulated firm to hold productivity improvements until the next reset). The EUCV is of the view that, as the AER has consistently done in recent years, labour cost movements should be adjusted for productivity, as this reflects what occurs in the wider market.

#### **4.2.3 A better way of managing materials and labour price movements**

Over the long term, the nationally produced range of escalation factors (of which CPI is one) provides accurate costs in the movements in the cost of labour and materials. EUCV affiliate Major Energy Users (MEU) has suggested that in order to adjust for the disparity between forecast movements in labour and materials and the actual movements, the AER could develop a "Utilities cost index" which would provide an escalation

factor which utilities could use rather than attempting to second guess what might happen in the future.

The AER has commented that as consumers are used to seeing adjustments in terms of CPI then a Utilities Index would create confusion. The EUCV has come to the conclusion that this is a fallacious argument. Already consumers see massive annual movements in their network charges (MEU members have reported increases of 20-50% year on year) and the introduction and use of a Utilities index would, at most, only create a small difference in charges compared to a CPI adjustment.

However, what the use of a Utilities Index would achieve is the elimination of all risks in assessing future materials and labour movements where currently the conservative approaches taken provide a bias in favour of the regulated firms and impose unnecessary costs on consumers.



## **5. Cost of capital and allowed revenue**

### **5.1 Weighted average cost of capital (WACC)**

In the recent reviews of network resets, there has been advice from the applicants that there is a need to set the WACC parameters to values that provide an increase in the WACC or a reduction of the amount of tax that is subject to imputation. Considerable effort by applicants has been devoted to “drilling down” into available data to “prove” that changes are required to provide a WACC that reflects “reality”. What no one, including the AER, has done is to assess whether the outcome of the various levels of WACC calculated are efficient and reflect an outcome that provides an efficient WACC – one that provides an adequate return to the network provider but neither over provides nor under provides when compared to what occurs in the competitive market.

This view is supported by the Chair of the AEMC, Mr John Pierce, who is reported as stating<sup>9</sup>:

“You've got to have the right rate of return. The first question is, what's the minimum rate of return necessary to attract funding so people will invest in the sector. Secondly, we want people to operate efficiently so what we need is an efficient benchmark rate of return... we want them to try and beat it so the shareholders get the benefit of it, so that next time around it can be shared with customers.

“But if they don't ... then you also want the shareholders to suffer ... if I'm inefficient, I want the shareholders to carry that risk, not customers.”

Some of the claims made by applicants have ultimately been referred to the Australian Competition Tribunal (ACT) for a ruling. In the case of imputation the ACT has determined the proportion of dividend subject to imputation. The ACT has also been heavily involved in the way the AER has to use scarce publicly available data on the values of Australian corporate bonds in order to manipulate minimal data into a form which might be used to infer a debt risk premium for the benchmark BBB+ rated entity.

The AER in its WACC decision in 2009 for electricity transmission networks provided values for the market parameters, viz, a risk free rate based on 10 year CGS, a market risk premium of 650 bp, an equity beta of 0.8, a gamma of 0.65, gearing of 60% and a credit rating of BBB+. Since then there have been AER decisions which reduce the market risk premium to 600 bp and the ACT has reduced gamma to 0.25.

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<sup>9</sup> “High power rates: it’s a poles and wires story”, SMH June 12, 2012

In the applications from the DBs, they have accepted some of the parameters, and sought an increase in the market risk premium to 850 bp. In addition, they have commented that reviewing the averaging period for calculating the risk free rate is needed, and they provide considerable argument to set a debt risk premium of 392 bp.

It is obvious that the recent low yields for 10 year CGS has raised concerns with all the Victorian gas networks, including Gasnet, and that higher levels of market risk premium should be used to accommodate what they consider to be a disparity in the calculation for the equity and debt components of the WACC that arises from a low risk free rate.

What concerns consumers is that such an approach is “all one way” as when the approach used by the AER has resulted in levels of debt risk premiums well in excess of actual costs, the regulated businesses have not sought lower levels – in fact they have actively sought, through the ACT, for even higher levels to be used. After enjoying the benefits of a financial market that has resulted in higher levels of WACC than was incurred, it is therefore somewhat perverse to seek a significant change in the approach to setting the WACC parameters because the outcome of the previous approach is not as attractive.

In its responses to the WA Economic Regulatory Authority (ERA) in response to its Draft Decision on Western Power, the WA Department of Finance made the following observations<sup>10</sup>:

“The Authority's attention is also drawn to the risk of using a 20 day average to calculate the risk free rate given the significant degree of uncertainty and volatility in international financial markets at present.

Given the turmoil in the financial markets emanating from Europe at the moment and the cascading effect that has on international financial markets, it would seem risky to base a five year WACC determination on a 20 day average in this environment.

The Authority is therefore requested to consider this matter further in its deliberations and determine what would be a more appropriate averaging period that ensures Western Power is not 'locked in' to an artificially low return on its assets for the entire five year regulatory period, as a result of this current market volatility.”

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<sup>10</sup> Page 2 Dept of Finance submission to ERA dated 29 May 2012 available at [http://www.erawa.com.au/3/1181/48/western\\_powers\\_proposed\\_revised\\_access\\_arrangemen.pm?utm\\_source=ERAwebsite&utm\\_medium=HTML&utm\\_content=TextLink&utm\\_campaign=MostViewed](http://www.erawa.com.au/3/1181/48/western_powers_proposed_revised_access_arrangemen.pm?utm_source=ERAwebsite&utm_medium=HTML&utm_content=TextLink&utm_campaign=MostViewed)

However this view to change the approach used for over 15 years to setting regulated WACCs is then undone when the Department then seeks for the ERA to

“...to consider the importance of regulatory certainty and how it impacts Western Power and indirectly, its end consumers.”

Regulatory certainty is at the very basis of the AER Statement of Regulatory Intent (SORI). To vary from the longer term practices introduces uncertainty, so the AER has to be cognizant of the risks inherent in changing regulatory practices because the wider financial environment has changed. The AER maintained its flawed practices for setting the debt risk premium (which benefited the regulated firms) despite clear evidence that the financial environment had changed. The AER decision to continue the use of the flawed process (coupled with successful appeals from regulated firms) delivered considerable harm to consumers and increased profits to the regulated firms.

In its recent draft decision on Western Power the WA Economic Regulation Authority (ERA) decided to use the 5 year CGS rate, an MRP related to the 5 year CGS of 600 bp, an equity beta of 0.65, a credit rating of A-, a shorter borrowing term than 10 years to reflect actuality of the debt portfolios seen in the market<sup>11</sup> and less reliance on the Bloomberg data.

This revised approach has tended to reset the calculated WACC to a level which more reflects what actually is occurring in the wider market and results in WACCs which are more reflective of what is seen in the wider market.

Whilst the ERA decision is, at the time of preparing this submission, still at draft stage, the arguments included in it are very detailed and provide totally different conclusions to those of the DBs and their consultants provide.

It is important to note that the Gas Rules are not as prescriptive as the Electricity Rules in regard to the development of the WACC to be used by regulators. Intriguingly, the ACT has also made observations that the approach used by the AER in developing the debt risk premium can be contentious and that other approaches to its development could be used.

The Gas Rules state:

Rule 87 (Rate of Return) of the NGR:

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<sup>11</sup> This approach has the added benefit of increasing the population of corporate bonds to provide greater reflection of the actual costs.

- (1) The rate of return on capital is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services.
- (2) In determining a rate of return on capital:
  - (a) it will be assumed that the service provider:
    - (i) meets **benchmark levels of efficiency**; and
    - (ii) uses a financing structure that meets **benchmark standards as to gearing** and other financial parameters for a going concern and reflects in other respects **best practice**; and
  - (b) 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. (emphasis added)

This wording provides the AER with significant flexibility to develop a WACC which delivers a sensible outcome that is more reflective of the wider market than the mechanistic approach currently used by the AER, although the EUCV acknowledges that the AER approach does provide regulatory certainty which is also a feature of the Australian regulatory environment. In particular, the EUCV draws attention to the requirement that the outcome is to meet benchmark levels of efficiency, benchmark standards as to gearing ... for a going concern”, and reflects “best practice”.

It is also important to define what is “efficient”. The second reading speech for the introduction of the National Electricity Law defines efficiency as being when

“...services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.”<sup>12</sup>

The regulatory approach used in Australia is based on incentives, so that the providers will actively seek to make its operations more efficient and for these savings to be passed onto consumers in the long term. This means that the first assessment of the regulator is to identify how the regulated firm has improved its efficiency and for these efficiencies to be built into the future allowances. The second stage of ensuring efficient outcomes, is for the performance of the regulated firm to be benchmarked against “best practice” seen in the provision of the services.

This means that, particularly under the Gas Rules, the AER is required not just to use approaches that it has used in the past, but to actively recognize

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<sup>12</sup> Hansard, SA HOUSE OF ASSEMBLY, Wednesday 9 February 2005, page 1452

what is “efficient” and “best practice” so that the long term interests of consumers are integrated into each regulatory decision.

It is clear that the DBs have decided to only query WACC parameter inputs where they consider there might be an argument to justify higher values, and to not query any inputs where there might be an argument to reduce the values set in the AER WACC review or by other regulators. In its submissions to the AER on the WACC review, the MEU (on behalf of its affiliates and the Consumer Roundtable) pointed out that there is a high degree of interdependence between the various inputs, and therefore an holistic approach is necessary to setting the WACC inputs. By and large the AER concurred with this view and its workings show this feature in many instances. The approach by the DBs effectively negates the concept of a holistic overview, and therefore if the AER decided to open up this debate, it should also decide that other input elements should be investigated and perhaps changed.

As the Gas Rules require the outcome to be efficient and reflect best practice, the AER must assess all aspects of the WACC development so that the outcome complies with the Rules.

#### **5.1.1 Term of the outlook and risk free rate**

The decision to use a 10 year outlook for setting parameters and inputs to the WACC was a result of the ACT determining that if the market risk premium was calculated from the difference between the ASX accumulation index and the 10 year CGS, then the 10 year CGS should be used as the risk free rate. This decision came because the ACCC had previously used the 5 year CGS as the basis for the risk free rate and the MRP developed from the 10 year CGS.

The draft decision by the WA ERA makes a sound case for the 5 year CGS to be used as the risk free rate and this would be combined with an MRP calculated over time from the ASX accumulation index and the 5 year CGS. The ERA then was able to have a much larger population for setting the debt risk premium as the DRP would reflect a five year outlook.

As well as having a number of implicit benefits from using data from a 5 year outlook, the ERA highlights that the regulatory period being examined is for 5 years, and therefore the best outlook for setting the WACC for the regulatory period is to use data that coincides with the regulatory period. It is essentially inconsistent to set a WACC based on data for the next ten years but which will only apply for the next five years. It is logical that the WACC for the next five years be based on input reflecting that period. It was this same argument that led the ACCC to use the 5 year CGS in its earlier decisions.

The ERA approach reflects considerable consistency and common sense. The EUCV considers the AER should implement such an approach, accepting that the Gas Rules not only allow for the WACC development to follow such an approach if it is considered to be efficient and reflect best practice. The ERA approach reflects efficiency because it ties the WACC to the duration of the regulatory period and is thus internally consistent.

It would be more efficient to use data applying to the next five years to set a WACC for the 5 year regulatory period, as this is more reflective of the costs that are likely to be incurred over the duration of the reset period. Such an approach also reduces risks for the regulated entity, knowing that the data used is consistent with the period for which it is to apply.

### 5.1.2 Gearing

The Gas Rules require the WACC to be efficient and reflect best practice. The AER has determined that the model energy transport firm would be geared to 60% debt and 40% equity, and that this would provide a credit rating of BBB+ against which the firm would secure its debt funding.

Analysis of the gearing of the four gas transport businesses in Victoria indicates that best practice for gearing lies between 65%-80% debt<sup>13</sup> with a weighted average of between 70-75%. Incentive regulation is intended to provide firms with the opportunity to develop the most efficient outcome based on best practice. This means that the firms themselves have identified that a better (more efficient) outcome is with a higher debt than the 60% used by AER. This implies that best practice is a higher debt level than 60%.

It is interesting to note that even with this higher gearing, all of the four gas transport firms in Victoria are able to secure their debt at costs considerably below that allowed by the AER in its most recent gas transport decisions (NT Gas which is also owned by APA Group and Envestra SA and Qld), implying that 60% gearing is not associated with BBB+ credit rating but probably a higher rating, a conclusion reached by ERA.

A review of the latest annual reports of the four gas businesses in Victoria shows the following gearing levels. Also included in the table is the current credit rating of each.

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<sup>13</sup> SP Ausnet (owner of Victorias western gas distribution assets) is geared to 66% debt, APA (owner of Gasnet) to 69%, DUET (owner of Multinet) to 80% and Envestra to 81%

Actual gearing	Credit rating <sup>14</sup>	Debt/ Assets
APA (Gasnet)	BBB	69%
DUET (Multinet)	BBB-	80%
SP Ausnet	A-	66%
Envestra	BBB-	81%
Arithmetic Average	BBB	74%

The EUCV considers that the gearing of an efficient gas transport business operating at best practice is probably 70% or higher, and the AER should be using this gearing for the DB's WACC calculation

The Rules are clear that in:

“... determining a rate of return on capital ... it will be assumed that the service provider ...uses a financing structure that meets benchmark standards as to gearing ... for a **going concern** and reflects in other respects **best practice**” (emphasis added)

The AER has previously decided that the benchmark standard for gearing is 60% and that this reflects best practice. That none of the Victorian gas businesses (all “going concerns”) has gearing at 60% (and most other regulated energy networks in the country exhibit gearing at a higher level than 60%) indicates that best practice has gearing at a considerably higher level than the 60% used. A value of 60% is demonstrably not efficient as the businesses all have a higher level of gearing yet do not appear suffer considerable credit rating downgrades.

What is also obvious from the data is that a gearing level of 60% does not match a credit rating of BBB+. SP Ausnet has a gearing of 66% and a credit rating of A-. Averaging the four businesses indicates that a credit rating of BBB (one level below BBB+) would appear to be related to a gearing of 74%.

The AER has the responsibility under the Rules to set the gearing which is best practice and which is efficient. If all four businesses demonstrate a higher gearing than the 60% used previously by the AER and all are “going concerns”, then this indicates that higher gearing is “best practice”. The fact that at this higher gearing the benchmark credit rating of BBB+ is exceeded, indicates that a higher gearing is more efficient.

The Rules do not expect that the AER will use gearing which does not reflect best practice or is not efficient. The EUCV considers that gearing at 70% reflects best practice and is more efficient than gearing at 60%.

<sup>14</sup> Sourced from ERA draft decision on Western Power Table 71, page 174

### 5.1.3 Market risk premium

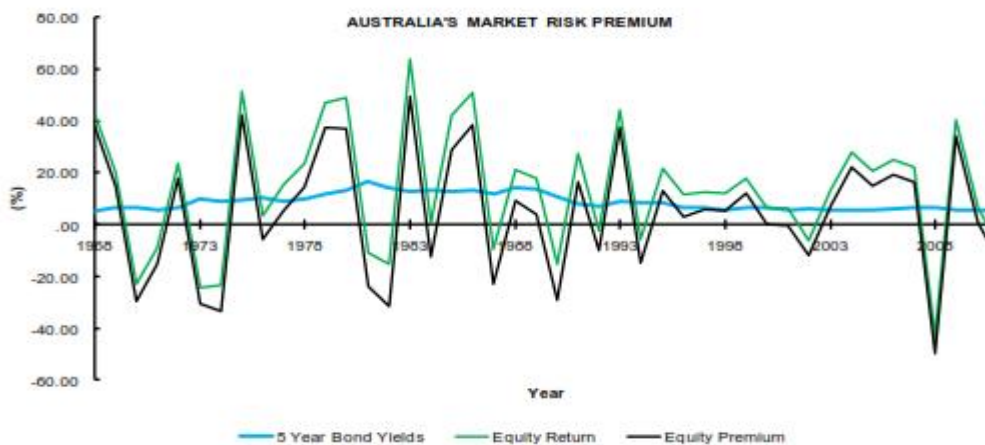
In its draft decision ERA recalculated the market risk premium over considerable periods of time against the 5 year CGS and calculated that the MRP on this basis is 600 bp. Over the past 20 years, the 5 year CGS has been consistently lower than the 10 year CGS by at least 25 bp. That ERA identified that the MRP when measured against 5 year CGS is 600 bp, then against the 10 year CGS the MRP must be at most 575 bp.

This conclusion is at odds with the claims by the DBs and their consultants that the MRP should be set at 830-844 bp against the 10 year CGS. There is a clear inconsistency between the views of the DBs and ERA.

It is pertinent to note that Envestra appears to support an MRP of 600 bp when used in conjunction with a long term average 10 year CGS. What Envestra fails to note is that the long term average MRP of 600 bp is the difference between the daily variables of the risk free rate and the ASX accumulation index ie that the long term average MRP already accommodates the daily changes in the risk free rate.

The EUCV has long been of the view that the MRP varies on a yearly basis (and even on a shorter time basis). During the later stages of the global financial crisis (GFC) for example, the ASX accumulation index was negative for a considerable period whilst the 10 year CGS was quite positive implying a considerably negative MRP. Before the GFC, the accumulation index was markedly higher than the 10 year CGS implying a larger MRP than the average. This variability is demonstrated by the following chart (figure 9) extracted from the ERA draft decision for Western Power (page 163)

**Figure 9 Australia's Market Risk Premium, 1968 – 2011, Per cent**



Source: RBA, Bloomberg, and Economic Regulation Authority's analysis



A regulator needs to ensure that the WACC it determines reflects the longer term and avoids the quite large swings in MRP estimates that result from quite massive swings on the share market. It is therefore possible at any point in time to select a period of calculation of MRP that will return a higher MRP than the long term average but, equally, selecting another period might result in a negative MRP. Thus, it is essential that for the sake of consistency, MRP must be calculated over a period long enough that significant swings are eliminated. This is what the ERA did.

Regulated firms were supportive of the AER increasing the MRP in the depths of the GFC because the outcome increased their WACCs at a time when there was great uncertainty. The result of this move was to over-provide a rate of return for a considerable period and provide an unearned and unnecessary benefit to regulated firms. Quite sensibly the AER reduced the MRP when stability returned to the market as a whole and it was seen that the WACC based on an MRP of 650 bp was then providing a WACC that was excessive. Such an approach reflected the requirement for setting an efficient WACC based on best practice – both aspects that are explicitly required by the Gas Rules.

Prima facie, there does not appear to be sufficient new evidence to support the DB contention that MRP should be raised at all, let alone to 850 bp. The ERA analysis implies that in fact the MRP (compared to 10 year CGS) should be lower than 600 bp.

#### 5.1.4 Equity beta

The DBs have not requested an increase in equity beta, considering that the recent AER decision on NT Gas on equity beta of 0.8 had rejected a strongly presented argument for increasing this parameter to be 1.0. In fact the AER WACC review (page 343) had identified that equity beta, based on:

“The empirical evidence considered by the AER suggests that the equity beta of a benchmark efficient NSP is in the range of 0.41 (average portfolio estimated by the AER for Australian businesses post ‘technology bubble’) to 0.68 (average portfolio estimated by the ACG for the JIA using a five-year estimation period).”

This empirical evidence carried out for the WACC review implies an equity beta of 0.55. Interestingly the ERA draft decision for Western Power suggests that the equity beta should be 0.65.

The ERA used the same processes as were used for the AER WACC review to estimate the equity beta but used an extra three years of data.

In the final decision in regard to the gas DB's application released in March 2008 by ESCV, the ESCV commented (after considerable investigation) that:

“The Commission has therefore considered that in the application of the preferred methodology the evidence concludes that:

- the beta estimates obtained using the longest period of data range between 0.5 and 0.7 depending on the method (outlier adjustment) applied
- the beta estimates obtained using the most recent five-year period would indicate that the range may extend below 0.5 however
- the US evidence suggests that the beta is between 0.6 and 0.8.”

After considering each of these points, the ESCV set equity beta for the gas distribution networks at 0.7<sup>15</sup>

The EUCV considers that the work carried out by ESCV (and applied to the gas distribution networks at the last review) clearly indicates that an equity beta of 0.8 is too high. The more recent work by ERA using three years of additional data led them to the conclusion that the equity beta should be 0.65

The EUCV considers that at most the AER should be consistent with the ESCV decision and retain an equity beta of 0.7 rather than increase it to 0.8 which it has applied in other recent decisions.

But the EUCV considers that the more recent work by ERA using additional data than that used by the AER at the WACC review provides persuasive evidence that the lower equity beta value of 0.65 should be used as this results from the most recent assessment of this parameter and uses more data than that used previously by the AER.

The AER is required to ensure that the WACC it develops is efficient. It is not efficient to use a value for equity beta which is patently much higher than it need be.

### **5.1.5 Debt risk premium**

Of all the parameters in the WACC development, the issue of debt risk premium (DRP) is the aspect that consumers have found to be most contentious and least understandable from a regulatory point of view.

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<sup>15</sup> The ESCoV also set the equity beta for the water businesses in 2009 at 0.65, based on the work it carried out for the 2008 gas distribution review. The final decision noted that there was little data available for water businesses and the gas businesses provided a reasonable surrogate

There is no doubt that regulatory decisions made since the onset of the GFC in 2007 have provided a DRP at a level greatly in excess of the actual cost of debt acquired by regulated firms. Government owned networks have been granted allowances for the cost of debt at 200-300 bp above the cost they actually incurred, and privately owned firms have been granted debt costs some 100-200 bp above their actual costs.

The Gas Rules require the rate of return to be efficient and to reflect best practice. There can be no doubt that that recent regulatory decisions by the AER have not provided efficient levels for the cost of debt. The AER itself has noted that the cost of debt incurred by energy networks have been significantly below the benchmarks they have used and as a result have attempted to introduce new data into the approach they have conventionally used. Appeals to the ACT have resulted in these attempts being found to be inconsistent and the ACT has even suggested that the basic approach used by the AER for assessing the debt risk premium might be flawed.

Despite the fact that the outcomes of their approach delivers patently incorrect and excessively high DRP values, the AER has continued to use a methodology which requires interpolation and extrapolation of a non-transparent data set which itself is based on a very few data inputs. Such an approach cannot be demonstrated to produce an efficient outcome.

The Gas Rules are considerably less prescriptive than the Electricity Rules and do permit the AER to use other approaches to developing a debt risk premium. The EUCV considers that the AER has a responsibility to consumers not to continue the use of a flawed process that delivers a DRP well above the efficient level.

The EUCV has reviewed the annual reports of the four privately owned gas network firms operating in Victoria. The outcome of this review is tabulated below<sup>16</sup> providing the actual DRPs (compared to the 10 year CGS) for the parents of the Victorian gas transport businesses.

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<sup>16</sup> Whilst it is recognized that each of the separate networks are part of a larger group, the information does not differentiate the different types of infrastructure (eg DUET has a much wider asset type base than the others) and APA Group has mainly gas assets, many of these are unregulated. With this in mind, a regulated energy network monopoly would be expected to have a lower risk profile than other assets in the parent businesses and therefore the debt risk premium for the regulated entities will be lower

<b>Actual DRP (bp)</b>	Credit rating <sup>17</sup>	Debt/assets	2008	2009	2010	2011	Av'ge
ACCC allowed			299	299	299	299	299
ESCV allowed			215	215	215	215	215
APA (Gasnet)	BBB	69%	100	310	240	300	235
DUET (Multinet)	BBB-	80%	80	160	190	200	160
SP Ausnet	A-	66%	-50	80	60	50	35
Envestra	BBB-	81%	150	330	220	290	250
Arithmetic Average	BBB	74%	70	220	180	210	170

This EUCV analysis provides some interesting observations:

- The allowance provided by the AER considerably exceeds the actual premium incurred by Gasnet and that provided by the ESCV exceeded the average cost incurred by the distribution businesses.
- That the credit ratings of all the businesses reflect higher gearings for the businesses but that the credit rating of BBB+ is more reflective of a higher gearing than 60% debt/assets
- The calculated DRP varies year on year but that the main cause of this is not so much a variation in the cost of the debt but more that the movement of the DRP reflects the year on year movement of the risk free rate
- None of the actual debt risk premiums reached the levels of 392 claimed by the DBs in their applications or even the 380 bp the AER allowed for NT Gas
- Efficiently acquired debt is well below the benchmark sought by the DBs and well below the benchmark DRP allowed in recent revenue rests

The Rules are clear that in determining:

“... a rate of return on capital ... it will be assumed that the service provider meets benchmark levels of efficiency; and uses a financing structure that meets benchmark standards as to gearing and other financial parameters for a going concern and reflects in other respects best practice”

An efficient debt risk premium does not provide an outcome which is demonstrably higher than the costs actually incurred by a “going concern”. The AER approach uses just one form of assessing the debt risk premium and as most businesses use a portfolio approach to the provision of debt (in terms of tenor, source and expiry date), so an efficient financing structure is not based on one source of debt with a

<sup>17</sup> Sourced from ERA draft decision on Western Power Table 71, page 174

fixed tenor and start date used by the AER. The fact that all businesses use a portfolio approach to the provision of their debt (other than government owned networks which get their debt from the government treasury corporations) demonstrates that this is a more efficient practice.

There is no doubt that the approach used by the AER to establish a debt risk premium (and used by the DBs in their applications) is flawed and delivers a DRP well in excess of the actual costs incurred by an efficient service provider. Further the fact that gas firms have consistently been able to acquire debt at a cost well below the allowances provided by the AER shows that there are more efficient methods of debt acquisition than the approach used by the AER.

The Gas Law and the Gas Rules are specific that the costs allowed a service provider are to be efficient. To award a debt risk premium that is demonstrably not efficient is not in accordance with the Law or Rules and the AER must deny the approach proposed by the DBs and implement an approach that does deliver an efficient outcome.

The EUCV considers that the market evidence indicates that the debt risk premium should be no more than 170 bp above the 10 year CGS or 195 bp above the 5 year CGS. This value of DRP compares favorably with the value of 203 bp (vs the 5 year CGS) calculated in the ERA draft decision for Western Power.

#### 5.1.6 Gamma

The DBs have used the same value for gamma that was set by the ACT after an appeal.

The EUCV does not have available data which would provide persuasive evidence that the ACT decision is incorrect, but does make the point that the value of 0.25 set by the ACT implies that imputation at this level probably would make the decision by Government to show a marginal benefit at most when considering the costs involved in managing imputation. That Government has not repealed the Laws imputation implies that it considers that the benefit of imputation is considerably greater than that implied by the ACT decision.

#### 5.1.6 Summary of parameter values

The EUCV considers that the parameters that should be used for the WACC should be:

Parameter	DBs	EUCV
Risk free rate	10 year CGS	5 year CGS
Gearing	60% debt	70% debt

MRP	850 bp above 10 year CGS	600 bp above 5 year CGS
Equity beta	0.8	0.65
DRP	392 bp above 10 year CGS	195 bp above 5 year CGS
Gamma	0.25	0.25

## 5.2 WACC for speculative investment

The DBs do not appear to seek the use of the speculative investment process and therefore this element of the Rules is not used.

However, the EUCV does consider that if speculative investment is made, it should attract a higher WACC. On balance the EUCV considers that the equity beta for the speculative investment should lie in the range of 0.8 to 1.0.

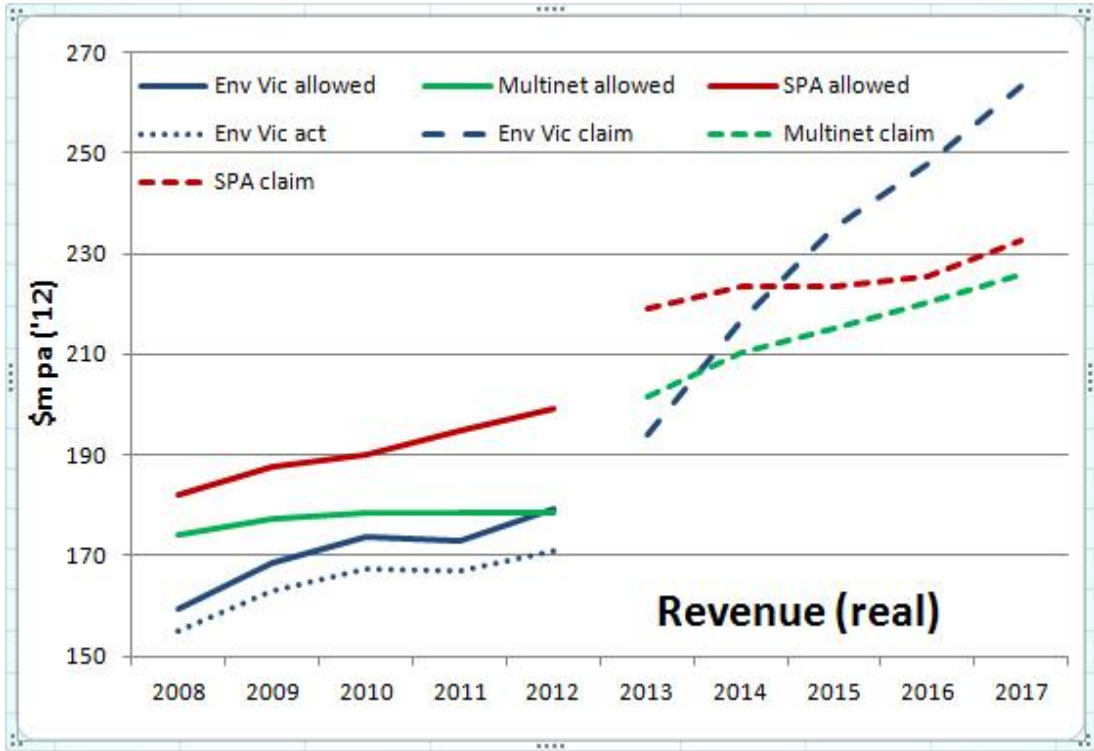
## 5.3 Revenue allowed and the impact on consumers

The presentation of historical and forecast data by the DBs makes it extremely difficult to demonstrate the trends of capex over time. The EUCV considers that the AER needs to require the DBs to provide historical and forecast data in tabular form when presenting access arrangement information. Whilst the graphical presentation does provide a pictorial view of change, data in tabular form allows stakeholders to develop detailed trends. In the absence of these trends, the EUCV is of the view that stakeholder input in to the review process is severely limited.

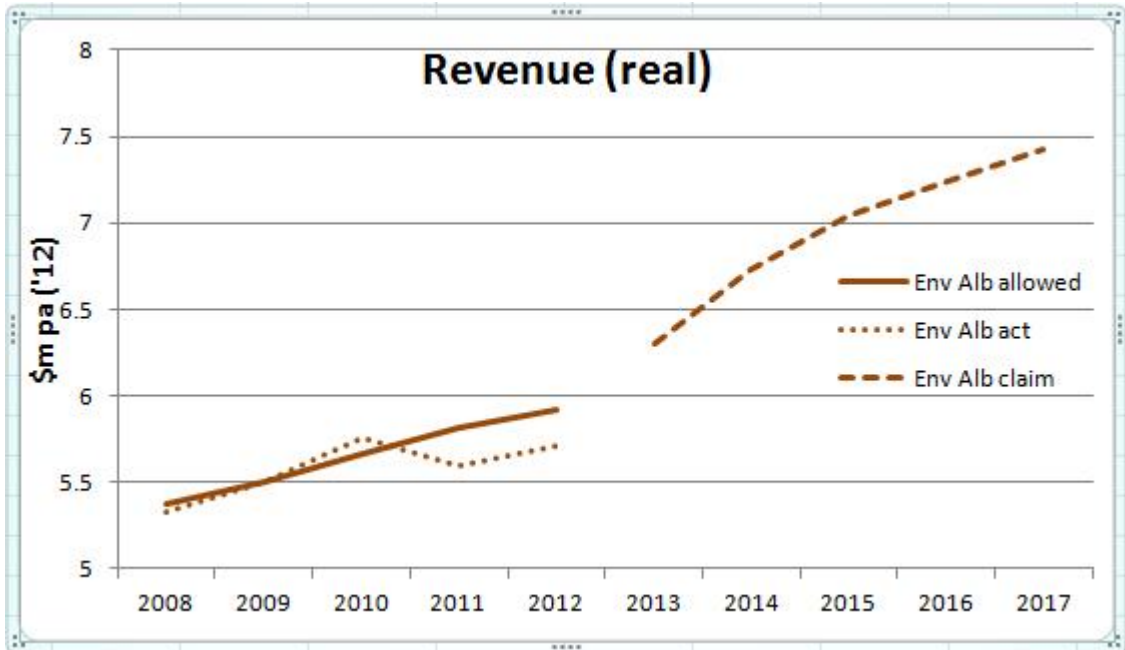
Whilst some of the DBs have provided forecast and historical data in a form that can be used (eg Envestra) others have not. The way the data has been provided by Envestra should be set as a standard for all future applications.

The absence of historical allowances from SP Ausnet and Multinet applications (both in terms of allowances and actual) makes assessment of their historical performance quite difficult. That Envestra did provide this data, and that it showed Envestra did under recover efficient revenue (as set by the ESCV) provides stakeholders with a better understanding of the challenges faced by Envestra in AA3 and to a degree supports their claim for a lower estimate of gas consumption.

The DBs have sought revenue that shows a marked increase from the revenue currently assessed in the current AA3 period, yet the absence of historical revenue data (other than that which the EUCV was able to glean from annual reports) makes assessment of the claims for increases (except for Envestra) effectively unsubstantiated.



Source: ESCV FD 2008, DB applications



Source: ESCV FD 2008, DB application

In the ESCV final decision in 2008 on the gas DBs, the rate of return (WACC) allowed for AA3 is similar to that sought by the DBs for AA4. Thus, as the RAB is relatively stable for all DBs and the rate of return is much the same, the cause of the increased revenue must be almost entirely related to the increases claimed for opex and capex.

Overall, the step increase in the amount of revenue sought for AA4 compared to the allowed revenue for AA3 exceeds 10%. Thereafter, the rate of revenue increase diverges markedly with SP Ausnet at one end of the range seeking a relatively small increase over time, to Envestra seeking to increase revenue by some 10% pa. This increase has to be seen against a modest increase in gas consumption (according to AEMO) or a fall in gas consumption (according to the DBs).

There is significant concern about the DB claims for increased revenue when compared to the modest increase in gas transportation forecast. The AER must analyse the actual revenues against the allowances and relate this to the actual changes in gas consumption. This will provide the AER with a sound understanding of the drivers of why the actual revenues differed from that allowed and whether the tariffs used were biased away from cost reflectivity.

#### **5.4 Pass through events**

Each DB has sought an increase in scope of the causes leading to the AER permitting costs to be “passed through” to consumers. The use of “pass throughs” is a mechanism for the regulated entity to reduce its risk by passing these onto consumers. Regulators have been inclined to accept this approach as they (rightly) fear that an allowance in the costs to accommodate this risk might be too high. However, there is a need to ensure that this transfer of risk is minimized and that the equity beta adjusted to reflect the reduced risk.

Despite the DBs seeking an increase in those events that might trigger a pass through of costs, none have suggested that the equity beta should be reduced to reflect the lower risk they face from the increased allowance for pass throughs included in their proposals.

Although there is some difference in the pass through events claimed by each DB, the EUCV considers that the increases in scope need to be examined very closely by the AER.

All DBs claim that the imposition of the price on carbon emissions must be treated as a pass through, yet this is a result of a change in the Law which is specifically identified as the basis for a pass through event. The EUCV is of the view that great care needs to be applied in the application of this pass through, especially in relation to the unaccounted for gas (UAFG).

If the AER continues with the approach established by the ESCV for AA3, where the cost of UAFG is carried by retailers and the DBs only exposed to the cost of UAFG where the DBs do not meet benchmark levels for leakage, then the DBs have little exposure to the procurement of gas. The cost of carbon (under the Clean Energy Act) is embedded as a cost to providers of



gas for combustion and is therefore required to be in the price the retailers pay for UAFG; therefore the gas DBs are not exposed to the cost of carbon in relation to UAFG unless they fail to meet benchmark leakage performance. Failure to meet leakage benchmark performance should not be allowed as a pass through cost.

Other cost impacts of the cost of carbon will be buried in the price of assets acquired, so the EUCV does not see where such a cost of carbon might impact directly on the DBs. Retention of this pass through will provide the DBs with an opportunity to seek recovery of costs that it recovers in other ways.

The EUCV notes that the pass throughs include for counterparty default events and insurer credit event as well. The EUCV does not consider that either of these should constitute a pass through as both of these defaults fall within the normal business risks. They are not risks unique to gas transportation and are therefore they are included in the market risk premium as risks of normal business operation.

The DBs claim a natural disaster event, but which they do not have insurance. Before such a pass through is allowed, the DBs should be required to provide as much insurance and to undertake as much protection of assets as is reasonable for the business before any such pass through should be permitted.

## **6. Pricing Methodology**

Under a price cap regulatory approach, the network takes the risk on the amount of energy that flows in the network. If the DBs are subject to price cap regulation, this incentivizes the DBs to maximise their allowed revenue and to understate their expected gas volumes. As has been seen in AA3, there was more gas transported than was assumed in the development of the Gasnet tariffs and by implication there would have been more gas transported by the DBs.

Great care is needed by the AER to ensure that the tariffs it agrees to are cost reflective. If this is not done, there is potential for the DBs to significantly over-recover on their allowed revenues.

The data provided by the DBs in their applications is insufficient for the EUCV to identify which tariffs are not cost reflective and permit any over recovery. The EUCV considers that the AER must devote resources to identify if there were over-recoveries and the mechanisms used to create them.

The EUCV is concerned that cost reflectivity has not been properly applied in the setting of the different tariffs and that this, along with errors in forecast consumption, is the main reason for variations in the recoveries of revenue away from the regulatory assessed revenue. The AER must ensure that this aspect is rectified for this review and for the next regulatory period AA4.