

Energy Users Association of Australia

and

Energy Action Group

VENCorp Gas Market Pricing and Balancing Review

Submission on ICF Report and Pipeline Investment Issues

March 2004

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EXECUTIVE SUMMARY

The Energy Users Association of Australia (EUAA) and Energy Action Group (EAG) are pleased to contribute to the review of future directions for the Victorian gas market. EUAA and EAG strongly support further market reforms that have the clear potential to benefit customers by way of lower prices, greater security of supply and/or improved customer service. We were therefore pleased that the ACCC requested that VENCorp undertake this review as part of its re-authorisation of the Market System and Operation Rules (MSOR) in 2002.

The Victorian Gas Market has now operated successfully for five years, with limited volatility and only one significantly disruptive event. Clearly this may change with the growth of gas use for power generation, Ministerial Council on Energy gas reforms, greater interconnection and increasing gas imports/exports, for which the existing market model may prove inadequate without some change.

The case for changing the market structure nevertheless has to be made, and it is critical that any change must provide benefits to consumers. While we recognise that the distribution of benefits to market participants has some value, improving this distribution at a potentially high cost to consumers cannot be justified. It is imperative that any reform based substantially on changing participants risk profiles should demonstrate flow-on benefits to users. End users would not support changes that result in higher risk premiums being paid by them without more than offsetting benefits.

The ICF study of the five alternative market structure packages does not provide EUAA and EAG with any comfort in this respect, for the following principal reasons:

1. The assessment of benefits is largely qualitative. We accept that many dimensions of the market cannot be quantified at present. However, a greater effort is required to clearly summarise the relative merits of each package, eg by ranking or rating them, and testing whether the value of the benefits could plausibly exceed the costs. Without this drawing together of results we find it impossible to relate the detailed package analyses to ICF's conclusions.
2. ICF acknowledges that benefits are highly dependent on contribution of non-firm gas but has conducted no sensitivity testing on the relevant assumptions, such as bidding profiles. This is clearly a critical factor in the study and further examination is essential.
3. The current market structure has not been assessed on a comparable basis for the five packages. It therefore appears that the “do nothing” option has been excluded from consideration even though the earlier Frontier Economics study concluded that no net benefits would accrue from major changes to the market structure.

The related Pipeline Investment issue is potentially of more immediate concern to users as it could create a shortage of capacity and lead to user curtailment and higher gas prices. Unfortunately, in this case too it is not clear exactly how real the issues are and why the existing regulatory process cannot resolve some of them.

These and other concerns are elaborated in the following sections of this submission. In view of our concerns about the assessment of the market packages, EUAA and EAG could not support a recommendation to the Victorian Government to mandate development of any of the packages, without a further opportunity to review the benefits (and costs) to energy users.

We do, however, support VENCORP's proposal to continue development of the pipeline investment options.

1 INTRODUCTION

EUAA/EAG has followed the market pricing-balancing review since its inception. As with other market and regulatory reviews our primary concern is to represent the interests of energy users, in this case primarily Victorian gas (and electricity) users, and to ensure that any proposed reforms have the clear potential to benefit customers by way of lower prices, greater security of supply and/or improved customer service.

The pricing-balancing review is closely linked to the unique nature of the Victorian gas market which uses price based balancing rather than physical balancing common to other gas transmission systems. Consequently, there are no precedents or examples from which experience can be drawn or from which users can gain comfort that recommended directions will benefit them. Moreover, for most users the complexity of the current and proposed market arrangements precludes effective participation in the review.

The initial stages of the review were conducted at a high level of abstraction but appeared to conclude that the benefits of significant changes, such as introduction of hourly/nodal pricing, would not outweigh the costs (Frontier Economics (FE), *Analysis of high-level design directions for the Victorian gas market*, Report for VENCorp, December 2003).

Market participants felt that this assessment did not take proper account of distributional benefits among participants and, notwithstanding the FE findings appearing to dismiss more radical options for change, the five market design packages developed for detailed assessment by ICF cover the full range from limited extension to the existing market design to an hourly/nodal pricing package. ICF's report (ICF Consulting, *Stage 2 – Evaluation of Market Design Packages*, Detailed Report (Draft) March 2004) concludes that Packages 2 (Ex-Ante Package) and 4 (Intra-day Hub Based Package) offer the best way forward.

EUAA/EAG could not support the development of a package based solely on distributional benefits to direct market participants and the ICF report in its current form does not provide compelling evidence of benefits to users.

We would welcome further discussion and assessment of the issues raised prior to finalisation of the report, particularly direct account of customer impacts. There is little point in introducing changes that do not benefit energy users.

It is also appropriate that we take this opportunity to express some frustration with the rather convoluted and frequently changing processes used for this review. This has made it difficult for us to follow the review, to assess its directions and to provide input. Energy users have very limited resources to contribute to reviews such as these and we rely on well thought out and predictable processes to make our task easier. Having said that, we certainly welcome the fact that senior VENCorp staff have made themselves regularly available to us during the review so far and wish to acknowledge their help.

2 EVALUATION OF MARKET DESIGN PACKAGES

2.1 DRAWING CONCLUSIONS

The ICF report presents a considerable amount of detailed analysis, critical elements of which lack adequate explanation (see below). In view of the potentially significant costs of the packages, a greater effort is required to clearly summarise the relative merits of each. For example, the summary results table in section 5 could include package rankings or ratings together with an estimated value (or simply a plausible value) of the benefits accruing to the highest rated package. Adding the benefits for each package and subtracting the costs would facilitate both comparison of the merits of the packages and the plausibility of ascribing net benefits to them compared to the base “do nothing” case. As mentioned earlier, this also needs to be pitched far more at energy user impacts.

2.2 SENSITIVITY TESTING

ICF state in a number of sections of the report that the results are “highly dependent upon assumptions for non-firm gas and supply costs in the market scenarios” (p 54, also, p 24, 29, and 30).

However, the key bidding assumptions used are crude relative to the sophistication of other aspects of their modelling and bear limited resemblance to current and likely future bidding by participants. The gas supply that will meet market requirements on the majority of days is assumed to be bid as follows (p 68):

- Non-firm gas - \$3.00/GJ
- Supply Step 1 (95% of forecast demand) - \$3.25/GJ
- Supply Step 2 (105% of forecast demand) - \$3.50/GJ

On the majority of days, where storage and LNG are not required, these assumptions would create the following prices:

1. Where non-firm gas is not available (current market) or priced on a “what-if” basis (Package 1), Step 2 would set the price at \$3.50/GJ (assuming actual demand is at 100% of forecast, hence Step 2 is required)
2. Where non-firm gas is available and is taken into account in pricing (Packages 2-5), Step 1 would set the price at \$3.25/GJ because the non-firm gas would displace Step 2 from the pricing schedule and Step 1 would set the price.

The non-firm gas price is not material as the quantity is too low to set the price. It appears that the \$0.25/GJ difference above is a significant contributor to the differences between

packages. For example, the average prices to consumers in Package 2 are reported as \$0.40 to \$0.50/GJ lower than in the current market and Package 1 (p 29).

The reality of the current market, however, is that the price variation over a wide range in the bid stack is considerably flatter, with bids typically varying by only a few cents. For example, in the March 7 2004 bid stack, prices ranged from \$2.90/GJ at 60% of demand to \$2.92/GJ at 90%, \$2.95/GJ at 114% and \$3.00/GJ at 199%.

The differences between Packages caused by the bidding assumptions are therefore unrealistic and it is essential that the sensitivity of outcomes to bidding assumptions be properly tested.

2.3 BASE CASE - CURRENT MARKET DESIGN

In cost-benefit studies of alternative projects such as market designs, costs and benefits are typically measured relative to a “do-nothing” base case. ICF’s brief did not include detailed consideration of the impact of continuing with the current market design, with the result that the costs and benefits of continuing with the current market have not been set down on a comparable basis.

For many of the criteria used to assess the Packages it is reasonably clear that Packages are being compared to the current market, eg the market prices on page 29 include values for the current package. However, this is not true for all criteria. For example, for the Dynamic Efficiency criterion the comparative benchmark is the hypothetically most efficient market design, Package 5.

It is difficult to avoid the conclusion that that the “do nothing” option has been excluded from consideration even though the earlier Frontier Economics study concluded that no net benefits would accrue from major changes to the market structure.

2.4 OTHER ISSUES

2.4.1 Design and Assessment of Package 1

ICF note that for Package 1 “prices are poor with ‘what if’ pricing for non-firm gas” (p 56). It is not clear why “what if” pricing is a necessary part of Package 1.

It is also noted that for Package 1 “uplift and imbalance risk (is) likely to discourage some participation” whereas for Package 2 “lower uplift risk ...” (p 57). However, on p 47 it is stated that that there would be “reductions in the market scenarios of ancillary payments averaging \$16million annually through 2018 in Package 1, \$10 million in Package 2,...” which would surely suggest a lower uplift risk in Package 1 compared to Package 2.

It is not clear from this that the best design for Package 1 has been used, nor that Package 1 has been fairly assessed relative to Package 2. This needs to be corrected so that a

comparable and economically efficient assessment of Package 1 can be incorporated in the analysis.

2.4.2 Front-End Costs, Rear-End Benefits

It is clear that while development and implementation costs will be incurred over the next 2-3 years, benefits are expected to start from a low base and only grow over time. Even if there is a net present value benefit to consumers up to 2018, there is not likely to be any benefit for several years. This is an important point for gas users who would be required to bear these costs in anticipation of higher future benefits as some later date.

Once a benefit is established it is therefore important to establish whether benefits could be enhanced by deferring implementation.

2.5 FURTHER EXPLANATION

The current market structure itself is complex and we do not expect assessment of the potential replacement packages to be straightforward. In some respects, however, the ICF report unfortunately creates more uncertainty than it resolves:

1. A “simple” model is used in the biddable capacity test reported on page 15. How and why the model produced its completely counter-intuitive results is not explained. The results imply a lack of market transparency to non-participants that could all too easily be exploited against the interests of consumers.
2. Why increases in system capacity do not yield an equivalent increase in peak linepack. (p 47). Given the critical role of linepack in balancing, this clearly has a significant impact and requires further explanation.
3. Whether in the packages with capacity rights there is some cost transfer between DUOS and market charges.

3 PIPELINE INVESTMENT

A failure by Gasnet (or other parties) to invest in pipeline capacity in Victoria has the potential to significantly impact Victorian gas users, as it could create a shortage of capacity and lead to user curtailment, restrictions on competition and higher gas prices. With increasing gas-fired generation, there would also be a flow-on impact on electricity prices.

It is our understanding that there are essentially two types of investment that might be contemplated:

1. To match growth in demand, while maintaining levels of service/security; and
2. To meet a specific supply requirement, such as shipping gas from Longford to Port Campbell or from Port Campbell to the Metropolitan area

In the former, the beneficiaries are the (local) “market” as a whole and we would expect Gasnet to include investment in such capacity in its access arrangements and for the ACCC to approve the investment, assuming it is merited. Gasnet would then obtain a secure revenue stream to support the investment by rolling it into its asset base. The specifics of the gas market design would not appear to influence this process, which is satisfactorily conducted in other access arrangement approval processes under the National Gas Code. There does not appear to be any need for an Independent Planner in this process, since the ACCC can take independent advice from any number of experts in gas technical and commercial matters, including VENCORP.

For the second investment, where the principal beneficiary is a single supplier, and where investment discussions may be confidential, it is clear that Gasnet could not rely upon ACCC approval. Instead, Gasnet would need financial support from the supplier, which would only be forthcoming in exchange for well-defined rights to the new capacity created. If the current AMDQ and AMDQ Credits are not sufficient¹, then new rights such as those outlined by VENCORP will need to be introduced to facilitate this type of investment. The capacity rights and protections afforded to gas consumers by the current AMDQ allocation must be preserved or improved in any new system.

¹ As noted by AGL in its 6th February submission to VENCORP, the need to replace the existing rights has yet to be conclusively demonstrated.