INDEPENDENT PRICING AND REGULATORY TRIBUNAL

PUBLIC HEARING
REVIEW OF ACCESS ARRANGEMENT
AGL GAS NETWORKS

Tribunal Members

Professor Parry - Chairman
Mr Jim Cox

Held at Meeting Room 1, Level 2
44 Market Street, Sydney, NSW, 2000

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THE CHAIRMAN: For the record, it is Wednesday 31 March, and the Tribunal commences two days of hearings into AGL Gas Networks revised access arrangements for access to the distribution networks of AGLGN.

Let me say a few things at the outset, because there are some issues that need to be understood by participants in this process. Firstly, as I'm sure many people are aware, there are processes under the gas code - perhaps slightly cumbersome processes - which the Tribunal is bound to follow with respect to a number of things. One of those is with respect to the information requirements of the access information arrangements, which in this case have been put forward by AGL Gas Networks.

The Tribunal has considered the information that has been provided to date. It has issued a section 2.9 notice for further disclosure to stakeholders under the provisions of the code. When that information is provided to the Tribunal, of course it will be made public as per the provisions of section 2.9.

The Tribunal is also able to obtain further information for its own purposes of investigation and analysis, which it does under section 41, and that process has in fact taken place.

Some people have been concerned that, because of their view that there is no information that meets the requirements of the code to enable them to undertake their analysis and derivation of prices as proposed by the applicant, that may disadvantage them in terms of their participation in the process. I believe that the secretariat has assured people, and let me assure you on behalf of the Tribunal, that the process does not conclude today in terms of public participation. Whether there is a need for further public hearings is something that the Tribunal will decide, but certainly there is ample scope for further submissions.

There will be opportunities for further public processes, whether they be by way of forums or workshops or public hearings. That was pursued in the case of Victorian gas arrangements and will be pursued in the case of these proceedings. So, as further information is made available publicly, pursuant to the section 2.9 notice procedures, there will be further opportunities for public participation through to the decision-making time frame of the Tribunal. So these two days of public hearings are the continuation of the start, not the end, of the

process.

The timetable, as I'm sure many people realise, is most unlikely to mean that there will be a new access arrangement in place from 1 July 1999. I think that is physically impossible. We are taking advice on options for what might happen at the expiry of the current undertaking. That clearly is an issue which does require interpretation of the code requirements, and indeed is a matter that AGL Gas Networks itself will have some views on.

Once we have some firm guidance and a view of that, we will be providing a public announcement about what might happen on expiry of the current determination which will take place before the commencement of the new undertaking given the processes that do need to be taken into account.

I should also add an apology from Christina Cifuentes, the third member of the Tribunal for the gas matter. Christina had a baby a few weeks ago and is not able yet to resume public duties.

We have before us the revised access arrangements proposed by AGL with information. Clearly the Tribunal, in issuing the 2.9 notice, has formed the view that there is a requirement for further information to be made available publicly to assist in this process. There are many complex issues involved in the Tribunal assessing the proposed access arrangement and forming a view as to whether to accept, to reject, or to seek amendments to the revised undertaking.

This is the first consideration of an access arrangement proposed by AGL Gas Networks fully under the national code and the national law and, as such, is a de novo process. We will open up all of the issues that have been at least touched upon in our prior consideration of what is now the existing access arrangements for AGL Gas Networks. That goes to asset valuation issues, capital contribution issues, questions of cross-subsidy, over-recovery, under-recovery, and cost allocations, pricing structures, terms and conditions. We welcome and thank the many participants who have already put in material to us, and I'm sure will continue to put in material to us to assist us in our task.

It probably does not need to be said, but I will say it anyway, that the Tribunal will consider AGL's revised access arrangement, taking full consideration of and meeting the requirements and obligations of the code and the legislation. That is a requirement on us, and that is, again, probably not needing to be stated but I will state it anyway, what we will endeavour to do.

As I think has been clear from the arrangements that have been reviewed both by this tribunal and other regulators there is a degree of judgment and discretion required under the code, and it is in the exercise of that judgment and discretion that the Tribunal looks to the involvement and assistance of various stakeholders.

With that preamble, we have with us starting off AGL Gas Networks, and then we will hear from various other parties through today and tomorrow. I will repeat that these two days do not conclude the public process, nor the opportunity for stakeholders, nor indeed the proponent, to provide further information, importantly including the proponent to provide further information, so that all of us can understand, and ultimately the Tribunal, can form a view about the proposed arrangements before us. I will ask the representatives of the AGL Gas Networks to identify themselves for the record, and then proceed with a presentation and some questions, but given the obviously enormous amount of material within their application, we can really only at this stage in the public process deal with some of the issues that at this point in time are addressing our minds.

AGL GAS NETWORKS

MR CHRIS HARVEY: My name is Chris Harvey. I am manager, regulatory affairs, Gas Networks, for AGL. Sitting beside me in Bruce Connery, manager, regulatory affairs. We will be addressing the proposal together. Members of the Tribunal, Dr Parry, Mr Cox, ladies and gentlemen, thank you for this opportunity to make this presentation.

It is our aim this morning to present the highlights of the AGL Gas Networks access arrangements and access arrangements information. In doing so, I will address the services offered in the access arrangement, the derivation of the reference tariffs for those services, and the key elements in deriving the level of the reference tariffs.

Firstly, it is important to consider the access arrangement in the context of the scheme of the code, and the reasons for the introduction for the third party access. The intent behind third party access to monopoly infrastructure is that open and transparent conditions of access will create a level playing field between users of the services. This, in turn, will provide the conditions for downstream competition to develop.

In the case of the gas market, access to the distribution network is only one of the components necessary for the development of competition. Other key components are upstream competition and access to transport from the producers to the city gate.

In this context, the purpose of an access arrangement under the code is to present a statement of the services offered to third parties - usually major consumers or suppliers - by the service provider to establish reasonable terms and conditions for access, and to establish prices for those services which are determined in accordance with the reference tariff principles described in the code.

A service provider has not failed to comply with his obligations if, notwithstanding the establishment of an access arrangement, competition does not develop and users' gas prices do not fall.

Under the code, the initiative in preparing an access arrangement and access arrangement information rests with the service provider.

There is no right or wrong way of writing an access arrangement, including determining services or tariffs. The code requires the service provider to include certain matters in the access arrangement, but the scheme of the code is that the service provider is entitled to decide the actual content of the policies, other than for the mandatory requirements of the trading policy. If the service provider includes the policies required by the code, it will have complied, even where there are other approaches which some users might prefer.

The code requires an access arrangement to include a policy describing the services offered to users; at least one service where a reference tariff applies (that is a reference service); and policies in relation to trading, queuing, and extensions and expansions. An access arrangement must also include the terms and conditions on which the reference services will be supplied, a capacity management policy and revisions submission and commencement dates.

The code sets out the objectives which the regulator must take into account in assessing a proposed access arrangement, and those which the reference tariffs and the reference tariff policies should be designed to achieve.

The overarching requirement of the reference tariff principles is that reference tariffs should be based on the efficient cost of providing the services. Subject to this, the national code states that the reference tariff principles are designed to provide a high degree of flexibility, so that the reference tariff policy can be designed to meet the specific needs of each pipeline system.

AGL Gas Networks - which for ease I will refer to as Gas Networks - believes that its access arrangement meets the requirement of the code. There are a number of services offered which are likely to be sought by a significant part of the market. The services are offered as reference services so that users know the tariff which will apply to the service. The other policies required by the code, including queuing, trading, and expansions and extensions, have been included.

Finally, the reference tariffs and policy have been determined in accordance with the reference tariff principles in the code. In particular:

. The proposed initial capital base is

between DORC and DAC, which the code recognises as the usual range for an initial capital base;

. The capital base is reduced to reflect assets which cease to contribute, or which make a reduced contribution, to the delivery of services;

. Only capital expenditure which satisfied the requirements of the code for new facilities investment has been included;

. The proposed rate of return of 8 per cent recognises recent regulatory decisions and is commensurate with the prevailing conditions in the market for funds and the risks faced by Gas Networks in delivering the reference services;

. The reference tariffs are designed to recover the efficient costs of providing the services.

. The reference tariffs are further designed so that, to the extent commercially and technically reasonable, users will pay charges reflecting the cost of Gas Networks of providing the service.

. Prudent discounts have been factored in where, as a result of providing the service at the discounted tariff, all users of the network benefit; and

. Gas Networks has adopted an incentive mechanism designed to encourage efficiency and growth in the market, by permitting Gas Networks to earn a greater or less profits than anticipated if it outperforms or underperforms the benchmarks adopted in setting the reference tariffs.

Turning now to the services offered in the access arrangement, Gas Networks received many informal comments and requests and formally sought public comment on the services offered in the 1997 undertaking.

The services in this access arrangement seek to meet customer needs while recognising interests of the customer base as a whole, and maintaining cost reflectivity.

Under the 1997 undertaking, Gas Networks offered two main reference tariff services - the transportation service and the tradable capacity service. The transportation service has been replaced by three reference tariff services in this access arrangement - the capacity reservation service, the managed capacity service, and the throughput service - and a tariff service is also offered. The multiple delivery point service remains.

Turning to the overhead, capacity reservation managed capacity and throughput services are available at delivery points taking greater than 10TJ per annum, and working across to the capacity reservation service. The capacity reservation service is predominantly the same as the transportation service in the 1997 undertaking with some modifications to address users' request for greater flexibility.

The user specifies an MDQ and MHQ which fairly reflects their requirements.

To assist customers with no daily metering history or installing new equipment, the capacity reservation service allows an increase in MDQ during the first three months of the term.

Additional capacity can be obtained either retrospectively to the beginning of the contract period or by extending the initial term to 12 months from the date the additional capacity is required. This provides flexible and reduces the risk of incurring overruns for all customers. Overrun charges are payable as an incentive to book an appropriate MDQ.

The term has been modified to be a minimum of 1 year and a maximum of two years with the actual term between these parameters decided by the user. The choice of term provides retailers and customers flexibility in aligning contract terms with other parties or to specific activities.

In regard to managed capacity service, this has been introduced to assist customers who are weather dependent or who have unpredictable production patterns or who are anticipating growth. Customers in this position found it difficult to manage natural gas usage under the original transportation service, but this managed capacity service provides flexible to change usage patterns without incurring additional costs.

The managed capacity service is available where the MDQ booking is equal to or greater than the maximum quantity used on any day in the previous year. The user must have 12 months history of daily metering to take this service.

There are no overrun charges. The term is one year.

The managed capacity service provides certainty for retailers with respect to distribution changes. Retailers may be able to use this service to offer flexible arrangements to customers, which may not be based on MDQ at all.

Looking at the throughput service, to assist customers whose gas consumption is declining, have an uncertain future, or are willing to pay a small premium for the flexibility of a tariff price, Gas Networks has introduced the throughput service.

This service has no overrun charges, and the price is fixed regardless of the load factor or actual MDQ and MHQ bookings.

There is a minimum bill based on the 10TJ consumption for the year.

The tariff service has been included in this access arrangement as customers in this market will be contestable during the access arrangement period. The MDQ nomination requirements are required for tariff customers using greater than 6 cubic metres per hour.

The multiple delivery point service which continues is available to users with more than one delivery point. This is a contractual tool to simplify the number of contracts required by a retailer.

The second service offered under the 1997 undertaking was the tradable capacity service. Gas Networks is not offering a service as a reference service under this access arrangement. Capacity in a diverse network is such that usage of one location in a network has no relationship with usage at another location. Unlike transmission pipelines, capacity trading is not generally sensible in a network.

However, capacity trading is available under this access arrangement as a negotiated service where it is technically and commercially feasible. For those users who saw the tradable capacity service as a means of reducing the risks of overruns, the managed capacity service is a more appropriate and cost reflective means of addressing this issue.

The next major issue to be addressed is the derivation of reference tariffs. Tariff structures in the access arrangement have been changed to reflect the introduction of postcode based pricing for contract customers in place of the previous "follow the molecules" approach, and also the introduction of the tariff service.

We looked first at post code pricing. The local network pricing for contract customers downstream of Wilton has been determined on the basis of postcodes. This provides greater price transparency and ease of administration while maintaining reasonable cost reflectivity and minimising bypass exposure.

In country areas, local network pricing for contract customers is determined by using a distance based formula, with an economy of scale adjustment based on MDQ. Due to the geography of these areas, the methodology is more cost reflective than post code pricing while achieving price transparency.

In relation to the pricing structure for tariff users, the proposed structure in the access arrangement documents has been designed to achieve the following:

. To replace the current multiple tariff structure with a single structure. This overcomes the risk that tariff customers may have been on an incorrect tariff;

. To minimise price movements to individual segments. This was achieved by following the path of existing tariff curves as far as possible;

. To maintain the competitive position of natural gas with alternative fuels; and

. To maintain appropriate relativities between the tariff and contract customers.

Having explained these changes in tariffs and the access arrangement, we need to then understand the derivation of the tariffs. The tariffs in the access arrangement were determined on the basis that tariffs paid by contract customers would fall to recover the stand-alone cost of serving them, equal to $70m. Of the $70m $43m relates to recovery of capital related expenses - depreciation and cost of capital - and $27m to the recovery of operating costs.

The revised access arrangement information describes conceptually how these costs are allocated to arrive at reference tariffs. The

conceptual model is depicted in the overhead on display.

Capital related expenses are allocated using stand-alone ORC. Firstly, to assets - three groups: Meters, trunk and local network - then, for the trunk and the local network, to regions. They are denoted as S for Sydney, N for Newcastle, W for Wollongong and C for country. And we have sought to describe the situation for Sydney to simplify it, so that is replicated for each of the other regions.

Meter reading operating expenses are added to the allocation of capital related expenses to meter reading, to arrive at the total revenue to be recovered from meter reading devices, and this charge is expressed as $ per meter reading device charge.

Moving on to the operating expenses, these are allocated to each region using the region's share of the total operating costs. It should be noted that these are the operating costs allocators relate to operating costs for the whole network business, not just the operating costs associated with serving contract customers. The region's share of operating costs is then allocated to asset groups on the basis of assignment when a direct relationship occurs, or on the basis of ORC where there is no direct relationship with the costs.

The amounts of capital related expenses and operating expenses allocated to each trunk region are then summed. So that is where we pick up the trunk for the capital related and trunk for the operating; they are combined together. They determine the total amounts to be recovered in regional trunk charges. These amounts are then divided by forecasts for MDQ for each trunk section to derive the trunk charge expressed in terms of $/GJ of MDQ.

Similarly, the amounts of capital and operating expenses allocated to each local network are summed to determine the total amounts to be recovered for each local network - denoted again by LN. So the capital related expenses are combined with the operating expenses and joined at that point. These amounts are allocated to post codes within the local networks on the basis of the share of assets utilised by the load delivered within the post code. These amounts are then divided by forecasts of MDQ within the post code to determine the local network charged for each post code. These charges are expressed again in terms of $/GJ of MDQ.

In relation to country tariffs, the recovery of costs allocated to the country region receiving trunk receiving stations, TRSs, and the country local networks is different for that described for the coastal regions - Sydney Wollongong and Newcastle.

A customer's share of TRS costs is designed to reflect economies of scale rather than a flat charge per GJ of MDQ. The charge for the TRS is based on a block structure - MDQ.

Country network charges are related not to post codes, but based on distance from the trunk receiving station. Economies of scale are recognised by the adoption of block charges per GJ of MDQ per kilometre.

Network tariffs for tariffs users are currently common across the state. The maintenance of a single state wide postage stamp is required. Currently there are a number of separate tariffs for household use and business tariff use. The proposal in the access arrangements is to combine these into a single block tariff. The resultant overhead average price for various levels of consumption is shown on these two slides. This picks up the whole range, and the next line shows the range for residential size customers.

The last matter to be addressed is key elements in deriving the level of reference tariffs - the initial capital base, rate of return and operating costs. The first key element in deriving the level of reference tariffs is the initial capital base. In its determination on the 1997 undertaking, the Tribunal did not materially modify the initial capital base it proposed in September 1996, but indicated that it intended to redetermine the figure at the next review.

The September 1996 amount of $1200m, expressed in terms of fund employed, was modified to $1.185m to reflect a small amount of asset stranding. Transitional provisions in the NSW code applicable to this review expressly provide for a redetermination of the initial capital base. In this line, Gas Networks has in the access arrangement proposed a value for the ICB as at 1 July 1996, and has deducted depreciation and added new facilities investment over the period from 1 July 1996 to 1 July 1999 to determine the capital base as at 1 July 1999.

The code states that ICB for a covered

pipeline that was in existence at the commencement of the code normally should not fall outside the range of the value that would result from taking the actual cost of the covered pipeline and subtracting the accumulated depreciation for assets charged to users (that is the DAC) and the value that would apply from applying the depreciated optimised replacement cost methodology in valuing the covered pipeline (that is the DORC).

The code also lists a number of non-exhaustive matters which must be considered in establishing the initial capital base. These factors are designed to assist in the determination of where the ICB should fall within the range of DAC and DORC.

In its final determination in July 1997, the Tribunal referred to a number of additional matters which it would take into account in this determination of ICB, including:

. The profitability of the tariff sector, tariff sector growth, competitive pressure on tariff prices;

. Market pressures on contract prices;

. Regulatory pressure on contract prices;

. Retail costs and margins in network costs;

. Revenues collected during the transitional period; and

. Costs savings identified by Greenwood Challoner.

This Tribunal is entitled to consider these additional matters under the code.

In its revised access arrangement information, Gas Networks pointed to an error in the cash flow that was relied upon to arrive at the ICB of $1185m in the Tribunal's final determination. The error had the effect of reducing the NPV of the sustainable revenue stream by $300m. When this error is corrected, the NPV, and thus the ICB, rises to $1485m. There is no reason for the Tribunal to give way to its earlier position on valuation. The valuation for this access arrangement is to be a redetermination, not an adjustment. Nevertheless, if the Tribunal's earlier position is taken, consciously or unconsciously, as some reference point, then that point should be read as $1500m not as $1200m.

Gas Networks has commenced on each of the factors that the Tribunal must consider under the code in establishing the initial capital base, and on each of the matters the Tribunal said it would take into account in its 1997 final determination, in addition Gas Networks has carried out the forms of analyses that regulators, especially the Tribunal, have employed to help quantify the effects of the factors considered in establishing the initial capital base.

The ORC was calculated using unit rates employed J P Kenny, the consultant commissioned by the Tribunal in the 1997 process. DORC was calculated from ORC by applying the percentage of remaining economic life to each class of asset. Economic lives were determined having regard for similar lives employed in the derivation of DORCs by the ACCC, the Office of the Regulator General, and the Tribunal under the code. The 1 July 1996 DORC for the NSW is calculated to be $1831m (expressed as funds employed).

DAC was taken to be from the statutory accounts (adjusted to bring Goldline on balance sheet). DAC as at 1 July 1996 was $789m (expressed again as funds employed).

Gas Networks has carried out analysis to assess the depreciation of the network, and the historical returns to the service provider. While the analysis is not conclusive, it does suggest that the regulatory constraints existing under prior regimes on depreciation, and on profit, have led to an under-recovery of both.

With respect to the code requirement that "other well recognised asset valuation methodologies" should be given consideration in determining the ICB, Gas Networks has carried out on ODV analysis.

ODV is a well recognised asset valuation methodology. As set out in the Tribunal's final decision on the access arrangement for Great Southern Networks, deprival value is adopted as the appropriate current value basis for asset valuation by the Steering Committee on National Performance Monitoring of Government Trading Enterprises. It was also adopted by the NSW electricity industry and the NSW treasury in 1996 as the asset valuation methodology for financial reporting. The New Zealand electricity has adopted the approach, and the National Electricity Code identifies the deprival value as

the preferred approach to valuing assets.

Gas Networks has modelled its approach to ODV analysis. The ODV resulting from consideration of this stream and DORC is $1831m, equal to the DORC.

Gas Networks has carried out a further refinement of the ODV analysis. In this analysis, the revenue stream reflects a gradual movement to subsidy-free prices, to minimise price shocks. The NPV of this revenue stream is $1733m, equal to 95 per cent of DORC.

Gas Networks has proposed that the ICB at 1 July 1996 be determined as $1733m (expressed in terms of funds employed).

In its 1997 final determination, the Tribunal indicated that it would crosscheck the asset valuation based on sustainable revenue stream against other benchmarks of asset values. The overhead shows the ICB proposed by Gas Networks based on the sustainable revenue stream against such benchmarks.

The second key element in deriving the level of the reference tariffs is the rate of return. In October 1977 the Office of the Regulator General and the ACCC determined that 7.75 per cent was a reasonable real pre-tax WACC for gas industry infrastructure in Wagga Wagga.

Those decisions were reached following significant public debate on the approach and variables to be used. Gas Networks believes that in the near future any regulatory application of the WACC approach to calculating a rate of return for utility infrastructure is unlikely to substantially deviate from the application used in these decision processes. These outcomes are a starting point from which a rate of return for Gas Networks' infrastructure can be reasonably determined.

In using these outcomes as a starting point, it should be noted that a risks in Gas Networks' market are greater, due to a lower level of maturity in the NSW market, and the greater concentration of usage in the larger end of the market, with several of the largest users accounting for a substantial proportion of total usage.

Gas Networks believes that when setting a reasonable rate of return, regulators should use WACC calculations as a guide to identify a range in which a reasonable rate of return is expected to lie. The selection of a final rate of return then relies on consideration of other relevant factors and the exercise of regulatory judgment.

Gas Networks has based its WACC calculations on parameters which provide a nominal cost of debt in a range of 6 per cent to 7.25 per cent, and a nominal cost of equity in the range of 12 per cent to 16 per cent.

Gas Networks believes that any rate of return consideration should take asymmetric and self-insured risks into account. These risks are not readily accounted for in the WACC approach. Nevertheless, these risks are real and have been incorporated into the upper end of the nominal cost of equity range.

Using WACC calculations as a guide, combined with commercial judgment and relevant benchmark rates of return, Gas Networks has adopted a cost of capital of 8 per cent pre-tax real as being consistent with the provisions of the code.

The third key element in deriving the level of reference tariffs is operating costs. The Gas Networks has compared the level of its operating costs with a group of Australian organisations for which recent information has been made available, mainly to access arrangement information.

There are two problems identified in making these comparisons, one being the difficulty of comparing like data, and the other being the effect of the operating environment. The difficulties in making comparisons of data, the issue of comparing apples and oranges is highlighted in two examples which significantly affect the perception of Gas Networks' relative efficiency.

Firstly, it has only just come to our attention that certain categories of cost borne by Gas Networks are not included in the Victorian costs, including government levies, meter reading and call-centre related costs. Clearly, the operating cost comparisons between Gas Networks and the Victorian gas distributors are not on an apples for apples basis.

Secondly, in the Tribunal's draft decision on GSN, it noted that the only costs that are incremental to the basic electricity business are allocated to the gas network business. Here again we are comparing apples and oranges. Both examples leave the matter of relative efficiency uncertain.

The difficulties of comparing organisations facing differences in the operating environment which impact upon the level of costs a network can reasonably be expected to experience also need to be recognised. Typical operating environment factors include:

. Climate
. Price competitiveness with substitute fuels
. Degree of urbanisation and industrialisation
. General geographic conditions such as to topography and soil conditions
. Pressure levels and pipe material used
. System age.

When these factors are considered and understood, comparisons with only be used to indicate the ballpark in which operating costs performance indicators can be expected to fall for an efficient operator.

Comparisons of movements in operating costs indicators over time do not suffer from the same problems as comparisons in absolutes. Comparisons can be against yourself with time, or against the rate of improvement of other organisations.

There have been significant improvements in Gas Networks' operating costs since the time of the 1997 undertaking. This is shown in the reduction in real operating cost per kilometre from $7,200 per kilometre in 1996 to a forecast of $4,900 per kilometre in 1999. The revised access arrangement information provides a detailed transcription of the program undertaken to re-engineer Gas Networks' processes and the sizable reduction in operating costs this achieved.

A trend comparison of reductions in operating cost performance indicators against US gas utilities shows that Gas Networks has reduced costs at a similar, if not greater, rate than counterparts in the US. However, again it must be recognised that even this type of comparison, the timing and the nature of cost improvements will vary for each utility. It is likely that some will have undergone process re-engineering programs similar to that undertaken by Gas Networks before Gas Networks did, and others have yet to do so. The consequence is that this type of comparison, like the one discussed earlier, acts only as a broad guide as to what levels of the cost reduction could be expected to have occurred during the period considered.

The significant improvement in efficiency of operation and continued high growth in the tariff connections have combined to improve profitability in that segment. Such profitability was foreshadowed by the Tribunal in its final determination on the 1997 undertaking as a significant factor to be considered in redetermine the ICB.

In the financial years 1995-96 to 1997-98 customer numbers grew on average by more than 26,000 customer per annum. The overall result of this growth of tariff customer numbers and reduction in operating costs has been a significant fall in operating cost per customer, and a significant increase in operating margin forecustomer per household customer.

Gas Networks would like to thank the Tribunal for the opportunity to present the significant points in the access arrangement and the access arrangement information.

THE CHAIRMAN: Thank you. There are a lot of issues and, as we indicated, we can only start to scratch the surface of the ones uppermost in our minds at the moment. Firstly, could I ask that we get a copy of the overheads? That will help us.

MR HARVEY: Yes, they are here.

THE CHAIRMAN: By way of clarification really, in the first instance, you have gone through how you have determined total revenues in terms of this building block approach. You have also taken us through, with your pointer, the allocations. One thing I think we understand, but I really want to be quite clear, is with respect to the determination of contract revenues. Our understanding is that your proposal has a return on capital which is based on ORC, optimise replacement cost, not depreciate optimise replacement cost. Is that the case and, if so, why?

MR CONNERY: It is actually one question we had prepared for. The answer is yes, we have proposed a return on the ORC rather than the DORC. Perhaps if we can explain the rationale behind that. Firstly, our economics suggests that recovery of costs should not be less than incremental costs nor the stand-alone cost. Like with many issues, and I can say this because I'm not an economist, economics can put it in the right ballpark, but it cannot tell us that there

is a preferred spot on the park. Anywhere between incremental cost and stand-alone costs is okay in economic terms, as we understand it.

The gas code does allow prices to be set within this range, that is on the ballpark or within the ballpark that we have described. Stand-alone cost is sometimes measured by reference to a depreciated cost or DORC, and sometimes by reference to replacement cost or ORC.

In the 1997 review process, there were number of submissions - in fact I think it was BHP, but I may be wrong so don't hold me to my answer - that stated that stand-alone costs should be measured against the cost of an efficient new entrant, that is against DORC. The Tribunal in its submission also supported this as an appropriate measure of a stand-alone cost, as I recall it.

Forcenergy, in its submission to this process, has said that economic principles imply in general terms tariffs for a distribution network should deliver revenue on a per customer basis, which lies between incremental cost of continuing to serve that customer and the stand-alone cost of replacing the service being offered. This supports the new entrant or ORC approach. It also suggests that ORC for the contract market might be the sum of individual ORCs for each of the 500 contract customers. Such an ORC would be considerably larger than the shared ORC, and would give rise to a stand-alone price much greater than $70m. This is another plausible view of economic principle.

THE CHAIRMAN: I think I will give away my degree.

MR CONNERY: Gas Networks has assumed that the contract market should enjoy the benefits of the economies that it as a total group brings. We think this is a more reasonable approach than one which would rely on the sum of individual customer ORCs.

In coming to a landing on a shared ORC as the foundation for contract prices Gas Networks has also considered a number of other matters including the rationale for the development of the high pressure system - and we did make reference to this in the access arrangement information - and the impact of alternate landings on contract and tariff prices. So there is a big ballpark out there and there are a lot of considerations no doubt that the Tribunal will take on board.

THE CHAIRMAN: Clearly they are issues that will be explored. In terms of the process of determining an appropriate pot of dollars or revenue requirement, and then allocating that amongst the major clients and networking that through the prices - which in terms and conditions sounds easy, but, as we all know, it is extraordinarily complex - a part of it relates to, in the building blocks, the operating costs, and I note that you have recognised the requirements of the code when the code talks about efficient costs.

I want to talk about the Capex forecasts and the Opex forecasts in the context of efficient costs. I note that overall there don't appear to be any real cost reductions over the period of the proposed undertaking. Capex is about $80m per annum average over five years. On the Capex side first, what is happening? What is the Capex for? It looks like quite high levels for a mature network.

MR CONNERY: The Capex itself has been derived from a bottom-up approach, so we do in our models have quite significant detail, and we can take the Tribunal through that. Essentially, it looks at a number of elements. It looks at the age of the existing assets and when those assets will need to be replaced, and what that requires by way of additional capital. It looks at the projections of growth and connections, particularly in the tariff market. In fact, that's where the growth is, of some 25,000 connections per annum, and builds up from that average cost per connection to arrive at an amount of capital that is required for growth. Then finally it looks at any additional capital required of an imbedded nature to reinforce the system to meet that additional growth. So the legs, the steps, the foundations are there, and we need to take you through that in detail. That is the way it has been built up. It has been built up; it is not just a number.

THE CHAIRMAN: It is an area we will explore. Some consultancy work is about to start. Possibly more worrying, it is certainly intriguing to me, is that component of Opex, being marketing plus overheads or admin in general. I am surprised when I see that about 60 per cent of your total operating costs are accounted for by marketing plus overheads. That strikes me as large. When I look at some comparators, which we have with the Victorian companies through the recent processes, perhaps you can help me understand why it is high in terms of dollars and, apparently, a very high proportion of your total costs.

MR CONNERY: I have been well briefed, and not from the Tribunal. In terms of marketing costs - and, clearly, marketing costs is one we recognise as one that attracted a lot of interest in the market, so we did prepare to answer any questions on marketing - I would like to give a rather full answer on marketing, because it is an important area --

THE CHAIRMAN: Please.

MR CONNERY: -- and look at it both in terms of the relativities with other players as well as an absolute sense of why marketing is required in the NSW network.

In the colder climates of North America and north Europe, natural gas has a strong market position. Because it has advantages as a heating fuel, 90 per cent, or more, of homes in cold climates use natural gas. In some circumstances, it is a matter of life and death, and people have been known to die if there has been an interruption for any significant period of time.

Again, because the cold average household consumption is typically around 90GJ per annum, or higher - in parts of North America you are in the 150GJ per annum compared with our 24GJ in NSW.

Because a gas supplier has a significant amount of fixed costs, and because of the economies of scale available in delivery systems, high household penetration and high household consumption lead to below average prices, the fixed costs of being able to amortise a large volume of gas, and low prices then add to the attractiveness of natural gas.

In these cold climates it is not necessary to promote natural gas; it sells itself. We call these markets "natural gas markets". Victoria, one of our comparitors, has many of the attributes of a natural gas market. It is cold. It has a high penetration, above 90 per cent, of households that are connected to gas. It has high average household consumption, around about the high 50s, almost 60GJ per annum. This market does not require significant marketing to hold its customer base and to grow. It has the natural attributes that attract customers.

The picture in the milder climates, such as Sydney, is quite different. Firstly, in Sydney it is not cold. We have the occasional snap, but it is not cold. Average penetration is about

35 per cent. We have about 50 per cent of customers on line of main, but we only have mains past something like 60 per cent or so of houses. So we have a penetration of about 35 per cent rather than the 90 per cent that you would find in cold climates, and the average household consumption is 24GJ rather than the 60GJ to 90GJ. As a consequence, the average cost to supply is higher than in the colder climates.

The combination of these matters show that natural gas does not have a natural market in the Sydney area, and it is necessary to promote that natural gas in order to maintain customers and to grow.

By way of the record, when I first joined the company in around 1978 the average household consumption in NSW was 13.5GJ, so 24GJ is not a bad number by way of comparison.

I think there are other questions that may spill beyond that. I don't know whether you want me to canvass those, but those are how much expenditure should there be in marketing, and should that expenditure be incurred by the network operator or by retailers.

THE CHAIRMAN: I suppose a cynical response might be, it is potentially spending a lot of money in a market that is not a natural gas market and may not actually generate the sorts of revenues that would justify that expenditure. We will not pursue it in detail.

MR CONNERY: I could answer that, as we have covered that matter.

THE CHAIRMAN: It is an issue that, obviously, we will explore. The corporate overheads are also about 30 per cent of total Opex. It is a very high figure.

MR CONNERY: I'm not sure how to address that because I'm not sure of the detail that we are comparing it with, but overheads in most of those businesses are not significant.

THE CHAIRMAN: We will explore that. I am highlighting things that are clearly of great interest to the Tribunal.

MR CONNERY: We appreciate that.

THE CHAIRMAN: I guess it goes both to this very interesting and important debate about cost allocation methodologies, the ballpark. I think sometimes economics takes us to the wrong planet let alone than the right ballpark. It goes to

cost allocation issues as well as the broad issue of capital contributions.

Let me quote, because it is on the public record, from the submission from Gas Advice. They use the example of Capral. They talk about the particular methodology that is proposed by AGL, which is the stand-alone methodology. It also goes to capital contributions. It is something we need to explore in terms of confirming it is correct. It states:

> Capral should be paying approximately $1m per year in local network charges for a pipeline which costs only $3.6m to build and apparently add a capital contribution of $2.19m to that. The pipeline has been operating for 15 years.

It brings into question the whole basis of the stand-alone costings currently being adopted. I don't want to go into the details necessarily, but assuming the details are broadly correct, it goes to two very critical issues, that is of capital contributions and how we deal with those, and the application of stand-alone charges with what, on the face of it, appears an outcome may be very difficult to justify. Can you help us understand that?

MR CONNERY: I don't know the details that have been put. As you know, some of the submissions we have had only for a short time and there has not been a lot of time to prepare. But certainly, in terms of capital contributions in general - I'm not talking about this one in particular - we can make the point, as we have made the point on previous occasions, that the company was required to treat those contributions as profit and, since our profits were limited, if there was any beneficiary of those profits, it certainly wasn't the company. It wasn't on top of the regulated returns that we were allowed to incur. That is just one perspective. I recognise there are other views that will be taken into account, but that is a reality. It is a fact.

THE CHAIRMAN: Again, it is an issue that clearly is on the table, both in terms of capital contributions and the allocation methodologies which quite critical.

Again a point of clarification from our analysis, whilst you are proposing contract market revenues after a transition period - I will ask you about a transition period - of $70m, there is a reduction in revenues in your proposal. From our examination of section 3, prices actually appear to be going up. We can't quite reconcile what is happening. That may be something that you can explain here, or it might be something that you can take on notice, but we just can't quite reconcile why falling revenues are associated with rising prices. It is section 3.

MR CONNERY: We would have to take that on notice. The intent was that it would reflect a reduction.

THE CHAIRMAN: Why still a transition period? Why hasn't the last four years, or whatever it has been, been sufficient to deal with transitional issues?

MR CONNERY: Our view would be that, wherever possible, there should be attempts to avoid sharp movements. A transition period - transition from where to where? There can be transitions forever, because there will always be movements over time, changes in perspectives of views about how prices should change over time. I suppose "transition" maybe is not the best word to use, but it is just how you move from one position to another. Do you fall over the cliff, or do you jump up the hill, or do you move there over time? Our position is that it is better to move there over time rather than go quickly.

THE CHAIRMAN: Again very much reflecting the allocations, as well as obviously the total pot of dollars that you are seeking to recover, both from the tariff part of the market and the contract part of the market, is what appears to be a nearly 40 per cent real increase in total charges to the tariff market over five years. Is that right? It does raise the question of whether indeed that can be obtained from an activity that, as we have understood, is fairly competitive in terms of its relationship with electricity. The corollary to that is, if indeed you can extract those sorts of price increases, and you had a look at the potential impact on market customers --

MR CONNERY: My recollection is that the proposal we put forward is that the prices to the tariff market will rise by 8 per cent real over the period of four or five years. I'm not sure where price movements of 40 per cent might come from.

THE CHAIRMAN: It is the revenues.

MR CONNERY: Revenues. Well, we generally would look at price. We have looked at price because, clearly, there is growth, and it is growth assumptions there. So in terms of price over the period I think of four years, we have proposed

that the price would rise by 8 per cent real over that period of time, and our view is that the market has been growing fairly strongly over a period of time.

THE CHAIRMAN: Again, what may be seen by some as a quite optimistic growth forecast, we will look at it, and also we will get some work done on what the growth might be like. There is a whole range of other issues in the non-price side. We will see what it looks like, but I know Jim is keen pursue that.

MR COX: Thank you very much for your submission and for your presentation this morning. I think, like Tom, there are many issues I would like to ask and we could be here until next week, but I don't think we will do that. What I thought I might do is try to raise a few issues that are troubling me, and I suspect my colleagues as well, and perhaps you can deal with them this morning or perhaps you will wish to enter into the discussions and present some material on them.

I think the starting point is, as you started off by presenting the services that you are going to offer, and I think it is appropriate - and you did make the point that the services you are proposing to offer are less restrictive and more varied than was the case in the previous, still current, access undertaking - a number of people have suggested to us in submissions that still further services will be required were a competitive market to eventuate. As you are aware, there is a possibility of interconnection with your system in the next year or so, and it does raise a number of issues. I'm not sure in my own mind what services would be required by a competitive market. I wonder whether you feel additional services would be required. I wonder what provision there could be in the access arrangement to reveal the services that are offered if further services were required were a competitive market to eventuate.

MR CONNERY: I think the quick answer is that we have provided for negotiated services, and anything is negotiable. But beyond that I don't think we can make comment at this time.

MR COX: I guess there is a question for us as to what should be in the reference service category and what should be in the negotiating category. I guess we are going to have to come to grips with it.

Another issue which has been presented in submissions is the forecast of volumes. I think I am correct in saying that the forecasts you have for the volume sold in the contract market is for no change and for growth in the tariff market.

MR CONNERY: Yes.

MR COX: We have a number of submissions suggesting, depending on your point of view, that this forecast is either cautious or ambitious for the contract market. We also have a submission on behalf of BHP Petroleum which purports to find anomalies in the forecasts for the tariff market. I wonder if you care to respond to those points either now or later?

MR CONNERY: I can certainly respond to the first, about the optimism in forecasts. We did read that there is one vision of doubling of contract load over five years. First, we have to look at the history. There has been almost no growth in the contract market since a very strong penetration after the early years of natural gas. Besides the increases that came about by moving gas into new areas, Newcastle, et cetera, it has been pretty flat. We wish it were otherwise, but that happens to be the case.

Then we look at what is going to drive additional contract growth. Where is it going to come from? Much of the manufacturing use of a natural gas is derived. I mean, they don't use natural gas except because they need it to meet their requirements for demand for their products themselves. We don't see that there is going to be a significant change in the demand by manufacturing currently for gas, because I guess we don't see that there necessarily will be a significant demand for the products that are being produced.

In terms of new manufacturing, natural gas normally constitutes less than about 5 per cent of the input cost of manufacturing, with the exceptions of the brick industry and fertilisers. There are some clear exceptions, but for manufacturing it is only a small portion of the overall cost, and it will not be the key determinant of where a plant is actually going to be built. If that plant is going to be built, how long before it is commissioned - a year or two?

So most of the projections are clearly out there. Whey they looked at where growth for gas was going to come from in NSW, they looked to electricity generation and cogeneration. At the

moment in NSW we do have that oversupply of capacity. The co-gen plants and electricity generation plants for natural gas are being pursued. People are looking at them. We are trying to promote them as hard as we can, but they are not yet getting off the ground. It is very hard for us to see in this next five years any significant growth. We just don't see it. We wish it were there, but we don't see it. I'm not sure about the anomalies. I would have to come back on that.

MR COX: From our point of view, the low growth forecasts are extremely important because they go to prices, determining prices. It is an issue about which we have to satisfy ourselves. I guess I have been in this job too long. I can remember early presentations by Greg Martin on how hard it was to get more money out of the tariff market, to compete with electricity. The gas business really was very marginal. I should add that we will be bringing down some suggestions like answers to what electricity prices might be over the next four or five, and if it were up to me I would say that I doubt whether they are going up. All of this being so, the first question is, why is it now possible for the tariff market price increases that you are suggesting? The second, is that a reasonable thing for us as regulators to sign off on. Is it a desirable outcome for domestic users of gas to be paying more?

MR CONNERY: Coming to the first, wherever there is to be a shift in perception, there has to be a time when that shift occurs, and it has occurred. That is simply the beginning and the end. We have had strong growth in terms of connections. I think for the last eight or 10 years, it has been about 25,000 connections per annum. That is a significant change from early history, if you go back to just prior to natural gas arriving. AGL have been losing customers, net losses of customers, for many years. The share of the market has fallen.

I am going into history now. If we go back to the end of World War I, we had an 80 per cent market share. Eighty per cent of the homes in Sydney used natural gas. Prior to natural gas we were down to 30 per cent. We were losing lots of customers. Even with the arrival of national gas, there was a price freeze for something like three years. It took us four or five years before we got a turnaround.

Admittedly, just prior to natural gas, we had been reforming naphtha to produce towns gas.

The price of naphtha had just through the roof. Gas prices went up three-fold. It is not surprising that customers were a little upset with those sorts of increases.

We also had difficulties with the distribution system. There has been insufficient money to properly maintain it. We had losses with supply. We had leakage. There were all those sorts of issues, so that led to a review of the tariff market. It was tough, and it was tough for a long time, but since around the mid to late 80s we have worked very hard at it, and we have turned it around. It has been fairly strong. We have now changed our perceptions and believe it is getting momentum. We are getting to a significant number of customers. It is coming together.

As I said before, the average consumption back in the early years in 1978 was 13.5GJ; it is now 24GJ. We would like it to be 60GJ, but 24GJ is certainly better than the 13.5GJ.

In terms of your second part of the question, what should we as regulators --

MR COX: Us as regulators.

MR CONNERY: Yes. It is not an easy task, and we don't for a moment think it is an easy task. We have our burdens to bear, and I think this is one that I can't give an answer to.

MR COX: I have been avoiding for as long as possible the initial capital base, but I think we have to grapple with it now. As was pointed out, this is a de novo review, so what we say last time may not carry any weight. You pointed out quite correctly that what we have to do is satisfy the various requirements in 8.10 of the code. I don't know whether you have been following the debate we had with GSM, and asset valuation there. No doubt you have, but not in the same excruciating detail that we have. But the view that we came to there was that we had to produce an access undertaking to satisfy the various objections of the code as set out in section 2.24 of the code, and that initial capital base had to satisfy not only the requirements of 8.10, which you presented this morning, but also the objectives of section 2.24.

Those objectives include, properly, the interests of the owner. They also include things like the need to promote competitive markets, the need to promote economic efficiency, and the interests of users. I think we all agree, at

least in the gas context, that the DORC asset valuation is towards the top end of the reasonable range. Those other considerations I have just quoted might well suggest that an asset base below DORC is appropriate to achieve the objectives of the code. Would you like to comment on this argument?

MR CONNERY: We don't question that the Tribunal has to take into account a whole series of matters in determining a number which is most likely to fall between DAC and DORC. We don't believe that DORC is the only answer. Clearly, the code is based on the assumption that there will be many considerations. Neither do we think that DAC is the only answer. It will be, more than likely, between them. Even then, you are allowed to go outside those bounds, if you so wish.

We could talk about our access arrangement information and the considerations that we have taken into account in that, which I think cover a number of the matters that we have raised, but I think that is on the record.

MR COX: It is a dark horse, actually.

MR CONNERY: I don't think it would further the cause by going through it here.

MR COX: I would like to ask you to speak about the Goldline issue, which I think you very nobly said was a mistake on your part. I recall living through that last time, and if it was a mistake, it was not a mistake that entered into in substantial debate about consideration of the options. Perhaps you can explain to us what the issue is and why it was a mistake.

MR CONNERY: It was not a mistake in the conceptual sense of how Goldline should be treated. I think the Tribunal indicated that, from a regulatory point of view, Goldline had to be treated as if it were on balance sheet, and that makes sense with the scheme of the code today, as I think it did before.

It was actually in the construction of the cash flows which represented the sustainable revenue stream and then we discounted back to get a net present value - very much an ODV type analysis. Within those cash flows - and AGL have the preparation of that, although they were clearly cash flows that were seen by the Tribunal and looked at very closely - within the detail of that, AGL had an expenditure of an amount of $300m, which was to purchase back the Goldline leases, to actually move them from debt to equity, as it were.

By having that expenditure in there, we were effectively, in a way, working out the net present value of shareholder wealth, not of funds employed. It was a mistake to have that in there. From our own internal purposes, it may have been appropriate for the company to look at it from that point of view, but it did not achieve the objective which was to get the net present value of the funds employed, both debt and equity, in the natural gas business. So that was the error.

MR COX: I wanted to raise the pricing structure. There are a couple of issues there. First, as we try to get to grips with it, it seems to us that the costs are being shifted from the trunk network to the Sydney local network in particular. This is compared with the access undertaking in force at the moment. Perhaps you can just explain why this has happened - few costs being attributed to the trunk, and more costs being attributed to the Sydney local network.

MR CONNERY: I'm not sure I understand. If you don't mind, we would prefer to take that on board. I know it is a consequence of the allocation, but to actually get behind it probably requires a little more detail and expertise than I have.

MR COX: Thank you for that. The other issue is, in submissions we are being told of the various bypass opportunities that will be economic in the pricing structure you suggest, which is based on stand-alone replacement costs. There is also a rather mysterious policy of capping customers, which I'm not sure I understand, and perhaps you will speak about that a little. I have two questions. Firstly, what is capping, how does it work and what is it intended to achieve? Secondly, does the prevalence of that and the emergence of bypass operations really suggest that there is something basically wrong with the pricing structure that has emerged in the pricing you described this morning?

MR CONNERY: Again, without having had the time to consider the bypass options that were put up, I can't comment on whether they are feasible. I really have not had time to review those. In terms of the capping, it is an attempt to limit the increases that would fall on certain customers as a consequence of trying to adopt a more cost-reflective approach. We had capping, on the last occasion, in 1997. We have always had an issue as we moved in NSW from one

traditional form of pricing to another. It wasn't reflective of where you were within a network; it was generally that, I guess, a 50TJ or a 100TJ customer paid a certain amount, and it didn't matter whether you were right on the trunk or whether you were out at Botany or wherever else.

We are now moving to a more cost-reflective pricing structure, and on occasions we end up with prices that are rising significantly to individual customers, even though overall the revenue might be coming down. The capping is simply an attempt to moderate those sorts of movements. Also you can find sometimes that a price is going up one year and going down in a future year. This is an attempt not to send that silly signal, that one year you are going up and the next year you are coming down. It is difficult.

THE CHAIRMAN: For my benefit, is that capping done by the network or by retail?

MR CONNERY: No, that capping is in the structure that has been presented today.

MR COX: Would you like to address the question of the instance of capping, and the bypass opportunities. Those things taken together, do they suggest there is something basically wrong about the pricing structure?

MR CONNERY: I think that if they are real consequences, it is important that we look at those and explore them, certainly. If that is the case, we need to look at those and the price structure.

MR COX: One final question. Again, things have been said to us in submissions about your trading and queuing policies as being perhaps too restrictive. Do you want to comment on that suggestion?

MR CONNERY: I think we would like a little more detail on how they are restrictive.

MR COX: Perhaps it is worthwhile reading through the submissions that have we received and provide a response for us.

THE CHAIRMAN: On that, I note that AGL returns tomorrow afternoon. The sorts of issues that have been raised relate to what is seen as overly complex balancing arrangements compared to other jurisdictions. They certainly have been identified as problems by some customers. They are in the submissions. They are, again, of great interest to the Tribunal. Maybe you could look at those and address some of those issues. I know they will be pick up some criticisms over the next two days.

MR CONNERY: Yes.

THE CHAIRMAN: Thank you. We will take a short break.

(Short adjournment)

AUSTRALIAN GAS USERS GROUP

THE CHAIRMAN: We will resume. We actually have David Headberry from the Australian Gas Users Group, with Professor David Johnstone, who was commissioned to prepare a paper which is on the record as part of these proceedings.

MR HEADBERRY: Thanks very much, Dr Parry. The Australian Gas Users Group is extraordinarily concerned about the initial capital base. We have commissioned David Johnstone to look at the issues of initial capital base and asset valuation. He will make a major presentation and then answers questions.

Before we get into that, I would like to make a couple of points about our major concerns. Our first major concern is that the information so far disclosed is insufficient for us to be able to do an assessment of the proposal put forward by AGL. We would like to have the information as required by the code submitted and made available to us.

Another point is once we receive that information, we think that it would be appropriate to call for new submissions and to hold another public forum to discuss the issues in more detail after we have been able to digest the information.

The third point we would like to make relates to the evaluation of equity issues. Again, this comes out of the information disclosure. I refer to issues such as the allocation on geographic basis or service basis - that is the allocation of costs - and the cost allocation of common assets, which you picked up on earlier. Why should the contract market be evaluated on a stand-alone basis? Why should it be evaluated on an ORC basis as distinct from the more appropriate DORC basis?

I now wish to introduce Professor Johnstone. He has done an analysis for us on the total cost. Because of the total cost to consumers, asset valuation is probably the key. It leads to about 60 per cent of the total tariff or maybe a tad more. We would like to spend some time on asset valuation and I'll hand over to David Johnstone.

PROF JOHNSTONE: From an academic's point of view the discussion that I have been privy to in all the various proponents' proposals and regulators' findings in the various energy access proposals have been very unguided by any theoretical framework on asset valuation.

Just this morning we heard the proposition that the correct, in a sense, rateable asset base would be between DAC and DORC, but it might be outside that range. So this is the level of foundation that we are working at in this debate. If we built gas networks on this kind of foundation they would hardly be worth valuing at all, but we are prepared to do this kind of economics with such little foundation.

Today, I would like to provide a theoretical foundation, which I am sure will be new to almost everybody here. It is actually something which exists in the literature as a rationalisation between economics and accounting, but it seems to be new pretty well even to economists but certainly to accountants. I have talked to accountants about what goes on here, where we intermix these terms NPV and DORC, for example - NPV is an economics' notion, very much from economics and finance. DORC is an accounting notion and traditionally accounting and economics are regarded as irreconcilable twins in that accounting looks at the present and the past but economics is a valuation framework looking at the future, in particular looking at cashflows.

Getting back to this quite strange thing that is going on in the regulatory tribunals at the moment, this funny juxtaposition of accounting and economics, it turns out that there is a wonderful reconciliation of asset valuation rules in accounting and economics notions of valuation, particularly NPV, that was developed in the 1970s by a Cambridge economist called John Kay and it has lain dormant in the literature forever.

I am going to give you the basics of that today and I am sure it will provide some clarity about asset valuation in terms of an economic rationalisation. I have about eight slides to go through. My presentation is in the nature of a little tutorial, really, on this reconciliation between economics and accounting notions of valuation, and then we will draw some ramifications for this particular debate.

This is all measuring the capital costs of an entity because the whole idea is to reward AGL for its fair capital costs. How do we do that? According to economics, and finance coming after it, you value capital costs on a strictly discount cashflow basis. Cashflows are facts, they are all that matter, no other basis is

relevant. If you have ever studied finance you have been told this ad nauseum.

Let us just take a simple example of an asset purchased for $1,000 and sold two years later for $300. What are the capital costs involved there? On a strictly DCF basis - that is, cashflow only - we simply identify the time and amount of the cashflows and we discount them back to zero to get them into an aggregate figure called a present value. In this case, that would be $752 of cost in PV terms - $1,000 at times zero, no discounting required for it, $300 coming back to us at times two, termination proceeds of sale, discount that back to times zero today and we have $752 worth of costs on a PV basis.

That is a very straightforward valuation approach. It is just matter of fact, it is cashflows only. Strangely, economists have another way at least of doing this same calculation which is much more abstract. It is more of a conceptual view of costs than a factual view. That is what I've called in this presentation the accruals approach.

I want to come to the same figure from a completely different route and this will help us understand relationships that are presently very vague, I would say. This is method two, the accruals method of getting the same result.

Under this method, economists have told us that there are actually two elements to the cost of capital. When you hold capital, you have a capital asset, the first element of cost is the loss of value of that asset - as you hold it, you lose value. That is called in generic terms depreciation. It is defined here as loss of asset value, ending value in the period minus opening value - "value" being at the moment an undefined term. That is depreciation.

The second element of capital cost is the fact that you are tying money up in this asset and, therefore, you are not earning a return on it elsewhere. That is call the opportunity cost of capital. Those two elements capture the whole cost of capital from an abstract point of view.

The opportunity cost is defined as the rate of return that you should be earning for an asset of this risk times the value of the asset measured as the opening value of the asset in the period, and the period can be a year, a month or however we define the period. They are the two elements of cost according to the accruals approach.

There is no cashflow here. Depreciation is not a cashflow. Opportunity cost is a notion not a cashflow. So we have two elements of cost that are both notional rather than actual, yet we come to the same answer in the end.

We do it through slightly more convoluted calculations, but as you can see the PV of costs turns out to be the same. Here is our same example repeated from a different framework's point of view. The asset value opens at $1,000, it must come on at cost under this framework and it must go off at exit value. It must be written down to exit value at termination, so it's written down to $300 at times 2, it comes on at cost of $1,000

I will just make up a number in the intervening period. This is the valuation. That could be arrived at any way you like, any rhetoric you like, DORC, DAC, 95 per cent DORC, anything you like. As it turns out, that number in the middle period is actually mathematically irrelevant. Its effect cancels out because it has one effect on the depreciation expense - the smaller it is the bigger the depreciation expense - but it has a compensatory effect on the opportunity cost in the second period and mathematically it turns out to be irrelevant.

This is a wonderful result, really, because it tells us an asset valuation in the period between purchase and eventual sale is an irrelevance mathematically to calculating the PV of costs.

Just going through this particular set of numbers, depreciation in time one, period one, is from $1,000 down to $700 at the end of the period, $300 is the change in value. That is the depreciation in period one. Period two depreciation, $700 down to $300 - $400 depreciation. They are the accruals in those two periods.

The opportunity cost measures at 10 per cent, for example's sake, times the opening asset value gives us opportunity costs in the two periods of 170. They are accruals; they are not cashflows. We add them together - they are negative because they are expenses in accountants' language - and we find their PVs and bring them back to zero and we get the same answer.

We could have got the same answer with any number here, it doesn't matter. The asset

valuation is in between. The asset coming on at cost and going off at exit price does not make any difference to that PV of negative $752. That is, through a basic example, the reconciliation of the two frameworks. We say that, provided each approach is applied by its own rules, the two methods are effectively the same, despite their superficial divergence. That was Kay's finding.

As it turns out, that is what underpins the discussion going on at the moment. Apparently the people doing the discussion are not aware of the underpinnings. There is very little resort back to this theoretical framework. I imagine what has happened is that the model that is being used at the moment of depreciation plus opportunity cost as the capital cost, coming from economics, perhaps initiated out of London, and then through New Zealand and so on. It came from economists, who have some background in that view of capital costs rather than the cashflow view of capital costs. As it turns out, it doesn't matter anyway. The frameworks are the same.

DCF rules - all non-cash flows associated with an item of equipment, a capital asset, must be recognised and nothing other than cash should be recognised. No book entry is of any relevance to the discount cashflow approach. Depreciation is a non-cashflow. Opportunity cost is a notional cost; it is not a cashflow. Under the DCF approach, you do not look at those elements of cost at all.

Under the accruals approach, you take the other view. You exclude the actual cash costs and use only the accruals flows, the notional flows. The one rule, as I said previously, that must be abided by is that the asset must come onto the balance sheet at cost and must go off at NRV - net realisable value - at termination.

Accountants, in the language that I think Kay introduced, call this clean surplus. They actually argue that if accounting was done properly, both these elements of accruals would go through the balance sheet and the numbers which represent the change in two balance sheets would be more meaningful. Accounting is not done that way under Australian accounting standards.

Getting to where this is taking us, this is really the important part. What is the economic criterion in tariff setting? We have talked WACCs and DORCs and these various things, but what is the underlying rationale for the use of these notions?

I had to read between the lines to actually determine this, but it seems to me that what is going on is that the regulators are attempting to grant the asset owners a tariff stream which gives them a net present value equal to zero at the rate of return of the WACC. In other words if the discount rate was the WACC - the weighted average cost of capital - then we are trying to give the asset owners an NPV of zero at that WACC.

Interestingly, that is exactly what finance tells us efficient markets do: they provide only NPVs of zero. There are no positive NPV projects. Projects are priced at an entry cost so that the NPV is zero at the WACC associated with the risk of that project.

It stands to reason that this would be a sensible economic criterion to use in tariff setting. I do not think there is any other, really, that could be consistent with economics and finance theory. It gives us something to start to base our discussions on.

The big problem in meeting this criterion is the handling of asset revaluations. We need to go back to our example to understand how revaluations must be handled if we are to get the NPV to be zero whilst applying the kind of pricing formula that is being considered here.

In our simple case I have allowed for an asset revaluation at the end of time period one from the depreciated value of the asset, which was $700, up to $1,200. I have written the asset up by $500. There is an asset revaluation at the end of the period one of $500.

That takes the asset value at the end of that period, first of all, down by $300 for depreciation, then up by another $500, so it is up to $1,200 at the start of the second period and that means the opportunity cost in the second period is a function of $1,200. The opportunity cost there is 10 per cent time $1,200. Depreciation, I run at 30 per cent per period on the opening asset value, just as a rule to get some numbers.

What happens, if we do this thing correctly, is we can still get the same answer of negative $752 despite the revaluations, but the only way to do that is to make sure that the revaluations are regarded as accruals of themselves. They must go through the income statement, in other words. That is the clean surplus argument.

So here is a revaluation of $500. That is actually regarded as an income to the asset owner. That $500 must be treated as an income to the asset owner, just like the depreciation is treated as an expense to the asset owner. When you do that and you follow the same logic through to the second period, at the end we have to write this asset down to its scrap value, which is still only $300. We have to write it down from its depreciated value, which was $840 at the end of time two, to its final scrap value of $300.

We have an asset writedown, a negative revaluation of negative $540 coming in there and that also gets treated as income, in other words, in the nature of income. So, in this case it is a minus. The upward revaluation was a positive.

The period accruals are then, in aggregate, $100 here, including the revaluation, negative $1,020 there, including the writedown at the end to residual value or scrap value, and if you include those revaluations, the up and down one, in the calculations, you still get the same answer. There is a problem with revaluations, but that is provided that they are actually recognised as an accrual of themselves.

To do that, this has to be the tariff form. It is a variation of what you have seen before. If you want to achieve an NPV of zero at the WACC and you want to allow for revaluations, then the tariff must be the sum of not three terms - the first three you have seen before - but a fourth term must be included for revaluations.

So we have operating costs, opportunity cost - that is the WACC - depreciation on the assets, and, lastly, revaluations. If AGL, for example, wanted to revalue its assets today by $10, then we must take $10 off the allowable tariff to AGL for that. Unless we do that, we are not locking in an NPV of zero. We are actually allowing a free lunch unless we do that. All asset revaluations must be regarded as income, otherwise we actually have violated our own economic criterion of NPV=0.

To recap, we have said that we can achieve an NPV of zero either under the cashflow route, which we could have actually instituted in the first case. Actually, IPART's method of looking at sustainable revenues was a cashflow view of the future. That is fine as a framework and that is actually much more standard in finance; in fact, it is the only thing that appears in finance.

I know of very few finance people who know of this reconciliation between accounting numbers and cashflows; in fact, traditionally accounting numbers are regarded as necessarily non-factual, artifice, fabrication - anything. You make them up to suit your argument.

As it turns out, at any point in time, that is correct, but the aggregate of a stream of accounting numbers, following our rules here - in other words, if you start at cost and you get to scrap value in the end - the aggregate of the process in between is meaningful. It is just that the individual step by step, any snapshot at any time is unreliable.

In the end you can run, but you cannot hide, though. The value must approach its termination value sooner or later. It might just be later rather than sooner if the accountants get their way, because that is what happens. That is the role of accountants. In fact, the academic view of accountants is - the accepted view of accountants is that they satisfy the market for excuses.

There's a famous paper, actually written by accountants turned economists. They recanted and they said that accountants satisfy the market for excuses. If you want to pay lower tax, you go to an accountant for the excuses. If you want higher asset valuation, you go to an accountant for higher asset values. The accounting rhetoric all the professional ethos, and so on, will be harnessed to provide you the excuses for your particular economics position.

With regard to DORCs, that is very much the case. There is no true DORC. DORC is what you want to make it. With an entity of AGL's size, it is impossible to actually scrutinise at DORC value. It is too big to pay for another valuer to do it again and another one to do it again after that. Besides, in the end, you would have three different answers. Which is correct? Well, none of them is correct, because there is no true DORC.

If you look at DORC closely, it has subjective and, in the end, arbitrary inputs. DORC, to me, in this debate, is just one of the excuses being provided for a standpoint of particular vested interest. I feel I am making a contribution just by saying that; afterwards, I am out of it.

THE CHAIRMAN: Is that an excuse?

PROF JOHNSTONE: Thanks very much for allowing me to go first. Last week I completely forgot a lecture for 400 people. I have no goodwill left there whatsoever, so I must be there today.

THE CHAIRMAN: Do you have a few minutes before you rush off?

PROF JOHNSTONE: Yes.

THE CHAIRMAN: We received your paper just yesterday or the day before. It obviously has some pretty important issues in the search for a framework, and that is an economist making an excuse. There is one question that I have been assisted in asking, as I sit stunned by your eloquent presentation. I understand what you are saying in terms of treating a revaluation as an income to the asset owner, does that have an implication for measurement of the WACC in real or nominal terms? It includes income.

PROF JOHNSTONE: No. The formula of the WACC is a bit exogenous; in other words, it is determined by what is the appropriate rate of return on assets of that risk, so it is a separate consideration. The formula does not care what the WACC is.

THE CHAIRMAN: Whether it is real or not.

PROF JOHNSTONE: That's right. But one of the things that the formula does say is that the argument this morning that you can return opportunity costs on ORC is completely unkosher, because that violates the NPV=0 condition. The opportunity cost must be determined on the depreciated value of the asset, otherwise the NPV condition mathematically will not be instilled.

THE CHAIRMAN: Maybe this is an obvious answer, but your interpretation of NPV=0 is certainly consistent with one interpretation of the code which is really rent free, economics rent free.

PROF JOHNSTONE: Yes, that's it.

THE CHAIRMAN; What if, on another interpretation of the code, you could have a positive NPV? You'd just rework your calculations, your framework around it?

PROF JOHNSTONE: That is contrary to the notion of efficient to asset pricing. In other words, that rents should not exist.

THE CHAIRMAN: So you would argue that rent free should be zero?

PROF JOHNSTONE: Theoretically, that is correct, yes.

MR HEADBERRY: And that is really what we anticipated in the code when we wrote it.

MR COX: Thank you. Just let me make sure I quite understand what you are saying. You are saying that if there were to be a service provider that were to revalue its assets, whatever they happened to be, to, let us say, their favourite DORC, we should treat that revaluation as income --

PROF JOHNSTONE: That's right.

MR COX: -- for purposes of deciding what is required to achieve their weighted average cost of capital?

PROF JOHNSTONE: But if you treat it as income and then you pay a return on it thereafter, those two effects cancel out and the NPV is still zero. It is still a bit of a fudge, though, in that the asset owner thinks, "This is a lovely pool to have my money in. I want some more money in this pool. I'll get it in there through a book entry and I'll earn a rate of return on a bigger sum thereafter".

Although the NPV is actually still zero, the amount of money earning that NPV - in other words, the amount of money earning the mathematically internal rate of return in that deal - is bigger. The pool is bigger so you are earning the same percentage in a bigger pool. If that percentage is seen as attractive, you want a bigger pool in there.

MR COX: I suppose the question is whether your proposed treatment is consistent with Australian accounting standards or is there a problem in terms of accounting standards?

PROF JOHNSTONE: Revaluations in accounting standards have not always gone through the income statement. That is, of course, under the market for excuses argument.

MR COX: But it is not inconsistent with standards, you are saying; it is just not required.

PROF JOHNSTONE: No. It is quite the opposite. The spirit of the standards is that revaluations should go through the income statement, but it is just that they haven't, for obvious reasons.

MR COX: Is your position then that, providing we

recognise revaluations appropriately, the initial capital base is a matter of indifference?

PROF JOHNSTONE: It is, except for the fact, as I said a moment ago, the NPV at zero is unaffected, the WACC is unaffected but the amount of the pool earning that WACC is increased by a revaluation. So if the only criterion is to set the NPV=0, revaluations are neither here nor there so long as you regard them as income.

If you want to make sure that the asset pool earning this WACC is not inconsistent with what efficient markets would provide, then you have to prevent revaluations. In other words, suppose, for example, a businessperson can identify a very good earner but can only get $1m into it, she or he would love to get $5m into it, but it is only there for $1m, in that case they would take it for $1m. What is happening here is a revaluation would allow you to put the sum in you want to put in. It's a book entry, of course; it is no cashflow.

MR COX: So in a way we still have the issue of going back to what is an appropriate cashflow to be derived from these businesses. If you like, we can play the accounting game, but we have to keep our eyes on the cashflow game as well; is that correct?

PROF JOHNSTONE: It becomes very subjective in the end. What amount would an efficient market allow AGL to have invested at this plant? I don't think there will be an answer to that.

MR COX: So it still leaves us with a difficult issue of judgment.

PROF JOHNSTONE: Except for the fact that if a revaluation is proposed, it must be regarded as income. You cannot have the revaluation for nothing - that's the free lunch. If you want a revaluation, more money in the pool, that must be regarded as income in this period. So you get less money now but you get more flowing later from the fact that the pool has increased and the two cancel each another out.

But the pool is getting bigger all the time, which means that the future in front of consumers in servicing this pool is getting longer and longer. Really, the pool size should be running down. As the asset value is economically depreciated, the pool should be running down to zero for existing assets; but, rather, we can keep on topping the pool up by revaluations and by other routes.

MR COX: Just me let make sure I understand that. The pool is the amount of money the customer are paying; is that right?.

PROF JOHNSTONE: It is the rateable asset base, basically. It is the rateable asset base, yes.

MR COX: The rateable asset base - that should be diminishing through time?

PROF JOHNSTONE: It should be, because depreciation would mean that it goes to zero. If you do not buy any new assets, sooner or later those you have will be worth nothing. It might take 100 years or 30 years, but it should be heading towards nothing; otherwise, there is no such thing as depreciation. These assets surely do depreciate in any commonsense way; they do lose value.

MR COX: What about the lower end of the range, the depreciated actual cost, do you want to comment on the appropriateness of that as a method of asset valuation?

PROF JOHNSTONE: I am intrigued by the fact that people give that a lot of significance because economics tells us historical costs are always irrelevant to every economic decision. So anything you did in the past is unaffectable. The proper decision model is to look forward and make the best of where we are at.

The fact that DAC is seen as some sort of natural lower bound is again, I think, explainable by the fact that there has been no theoretical framework to help people; it has just been something we picked on and said, "Okay, that is the lower bound". As we heard this morning, it is not necessarily the lower bound.

MR COX: I guess I feel that I am a bit without a compass with all of this.

PROF JOHNSTONE: Well, I was hoping to provide a compass. To me, when I saw this reconciliation, I felt that we could actually use, in a meaningful way, these asset valuation terms. "Meaningful" meaning that we could satisfy the natural economic criterion of providing an NPV of zero. If a regulator can have any economic criterion to work by, that must be it, from all the theory of economics and finance.

MR COX: I think I understand that and I understand the point about revaluations. I am less clear how we get from that to fixing an asset value

base, if indeed we have to do that, or I think we are required to do that, I suppose.

PROF JOHNSTONE: One thing you might do is say, "Let the market rule". If AGL or any other owner wants a revaluation, they can have it, but it must be regarded as income. That would be a natural limit on this kind of thing, which would mean that market conditions, in a sense, would determine the size of the asset base for themselves.

MR COX: I think that is a strong point. You also mentioned this other point about the pool of funds and having somehow to get that right and I am not sure how you do that.

PROF JOHNSTONE: You just have to get the pool right in the short term. I am saying that what is really going on here is a proposal for a big asset revaluation, and it has been on the books since 1996 at least. That asset valuation theoretically is okay as long as it is regarded as income. Practically, it might not be okay because it means that AGL can have a very large sum notionally in this pool and earning this WACC. The consumers have to pay the WACC, but on a bigger pool therefore.

I see your point. You are asking what is the appropriate pool size? I have not thought about it, I'm just coming up with an answer for that, but certainly calling revaluations income would discourage rank abuse of the whole idea.

MR HEADBERRY: To pick up the point that is vexing you, Jim, probably not quite uniquely, but certainly quite unusually in the current market we are in at the moment, with all of this regulatory work we are doing, AGL does have a book entry or a data entry or a history going back 150 years or more. We can actually track that through.

What happened in 1996 is effectively what David was talking about. There was a revaluation made at that time. Prior to 1996, when the New South Wales Gas Council was setting tariffs, it used the depreciated actual costs as its basis. So you have a full history. Because AGL did almost nothing until probably the 1970s or 1980s other than supply gas in this market, it would probably be quite easy to extract that information. We say you do have the history to be able to do the sums that you are grappling with.

It was a lot more different in the Victorian situation, when we went through that, because we had exactly the same debate. The answer was: "Well, we really do not know what we started with. We do not know what we depreciated at because the tariffs were always set on the basis of: this is what the government thought was a good number". So there was no way to be able to balance the ins and outs and get a true depreciation value or a revaluation that was being done during the process. That is why the regulator said, "We have no alternative, effectively, but to use the DORC value at this time".

But where we do have the full history and it has been trackable, as it has been in the case of AGL, we should actually follow Professor Johnstone's process and use the history we have and make those adjustments. Where there has been a revaluation, we should actually write it out of the tariff in the way he has suggested.

PROF JOHNSTONE: There is a big danger here in AGL's case that did not exist in the Victorian situation because there, if the income stream, this tariff stream, defined artificially in terms of asset values, book values, was too high, it did not matter because the privateers were bidding for that income stream. So there was some compensation coming back into public coffers.

In this case there is no bidding for an income stream. We are just defining ones that will exist thereafter. There is a distinct possibility of a free lunch here in that, for the sake of a book entry, the perpetual tariff stream to AGL can be greatly enhanced - no money from AGL.

MR COX: I been asked by an accountant to ask this question. How should issues of residual value be dealt with in NPV calculations of the sort that you were talking about?

PROF JOHNSTONE: Does that mean scrap value? Is that what you are saying?

MR COX: No, I think the point is normally if you are doing NPV calculations in 20 or 30 years or something --

PROF JOHNSTONE: I see what you mean.

MR COX: Normally the assets have some income generating potential at the end of that period.

PROF JOHNSTONE: The standard procedure is to look 30 years into the future and ask: what is the PV at time 30 of the remaining income stream? Whatever that is goes in at 30 as if it were a cashflow there. Of course, it is rank guess work - it could only be that - and, therefore, it is very hard to rely on. If a decision is hinging on that guesswork, you would have to be worried.

MR COX: I think that's right.

THE CHAIRMAN: The only thing which I guess I am still coming to grips with is if I understand the "intellectual underpinnings" of the proponents of the use of DORC or DAC for asset valuation pricing purposes, they seem to be arguing that that replicates the costs that would arise from an efficient new entrant and therefore would give an appropriate economic price signal. I hasten to add that that is not a view I necessarily share - I think it is well known it's a view I do not share - but if that is a view and it is put, how does that reconcile with --

PROF JOHNSTONE: This comes from work by Tobin, Tobin's Q. In this case it is very hard. All I have seen is two or three lines in various proponent's documentation. There has been no exposition of it in the case of a natural monopoly. What is a new entrant? Will the new entrant take half the market or take the whole market? If we are talking competition, perhaps we have to envisage a hypothetical of many entrants.

Once we start to do this, I have thought that far and given up in confusion. I am afraid that is as far as I have gone with the Tobin's Q thing. I think it has something to it, but I also believe it is utterly overrated if it is regarded as the reconciliation of pricing on all --

THE CHAIRMAN: We might get you to help us to think through some of those related issues.

PROF JOHNSTONE: Sure. The Tobin's Q is something I was hoping you wouldn't raise, to tell you truth.

THE CHAIRMAN: I am surprised I did.

PROF JOHNSTONE: If it is sound economics, it has to reconcile with what we did today.

THE CHAIRMAN: Yes, I understand that.

MR HEADBERRY: Just building up on the question a little bit further, whenever in doubt, we should go back to the real world. In the Victorian asset sales, after setting the WACC and the DORC, we are now going back and examining the implications for the actual people who are prepared to put their hands in their wallets and take money out. It appears that we are actually seeing the asset value has a lot greater value, even more so than the DORC value, which is what you would not expect to happen. If DORC is correct, then you would expect people just to put their hands in for the DORC value, and that is something that we see as an important part of benchmarking.

There is another matter that we have also done some research on. Gutteridge Haskins & Davey and others have done a revaluation of the electricity assets for the New South Wales Treasury, Sinclair Knight did the work in 1995. GH&D and others did it in 1998. GH&D have come up with a number across the whole of the group that increased the asset value by about 33 per cent; yet there has not been that sort of investment. That is about $2.5 billion of increased assets.

When you look at the Victorian assets, GH&D did the work for EPD for the Victorian assets and Sinclair Knight did the check on behalf of the Office of the Regulator General. In that case, Sinclair Knight were 30 per cent higher than the GH&D number. It seems to us that it all depends on who you ask to do the work and what sort of parameters you give them when they do the work and they will come back with the answer you want and say, "This is a true DORC number".

It certainly does not make you feel comfortable that when you commission somebody to do a detailed DORC analysis, they will get it right because DORC really is totally subjective. We have a great deal of concern about using DORC, and this is why we asked David to go through the issue. In fact his proposal washes out this revaluation that comes out of getting DORC wrong.

PROF JOHNSTONE: Yes, that is true.

THE CHAIRMAN: Thank you very much, that was most helpful.

MR HEADBERRY: We would like to thank Gas Advice for giving up their slot.

GAS ADVICE

THE CHAIRMAN: We will now hear from Gas Advice with, I believe, some representatives of some major users. Would you please identify yourselves for me for the record and we will proceed.

MR RANDALL: Thank you, Mr Chairman. I am Phil Randall from Gas Advice. We have been working with a group of major consumers and we put in a joint submission last week. I have Allen Mawby from ACI, on my left; Bob Grandidge from Capral on my right; and seated in the front are Peter Mahony from Austral Bricks; Grant Caldwell from ACI; and Gratton Boote from Karl Aluminium.

THE CHAIRMAN: Thank you.

MR RANDALL: Nine companies were involved in this submission. They represent over 10PJ of the New South Wales market, therefore accounting for over 10 per cent of the gas consumed in the State. They use gas at over 30 sites throughout the State, but predominantly in the Sydney and Newcastle region.

(Overhead: "Issues covered in Submission")

We focus almost entirely on the contract market looking at the proposed methodology, the areas that we consider require independent review and the outcomes for particular users and sites. We focus on the trunk section of the network. We have not really looked at the country zones so we cannot be quoted on that. We have provided a number of specific examples of user sites and how they are affected by this proposed access arrangement. We have not provided any specific comments on the tariff markets so our focus is entirely on the contract area.

(Overhead: "Headline Conclusions")

With regard to our headline conclusions, the proposed asset valuation and revenue base, we believe is totally unsustainable. The methodology being adopted is not sustainable. It does not provide for a reasonable outcome for a number of sites. What has been proposed and what has been put on the table is vulnerable to numerous bypass pipelines.

(Overhead: "Initial Capital Base / Asset Valuation")

I want to speak on the initial capital base but only briefly in terms of the numbers that have been put forward in the access arrangement. I want to concentrate more on the issues that should be taken into consideration in the asset base.

I guess at first glance one feels somewhat of a concern at what appears to be a massive revaluation of assets from two or three years ago both in terms of DORC, ORC and every other method that is included in the access arrangement information.

I think for comfort from the user's perspective, it is nice to have AGL provide that information, but it clearly needs to be independently verified, so to the extent that IPART or somebody else is doing that, that is most important.

(Overhead: "Initial Capital Base")

In terms of the initial capital base, both of the codes - the New South Wales and the national code - refer to a range of issues for which the regulators should have regard. The two most important issues that I want to concentrate on today are past user capital contributions and the bypass pipeline potential.

They are specifically mentioned in the New South Wales code. The national code refers to bypass without specifically mentioning the user capital contributions although there is a complete section in the national code that talks about going to an arbitrator to appeal and he will take in the account past capital contributions and some sort of return for any past contributions in terms of how you calculate the tariffs.

(Overhead: "Past Capital Contributions")

Past capital contributions were disregarded in the previous IPART review. We had some concern about comments that were made, which included the comment to the effect that as any recognition of the past capital contribution would not be available to everybody, then it cannot be classified as a reference tariff. We think that is inconsistent with what is proposed by the code because it specifically says that the initial capital base will have regard to the contribution.

It was not always clear that they were, in fact, capital contributions. We believe there is evidence to suggest there was and we would recommend that IPART require AGL to provide information on what capital contributions have been made by different consumers.

(Overhead: "Past Capital Contributions")

In the AGL access arrangements, they make the statement that the Tribunal did not require capital contributions to be taken into account last time and that they pointed out that the code would not permit them to do so. We refute that argument. We clearly believe that both codes, regardless of which one you use, suggest that they should be taken into account.

If we do not take into account capital contributions made by others, essentially, AGL Networks is asking to earn a return not only on the assets paid for by users but also on inflated valuation of those assets paid for by users. We think that is a little bit - well, it is not an equitable basis.

(Overhead: "User Example - Capral Aliminium")

Mr Chairman, you took a little bit of the thunder when you asked a question of AGL in the first session. The first user example I would like to present today is in relation to Capral Aluminium. Under the proposed access arrangements on the postcode basis, Capral, at their Kurri Kurri site, will be charged as proposed 363/GJ MDQ. This represents the highest local network charge for any major user in the network. I talk about major user being above 400TJ or 500TJ. I would also point out that they are currently paying $535 a gigajoule.

Information has been put together by Capral based on historical contract information. AGL advised, at the time that the pipeline was going through to Capral in 1984, that the cost of the pipeline was $3.6m. Capral made a 60 per cent capital contribution, which equated to $2.2m, which was paid as a standing charge, initially over 10 years, but it ended up being paid over 11 years. There was a slight readjustment for the last few years. Essentially that past capital contribution has gone all the way through to two years ago. November 1996 was the last payment.

Under the $363 per gigajoule local network charge, that equates to approximately $1m a year that Capral are being asked to pay. Currently it is getting close to $1.5m. The obvious conclusion from Capral's point of view is that there seems to be a slight equity problem here,

AGL have argued in the last review and again today that past capital contributions have been straight to the bottom line. That is from an AGL perspective. From a user perspective, they have paid for a pipeline, so to argue that they are going to pay $1m a year for eternity for a pipeline that only costs $3.5m-odd in the first place seems a bit over the top.

We have looked at supply to the Kurri Kurri side from a bypass point of view. To build a pipeline in today's terms would cost just over $3m. It would take a slightly more direct route than going by Maitland, which is the current supply route.

One of the outcomes of this valuation is what methodology is being used. We are told it is the ORC methodology. We are told you are allocating assets depending on what part of the system you use. I have not done the calculation, but I would suggest it equates to more like a $15m valuation of the assets if you are looking at an 8 per cent rate of return. The number should be significantly below $1m.

(Overhead: "Bypass Pipelines re Capital Base")

In terms of the capital base, if people are building bypass pipelines, we believe it is not just a failure of the service provider to negotiate; it suggests incorrect asset valuation and methodology and to some extent possibly even regulatory failure, if, as determined under both the codes, bypass valuations should be taken into account.

AGL stated in their revised access arrangement information that:

> A DORC-based valuation should result in a cost structure which is similar to, though lower than, the cost structure of potential bypass pipelines or networks.

Based on the work that we have done, and we will come to the detail in just a moment, clearly the basis that has been adopted in no way serves to achieve that outcome.

(Overhead: "Bypass Pipelines re Capital Base")

On this slide we are quoting from IPART again. It is useful to use some of your prior words. I think the last paragraph on that slide is important. You said:

> The number of commercial bypass options put forward and negotiated will be an important piece of information in assessing the future sustainable contract market revenues and asset valuation.

(Overhead: Stand-Alone Methodology")

I will now move briefly on to the issue of stand-alone methodology. As correctly pointed out by IPART in its previous determination, users prefer a fully distributed cost approach. It is the best approach and a fairer approach than a stand-alone contract methodology.

If I may just make an aside for one moment. If the stand-alone methodology is based on ORC, why is it not placed on DORC? There's a major problem with that as well.

IPART, in its draft determination, recognised that including the tariff market load was a more optimal basis of allocating costs between the tariff and the contract market, but in the July determination, there seemed to be a slight reversal of this position and a questioning of whether that approach was fair or not.

(Overhead: "Stand-Alone Methodology")

In terms of the stand-alone methodology, it clearly disadvantages contract users in the areas furthest away from the trunk or the primary main and in areas of high tariff market concentration. I guess the obvious example of that is hospitals. We do not find too many hospitals in high industrial zones.

I will quickly try to do a split of the market forecast that was provided in the AGL access arrangement, where, for the Sydney region for 1998/99, the contract market is about 46PJ, the tariff is 20PJ, and the total is 66PJ. That is straight out of the access arrangement information.

If one were to exclude the contract loads that, in our view, are close to the primary main, the trunk main or are serviced relatively close to the trunk main but do not go into high tariff areas, one could exclude at least 30PJ. We think that somewhere between 10PJ and 15PJ could be classified as being areas of high tariff incidence. The pipes are being designed and totally costed for those 10PJ to 15PJ of load whereas in fact they are serving 35PJ of load. Hospitals are a very good examples but there are a number of other companies as well.

(Overhead: "Stand-Alone Asset Valuation")

I want to briefly draw comparisons between the stand-alone replacement cost valuation that was used in the 1997 access undertaking and what is being proposed now. The asset valuation overall for stand-alone has gone up by 39 per cent.

It is interesting that, as was pointed out by the Tribunal members earlier on in questioning, the Sydney local network is going up by 50 per cent from $135m to $202m. That clearly needs some explaining. The other curious one, and I have not even attempted to look at it, is why Wollongong has gone from $4m to $14m.

(Overhead: "Contract Revenue Allocation")

In terms of the contract revenue allocation, the trunk charges have come down substantially. Overall, the revenue has come down by 16 per cent. It has come down from the $83m, which was used as a base in calculations last time, to $70m. In that result, we would suggest that most of the benefit seems to have gone to the Newcastle users. We do not begrudge that, given that they were paying such an exceedingly high price last time, in any event. But in a lot of cases in the Sydney region an advantage out of trunk has been replaced by a disadvantage in terms of the local network charge.

(Overhead: "Trunk Revenue Calculation")

We have a quick calculation. Looking at the trunk revenue as proposed in the previous trunk charges for the coastal and Wollongong area, they were listed in the access arrangements as being $18.6m. If one multiplies the contract MDQs for the particular areas - and those numbers came from the previous access information - by the trunk unit charge proposed, the revenue figures look more like $22m than $18m. There may be an anomaly there. I wanted to identify that.

(Overhead: "Proposed Tariff Charges for Sites of Companies to this Submission")

In terms of the proposed tariff charges for the Sydney region, of the 30 or so sites that are represented by the nine companies in this submission, 24 are in the Sydney region. I have provided a weighted average cost here so that they do not go to the individual companies in this instance. The trunk unit charge had come down 50 per cent, but the local network charge had gone up 32 per cent. Given that the average local network charge outweighs the trunk, there are a number of sites which have higher costs.

The other point here is that compared with the local network charge numbers for revenue that AGL have presented - they said it was going to go from $36m in the '97 access undertaking up to $39m, which represented an increase of less than $3m and a 7 per cent increase - these 24 sites alone, in a market of maybe 400 contract sites in Sydney, have a 32 per cent increase, not a 7 per cent increase, and they represent over $1.5m of what is supposedly a $3m increase. Hopefully someone is doing better than these companies.

(Overhead: "User Example - Barrett Burston")

In terms of a user examples, Barrett Burston is a maltster. They have sites in most States. They have sites in Victoria and they have one in Thornleigh, which is north of the harbour. For these particular sites versus the Thornleigh sites, we can draw a very quick comparison of pricing in Victoria as an outcome both in terms of the current pricing and the proposed pricing with post contestability coming into place in Victoria next year. There is one number that stands out and that is $4.75, and that is based on an 80 per cent load factor.

Okay, we can pay the $4.01 and the $4.02 throughput charge but, frankly, that figure of $4.75 stands out. It is exorbitant. These numbers exclude the retail margin, so we are doing a direct comparison. The cost of getting gas essentially from Wilton - if you look at the $2.40, 88 cents and 12 cents, that gets you to Wilton. That is $3.40. You now add another $4.75 to get the last 60 kilometres.

(Overhead: "Bypass Pipeline Projection")

Over the last few months, Gas Advice has undertaken a number of studies that look at bypassing the existing AGL system. I point out that part of the group that is represented in this analysis were also party to submissions to IPART in the previous review that related to bypass of the Sydney system as well. That was work completed by Gas and Fuel.

I have listed eight projects here. There are others that are clearly sustainable, but these are the major ones that I want to present today. I am not going to go through all the results of the individual sites to the individual projects, they are included in our submission. I do want to identify just a couple of the sites to give an example.

(Overhead: "User Example - CSR Cecil Park")

CSR has a number of sites which fit variously through those projects. Cecil Park brick plant is currently paying a local network charge of $128 per gigajoule MDQ. Under the proposed access arrangements it is going up to $250. This brick plant is about 600 metres from the trunk main. It is supplied by a pipeline which comes out of the Horsley Park PRS and comes back down about six or eight kilometres. A 600-metre pipeline would suggest that you could pay substantially less than $250 per gigajoule of MDQ - we put a figure of $86 - and we would suggest that is very much on the high side because we have overcapitalised a system that might be required to get gas out of the trunk main if you want to do a hot tap of the existing trunk main. We think that number should be substantially lower and that is for supply out of the trunk main for one site only.

As a broad rule of thumb, you could expect to pay half a million dollars as a starting point to get gas out of a trunk main. By the time you do the hot tap, regulators, meters, heaters, telemetry, et cetera, it is at least $500,000 for that alone. The extent to which you can add additional sites to that sort of bypass load, bringing together the number of loads helps to actually improve the economics of bypass.

(Overhead: "Austral Bricks")

Austral Bricks has three brick plants all located within probably three kilometres of the Horsley Park TRS and PRS site. These plants all use in the hundreds of terrajoules of gas. They would all have separate MDQs. Under the current rules each will have overruns, penalties incurred, if any of the plants goes above their stated MDQ.

These three plants are located very close to each other. There is no system constraint issue associated with those three plants. Two of them are served off a pipeline - they are 400 metres apart - whilet the other one is only a couple of kilometres down the road. This is very good example of where the ability to shift load and capacity trade should be allowed, but under the current arrangements, it can only be done if it is negotiated.

Under the bypass work that has been done, the current local network charge of 60 is now

being proposed as 84. Under the bypass arrangements, we believe it should be 48.

(Overhead: "User example - ACI Glass Packaging"')

The next example is ACI in Penrith. ACI are one of the largest gas consumers in Sydney, Penrith being about 23 kilometres from Horsley Park. ACI are one of the companies who are significantly disadvantaged under the proposed access arrangements.

You may recall the pricing path approach that was going to be taken in the last access arrangements, where we started here and ended up at the 84 and everyone paid transitional pricing. I think most companies would have the expectation that they would at least get down to this lower level. In the case of ACI, that hurdle has just been raised. ACI were involved in the last hearings. Allen Mawby spoke last time and basically said: "We are looking at bypass, if we have to build it, we build it". Allen is still saying the same thing.

All of a sudden the local network charge has gone up to nearly $300/GJ MDQ. A bypass price is less than $100. ACI have also advised that they understand past capital contributions were made to pay for the pipe out to the Penrith site in the first place.

The other issue is that they have a negotiated contract and a negotiated tariff, which came as a result of the bypass work last time. Under the current rules, that negotiated tariff has to be renegotiated every time. There is no certainty in terms of the long term for pricing. If you have to go back to the table every time you want to renew a contract, then you have to put all the same arguments every time.

We think there is some need for the Tribunal to set the rules now and make it quite clear if bypass has been taken into consideration in pricing, then it will last and there will be no ability to reclaim the ground in, two, three or five years time so that we have to start all this again. If that will be the case, you may as well build the pipes.

(Overhead: "User Example - Kaal Australia")

Another example is Kaal Australia. Kaal Aluminium have an aluminium products plant at Yennora. Again under the proposed access arrangements, their local network charge has increased this time by over 50 per cent. They are supplied via a pipeline which comes from the primary main. It goes from Horsley Park through to Auburn - actually, the primary main goes along the street on which Kaal Australia is located, but it goes all the way to Auburn, which is another five or six kilometres away, and then the secondary system comes back and supplies Kaal.

Kaal are paying for a system they do not really need. It does not take long to work out that a 30-metre pipeline, direct supply out of a primary main makes a lot more sense for Kaal, particularly if the proposed tariff will increase by another 50 or 60 per cent this time.

(Overhead: "Summary of Bypass Projects")

I want to summarise in aggregate the eight bypass projects we have assessed. This is detailed in the submission we made, but the information provided in terms of capital costs and the cost of the systems came from GCI. We engaged GCI from Victoria. GCI Consulting is an international arm of Gas and Fuel. GCI also do all the transmission and distribution pricing and costings for the Victorian system, so we believe they are very reputable in terms of having a good knowledge of what the prices should be.

For the aggregate of the eight projects, the Capex costs are $12.3m. We have annualised that cost in terms of getting a rate of return. We have used 8 per cent to provide an equivalent rate of return to what AGL are proposing, but we have done it over a 10-year period, which we think is very conservative.

If you make it a 20-year period rather than a 10-year period, you can take off probably another 30 per cent of that annualised Capex cost. You then add operating costs and some other local charges where we want supply out of existing AGL facilities, so it is partial bypass rather than a full bypass, and the annual cost for those sites is $2.5m. Under the proposed access arrangement, the local network charge for those same 15 sites is $6.3m, which is over 50 per cent of the Capex of projects to supply those sites.

(Overhead: "Other Reference Charges Required")

In terms of what should be in the reference charges, a number of items are missing from the current access arrangement that we would prefer to have in rather than out. We recognise that there is always a potential to negotiate under a negotiated service, but empirical evidence from a

number of users tends to suggest to me that that can be a little bit difficult at times.

There is no reference anywhere in the access arrangements to what will happen if and when the eastern gas pipeline is constructed. If the eastern gas pipeline comes into service at the end of next year, which is what is currently proposed, there is a potential that gas at Horsley Park, which is part of the route that EGP are taking, would want to get into the AGL system.

There is no reference to injection charges. There is talk about what is required for a station. There is probably a legitimate case to say if you want to inject and it means AGL will have some operating costs or work on some facilities, there may need to be some charges, but there is no reference in there at the moment to those charges.

There is no price given for partial use of the trunk. One option we looked at is building a bypass to Penrith coming out of Schofield, which is further up the trunk from Horsley Park. If ACI wanted to buy gas from the EGP, they would still need to use part of the trunk.

At the moment there is a postage stamp tariff, which will be $35/GJ MDQ, whether you were going from Wilton to Appin or Wilton to Windsor. If you only want to use a couple of kilometres of the pipe, is it fair that a postage stamp tariff should be applied? I think the answer would probably be no. We would want included in the tariff numbers providing the access arrangement a charge for partial use of the trunk.

There is no reference to backhaul. I think the Tribunal correctly suggested last time around that there was no real case for backhaul. I suggest that if EGP is going to happen, there is a case for backhaul and that should be reviewed.

Next is the question of charges at the outlet to the TRS and the PRS. This relates to Horsley Park, Auburn, Flemington and all the other PRS sites along the primary main, also including the likes of Hexham. Those charges were included in the previous access arrangement. There is no reference to those charges this time. If one were to look for a charge, if you wanted to get gas out of the PRS at Horsley Park, you would be paying the Horsley Park tariff, which is $80-odd. Previously it was $6.

There are no charges in the reference tariffs for getting off the primary main. We had the example of Kaal. There was a tariff last time for coming out of Horsley Park or coming out of Auburn, but what if you want to take gas halfway through? Maybe there should be a pro rata-ed number on the basis of kilometres used, or something.

The throughput charge is a throughput charge - a blanket number. We recognise that a lot of companies will find that advantageous if they have a dippy load factor; however, at $4GJ, not too many will use it. It is really only the last 1 per cent or 2 per cent, who are currently being quoted the likes of $1,375 of the local network charge, who will consider it.

(Overhead: "Other Issues")

May I very briefly go through a couple of the other issues. With regard to transitional pricing, we are concerned that another three years of transitional pricing is being proposed. IPART has the ability to allow transitional pricing. I may be putting words into AGL's mouth, but the way that the network access arrangement read, it almost said that they were able to do it, or will do it - they may do it; they will not necessarily do it.

Operating costs - the allocation for the contract market has gone from $21m in the last access arrangement to $28m. That seems a rather large increase. Earlier on in your questioning of AGL, you referenced the $35m for marketing. From a user perspective, it is probably more appropriate that marketing is more likely to be done by Retail rather than Network. We accept that Network will want to do some marketing to try to get greater use of their system, but there is an issue for the Tribunal in terms of allocation.

The term of reference service has been stated as being for one year or two years; yet the access arrangement covers five years. If someone wanted to get the tariff for five years and it is not a reference service, then it becomes a negotiated service. We think that the Tribunal needs to give some consideration to the question of what is the tariff for terms other than one or two years, and a reasonableness test must apply.

If someone wants to get gas for six months rather than for 12 months, do they pay the full

annual cost or does a reasonableness test approach come into being where they might only pay 50 per cent of the cost?

Metering contestability was something that was listed last time as being something that needed to be considered in terms of becoming contestible. We would argue that that needs to be the case.

(Overhead; "Other Issues")

The trading policy was included as a reference service the last time with a 1.4 premium. This time it was included as a negotiated service. We would prefer that it be retained as a reference service, but again we believe there should be no premium.

We have no problem with the contract carriage model, but what would happen if AGL Retail has booked all the capacity and, for example, a user wants to change retailers? We need to be sure that the answer is not, "I am sorry, there is no capacity left. It has already been booked." Unfortunately, this element of the access arrangement has never been tested because, in the last two years, no-one other than AGL has been supplying gas into the market.

Demand forecasts - the Victorian example is a good one because we are fairly close to it, but a great deal of work was done on the verification of the forecast being proposed by Energy Projects Division and the individual companies. The office of the Regulator General required a great deal of analysis of those forecasts.

Somewhat cynically we put forward in the submission one graph and a comment that simply says that we are assuming zero net growth does not really constitute a reasonable basis for establishing the forecast. The answer may well be there is no net growth, but we have to make sure the basis is correct, because it does have an impact on the tariff paid by customers.

The other issue is that the assumed contract MDQ has been reduced in that period as well. It was 314 in 1997 and in the access arrangement, they suggested that, over the period of the five years, it would go from 308 down to 297. I would like to understand how that was established.

(Overhead: "Conclusion")

I know a number of people will talk in a great more detail on the issues of the valuation methodology and the numbers, but our conclusion can be nothing other than what has been proposed needs a major overhaul. The methodology is not sustainable. The number of bypass projects simply says that what is being proposed just does not make sense. The revaluation needs substantiation and we look forward to having someone do an independent review of that. I am presuming the Tribunal will be engaging someone for that.

I guess the other issue is that this is supposed to be implemented on 1 July, and you spoke about the timing at the start of today. From our perspective, take your time. This is going to last for five years and it will set the basis for future reviews. If it takes until the end of this year, I would be more than happy with that because, at the end of the day, the users want an outcome that is reasonable. AGL has to make a rate of return but it has to be fair for the users as well. Thank you.

THE CHAIRMAN: Thank you very much for that contribution. You have raised a number of interesting issues. I want to focus on a couple.

MR RANDALL: If I may interrupt, the other gentleman here are available to be questioned as well, Mr Chairman.

THE CHAIRMAN: I appreciate that. On the capital contributions point, so I can be clear on what the proposal is, and there may be a differing view, is your proposal that the overall initial capital base, whatever that might ultimately be, have regard to capital contributions in total but that there not be a specific recognition in the cascading down to individual contract customers in their particular capital contributions? They are quite different propositions.

MR RANDALL: I think, at the end of the day, you will come up with a valuation of the system. In the case of capital, if this part of the system is being paid for by capital, then that part of the system should not be valued at the full ORC or DORC as the case may be.

THE CHAIRMAN: So you want them both?

MR RANDALL: The national code actually talks about the ability for some sort of compensation for having made those payments in the past as well. I think, at the end of the day, the overall valuation of the assets will be reduced by the fact that you will not allow the service provider to make a return on someone else's money.

THE CHAIRMAN: There is a difference. If you simply knock it out of the overall capital base, then you do your allocation, then you are cascading, that would mean, for example in the case of the aluminium business, that you will not get any particular benefit; you will share the overall benefit.

MR MAWBY: Firstly, I believe it has to be done on an individual basis, on a company by company basis.

MR RANDALL: You are already allocating costs according to what part of the system you use.

THE CHAIRMAN: I will come to that. Does anybody else want to comment on that important difference of approach? Again, it is something we will explore. You have given some examples of bypass and bypass opportunities which look to be $6m-odd and $30m-odd. So it is a substantial part of the contract part of the market. How much more widespread, without necessarily going into confidential information, are the opportunities for bypass beyond both --

MR RANDALL: You can be sure we picked the main ones.

THE CHAIRMAN: I am sure you did.

MR RANDALL: But there are some others as well.

THE CHAIRMAN: It is interesting. To the extent, certainly on the face of it, if we accept those bypass figures and if we look at the use of networks charges, the examples you gave are very interesting compared with Victoria. That is a consequence of the total dollars, the cost allocations and the pricing methodology. Have you been able to - and if not, are you able to - show us sensitivities, perhaps not so much of the total revenues, because that is fairly straightforward, but quite interestingly in the examples that you have given us, the sensitivities to the different cost allocation approaches and then the sensitivities to the different pricing methodologies that follow the molecule in the way that prices actually cascade down. Is that something that you are actually able to do or not because of the absence of information?

MR RANDALL: I think the examples we give are specific pipelines to specific sites. Those pipelines are generally only serving one or a small number of consumers. We did an allocation on the basis of MDQ not dissimilar to what AGL would have done.

THE CHAIRMAN: Can you do it differently and show us?

MR RANDALL: You can do it any way you like. At the end of the day, you have to do an allocation to make sure that everyone is better off by it.

THE CHAIRMAN: I understand that. I am interested in seeing where the sensitivities are in terms of the different ways that the total pot of dollars can be cascaded down - that is both the allocation and the pricing structures.

MR RANDALL: The work that we have done relates specifically to these particular bypasses not the total system. I would not suggest for a moment we are qualified to talk about the value of the total system. I think there are people better placed for that.

MR COX: Thank you very much for your submission and presentation. Can I start off with a point of clarification. On the table you showed which was headed "Stand-alone asset valuation, optimised contract stand-alone replacement cost", you had a column headed "1997 access undertaking". I understand that those estimates were done on a DORC basis not on an ORC basis, so that might explain some of the increase that appears on that.

MR RANDALL: I am happy for the revised numbers for this to be taken as DORC as well. I understand from today that it is being used as ORC. For example, the capital pipeline is now 15 years old. I do not want it revalued at ORC; it should be DORC.

MR COX: The question of what it should be is another matter. Capital contributions - I understand your arguments that we need to look at that again and we will have a look at those arguments. I understand you are saying that the information on the amount of them is available for AGL, and I guess we can follow it up. I am less clear as to how you want it to be treated. Are you suggesting that somehow the prices for individual sites should take into account the past capital contributions and, if so, how would that be done? I just want to understand your position.

MR RANDALL: The quick answer is yes. I again go back to the Capral example. If they are paying $2m towards a $3.5m pipeline, essentially they are being asked at the moment to pay, on the basis of a replacement cost, $1m a year. I cannot see any other logic than to say they have already paid for it. Why should they be paying through the nose for it again? In this access arrangement,

they have paid $1.5m for the last two years. They have paid off the pipeline in two years.

The choices are fairly obvious for Capral: get some recognition under this process, where the previous pricing is reflected, or build it again and pay for it again, or get someone to build it for them. There are a number of companies who are very interested in building pipelines in this State. It would seem rather strange to Capral that they would have to pay for it a second time.

At the end of the day, the outcome from building a new system would cost them less than half of what is currently being proposed. If Capral have a view that their site will be operating for 20 years rather than 10 and want to make it pay off over a 20-year period rather than a 10-year period, then it will be a third of what is currently being proposed.

MR COX: On the bypass, I want to understand how the situation arises more than anything else. The way you were talking about it, it seems to be the case that these customers were close to the trunk line. At the moment they are being served through the local system and they pick up a spread across the local system charge because they do that. But they can build a pipe cheaply to the trunk line at much less cost - that seems to be the situation that you described. I would like to check if that is generally the case and I would be interested in knowing, if you can tell me about it, the extent to which their situation is already recognised in the price they are getting from AGL at the moment.

MR MAWBY: I can answer on behalf of Penrith and the plants at Penrith. We are about 22 or 23 kilometres from the trunk line. I guess we are by far the major user at Penrith. Under the AGL undertaking last time and this time, with capital on a stand-alone basis, obviously that capital value has to be too high, if we can deliver gas off the trunk into Penrith at a much lower price than AGL seem to be able to do.

There has to be something wrong with the capital value under the last undertaking and this undertaking, because it is extraordinary that these bypass costs work out to be so much lower than the prices that AGL want to charge us through the undertaking.

The second answer to your question is we are paying less than the tariff, but I am not allowed to say how much less for commercial reasons.

MR COX: Sure.

MR MAWBY: But the bypasses we did last time had a significant influence to play in applying a negotiated price.

MR RANDALL: Without breaking the confidence of Mr Mawby here, because we will not talk exact numbers, the local Network charge for ACI is between $1m and $2m. To build a system out to his plant at Penrith would cost between $4m and $5m.

MR COX: I think the secretariat would be interested in following up the costings of the bypass opportunities, if you are able to do that.

MR RANDALL: In preparing the submission, I had previously spoken with Garry Drysdale and Elsie Choy and suggested we would provide a detailed report on the bypass studies on a confidential basis. They requested the maximum amount of information that we were prepared to put in the public domain, so we prepared the public submission first. We will follow up in due course by providing detailed reports on the bypass studies.

MR COX: Thank you very much for that. You raised the issue about what should be in reference tariffs and what is negotiated. You obviously thought much more should be in a reference tariff than is the case at the moment. Can you give any guides to the Tribunal as to what should be reference tariffs and what should be negotiated? How do we decide that question?

MR RANDALL: I think the decision is on the basis of what we realistically assume people will want to use. Based on the information we have tried to put here, we have listed probably half a dozen things that we think will legitimately be used in the next five years. Two years ago, I guess one did not expect there would be too many changes, but this is setting the framework for the next five years. As we sit here today, things will be a lot different in five years time. A lot of things will happen.

There will be more than one retailer in the market in New South Wales. There will finally be the opportunity for people to move gas in, whether it be via the interconnect, out of the Cooper Basin, or out of the EGP. So a lot of different companies will want a lot of different things out of this system.

At the moment the system is pretty well tailored for the existing arrangements, if you like, in terms of AGL Networks and AGL Retail, but more opportunities for different people will come in. There is no point building bypass pipelines if you do not have any gas. If people have some gas and want to move some gas in the system, then there is potential and these bypass pipelines will be built.

In theory there should be gas flowing into New South Wales now. We might have a slight supply problem coming out of Victoria at the moment, but we do have a potential now of other suppliers moving gas out of the Cooper Basin.

THE CHAIRMAN: These bypass risks are in some sense accommodated both through the provisions of the code and the arrangement and the commercial reality. I might say, playing devil's advocate, at the end of the day, there will not be the bypass because you'll negotiate a price; it will be a negotiated tariff with network. That may or may not flow through to others, depending on how that is accommodated in the next review period in terms of prudent discounts and so on. Why should we be so excited?

MR MAWBY: I will make two comments on that. You talk about negotiating with AGL. That has been raised on a number of occasions today. It is a bit like banging your head against a brick wall. After a time, you get fed up with banging your head against a brick wall.

Secondly, you require some certainty going forward that you will be able to use the alternative energy sources or gas sources or gas supplies that enter New South Wales; whether it be from the Cooper Basin or Victoria or anywhere else, we need to have access to the gas pipeline, et cetera. If we are to achieve that certainty going forward, knowing we will get supply at a reasonable price to our plants, then we will build a bypass. We can borrow money at under 6 per cent at the moment. Why the hell should we pay 8 per cent real return to AGL? It is crazy.

THE CHAIRMAN: Thank you very much indeed, I think that has been most helpful.

MR MAWBY: May I make another point, please. The fact that the forecast is for no growth in the contract market is a sad indictment upon AGL and their marketing - obviously they are very effective in growing the market.

We produce glass bottles in all mainland States in Australia. We have some choice as to where we produce those glass bottles. At the moment, we are investing $65m on a new furnace in Adelaide. It was not the only factor but the price of gas is a lot lower in Adelaide than it is Penrith. If the price of gas in New South Wales were more competitive, there would be more opportunities for industries which use a lot of gas to move into New South Wales.

THE CHAIRMAN: Though, presumably, the gas that you use in Penrith comes from South Australia, so there is a transport cost.

MR MAWBY: It certainly does - same gas.

THE CHAIRMAN: Thank you very much. We will break now until 2.15pm.

(Luncheon adjournment)

PIAC/NCOSS

THE CHAIRMAN: We will resume the public hearing. Would you introduce yourselves, please, for the record.

MR S RIX: My name is Stephen Rix. I am the principal policy officer for the Public Interest Advocacy Centre.

MS T BENSON: My name is Trish Benson. I am the senior policy officer at the Pubic Interest Advocacy Centre.

MS K LEE: My name is Kate Lee, from the NSW Council of Social Service.

MR RIX: There are a number of matters that we want to present to the Tribunal today. The first of those is to provide a brief outline of PIAC, which I understand will be more advantageous to the audience than to yourselves. Some topics in respect of the actual inquiry that we want to deal with are the information provision by AGL, cross-subsidisation, retail competition, operations, marketing and administrative costs and Kate Lee will deal with low income and affordability issues.

The Public Interest Advocacy Centre is a community legal centre, and the utility consumers advocacy program is a project of the Public Interest Advocacy Centre. It is funded by the NSW government to provide an independent consumers voice in the utilities market.

Activities that we undertake include resourcing of community representatives, consumer representatives, involvement in information and capacity development, particularly among community and consumer reps, and as part of that we run conferences, seminars, and also distribute a newsletter.

We have representative reference group made up of a number of organisations from the consumer and community centres. We are also directly involved in advocacy on behalf of community and consumer interests. For example, we have a member on the AGL customer council.

Having provided that brief introduction to PIAC, I will pass over to Ms Benson to discuss information provision by AGL.

MS BENSON: I was pleased, Professor Parry, that you raised the issue of information provision by AGL this morning. From PIAC's point of view, the information that AGL has provided lacks detailed information on how to make judgments on the proposal which will actually affect residential consumers. I think that statement forms the basis of our submission. As it was extremely difficult to elicit from the documents even accurate figures for example of the value of the DORC.

The document also does not, in PIAC's view, contain coherent arguments for many of the propositions that AGL makes. There are a number of examples that we have provided in our submission which outline the above claims. I suppose at the very least AGL needs to provide detailed information to enable consumer and community organisations to ascertain how their proposals will affect residential consumers.

Briefly I would like to talk about the cross-subsidy that AGL maintains still exists between the contract and the residential market. As a quick overview, the information fails to provide evidence, we believe, for the continuance of a cross-subsidy between the contract and tariff markets.

We want to highlight four points that were not taken into account by the AGL information, which are also highlighted in our submission. The first is the increase to growth in the tariff mart and how this impacts on the price increases over five years.

The number of tariff customers requires a guarantee of the revenue needed to eliminate the cross-subsidy. AGL has worked out, as an average, the increase to bills. However, the revenue part could mean that there is significant price increases in some years for residential consumers. That is, they could be subjected to substantial price shocks.

There is also no forecasting in the information for loss of tariff customers after the introduction of contestability in July 2000. I would also like to make a general comment that there is very little information provided by AGL about the impact of retail contestability on their business. We also don't believe that such forecasting is difficult, given the experience in both the UK and the US. I would like to hand it back to Steve Rix who talk about retail contestability.

MR RIX: In respect of full retail contestability, which is due to be introduced in a little over 12

months, the fact of the matter is that the price regime which IPART administers will establish the base from which future pricing decisions will be made, either by regulators such as yourselves or by market participants. It will establish the base level. This is an important, even if or when full retail contestability is introduced. I have deliberately used the word if.

At present consumers are largely unaware of these developments. That is our experience as PIAC and it is our experience through the utility consumers advocacy program, and also through the links that we have are other organisations in our reference group.

This lack of awareness was brought most glaringly to our attention at a seminar which we organised for customer council members of electricity, water and gas - all three - in February this year. It became obvious to us that the lack of information which consumers have about market developments permits politicians and others to claim credit for things which are already in place, or to have part of their policies based on incorrect information and, in particular, and while it refers specifically to the electricity industry, I'm sure it would occur in other industries as well. There was one party which argued that they will ensure price reductions through the introduction of full competition, which had already been decided some years ago, and their characterisation of the energy industry ombudsman in NSW, which AGL has not yet joined, was also incorrect.

This led us to make two recommendations. In brief, they were that IPART recommend that a community education campaign be introduced prior to the introduction of full retail contestability, and we have made no recommendation about who should pay. We simply know that it shouldn't be us. Whether the industry pays for it, the government pays for it or the regulator pays for it, it is essential that that occurs. Second, for customers who remain linked to a monopoly supplier in one way or another, even after the introduction of full retail competition, price regulation should be maintained.

In conclusion, we have noted in our submission a number of areas where PIAC needs to do further investigation and obtain further information, and indeed talk to a lot more people. We will be providing that over the next few weeks or months.

MS BENSON: Could I add something to what Steve Rix said about the public information campaign. It would seem to me - and it is documented in our submission - that we need to look at people who have different information needs: older people, people with a disability, and people from a non-English speaking background. I thought I should add that because it is important.

I want to speak about two issues before I hand over to Kate. I was pleased again, Dr Parry, that you raised the issue about the administration of general costs and marketing costs with AGL this morning. It is our belief that administration and general costs are unreasonably high. I would like to reiterate that AGL's cost per customer for administration in general exceeds the Victorian average by over $20 per customer, and their costs for marketing exceeds the Victorian average by over $40 per customer.

I would like to add an extra point made this morning about marketing. AGL in 1988 spent $35.7m on marketing. I am not convinced of the argument that is AGL put in its submission this morning about advertising in markets that have warmer climates basically. It is our understanding - and I could be corrected - that those figures actually only apply to their network business. I am at a bit of a loss about such a high figure. Unless things are ring fenced reasonably well, it is our understanding that the marketing costs should just apply to the network business.

The one thing that we haven't covered in our submission is the issue of trigger mechanisms or the length of the determination by IPART. This is just an initial response to a question that was raised with me. There is an issue of actually having a shorter determination, or having a trigger mechanism which basically shares the benefits if there is any increase in the volume of gas carried.

At this stage PIAC, I think, favours having a shorter determination. I think we have three reasons for that. This, I would like to say, is still preliminary. On the provision of AGL information - and it is what I can only describe as having significant deficiencies - no-one yet has mentioned, as far as I know, the eastern pipeline and how this will affect AGL's business. The third one is the introduction of retail contestability and how that will affect AGL's business. Kate will talk about affordability issues.

MS LEE: NCOSS is the peak body for social and community services in NSW representing the interests of low income people and communities. We have already submitted to the inquiry, and you have our written statement, that in the main we support the argument put by PIAC today in their submission. I will briefly emphasise some of the affordability issues that we see for lower income people in NSW, and increasing evidence of the rising need for assistance and rising increase in affordability of living costs in this state.

While that may seem a bit removed from a gas inquiry, it is an opportunity to cover the crisis many people are facing in meeting basic living costs of which utility costs are one. There are over one million income low income earners in NSW and many live in or near poverty. The evidence that we have of increasing need amongst low income and disadvantaged people is - and I will highlight a few key areas - that in November 1998 the Australian Council of Social Services released its "Living on the Edge" survey which demonstrated that there was an increased demand for community welfare services amongst 65 per cent of the agencies that were surveyed.

The main reasons cited for the increase demand was an increased level of need, and more complex problems affecting clients of services. You will be aware that many people seek cash assistance from welfare services for payment of utilities bills. Although in NSW assistance for gas bills is not yet available, 4 per cent of services are turning away increased numbers of low income people without being able to offer any assistance at all.

In 1998, an evaluation in NSW of a program called the SAP program, which funds refuges and medium term accommodation for homeless people, indicated that 27,000 excluding children, were turned away from those services in 1996-97 in NSW.

This is largely to do with the crisis in availability of affordable housing in this state, particularly in Sydney but also in the rest of NSW. Housing inaffordability has doubled for low income households in the last 10 years.

We now see waiting lists for public housing at 96,000 in NSW, and in the private rental market we see increased inaffordability in that market as well, particularly in relation to an increased demand for rent assistance, which is the direct payment by the Commonwealth government to individuals to help pay private rental, and also those people in receipt of that assistance are now paying 45 per cent of their income in rent, and 30 per cent is considered the benchmark at which housing stress occurs. This is increasing considerably amongst low income people in the state.

Specific to utilities, the Smith Family last year surveyed its client base in late 1998 and they found that 75 per cent of their clients indicated that they don't have enough money to pay for electricity gas and water bills. This was the highest ranking issue in both metropolitan and country areas of NSW. So I have just highlighted two indicators of the increasing inability of low income people to meet the increased costs.

Generally, our organisation would take the view that IPART would need to take some of those broader issues into consideration when looking at whether, as AGL indicated in their revised access arrangement, the "household sector" can sustain price increases. We don't believe this holds true for low income people. In the absence of any mechanism at present to separate low income households and buffer them from price increases, we maintain that additional price increases in gas will increase the burden of the cost of living for low income people in NSW.

It is becoming increasingly evident to us that the industry does not know enough about its customer base in order to make these distinctions in the tariff market. We would encourage IPART to do some work here and also fund the community sector to undertook some joint projects, possibly, with industry as well.

THE CHAIRMAN: Thank you very much for that and thank you for your submissions. I think we also would like to thank the community groups for being involved in this process, which does help us see some other perspectives. That is useful.

One of the difficult issues we keep coming back to is, once we have formed a view about an appropriate pot of dollars, which in itself has some twists and turns, is the cost allocations and the cascading of the recovery of those dollars between the different parts of the market. That clearly is of potential importance and interest to those groups that you represent.

In your submission you expressed some views with respect to the issue of fully distributed costs allocation, as opposed to the stand-alone

costs allocation, and other angels-on-pinheads, debate, but it is important. I wonder if you want to on this occasion perhaps elaborate a little on your thinking about costs allocation methodologies with respect to impacts on the tariff or the household. It also includes the small VIC.

MR RIX: What we talked about was the move to fully distributed costs, but we also added a rider on that, which was upstream and downstream. In other words, those people who use the transmission network as a means of transporting a product, which they sell on to an end user, should also be required to pay some of the costs of that transmission network.

I think we used pretty much the same sort of argument about the electricity industry and the distribution of costs to generators. This is an argument that is very similar. We then went on to say that after a certain point, which we have suggested IPART determine, the communal or postage stamp pricing would be applied for equity and environmental reasons.

It is possible for us to go back and provide you with more information on the recommendation that we have made which we would be quite happy to do if you should require that, but I just want to point out that we did talk about distributing costs upstream as well as downstream, and that we do talk about the application of a communal or postage stamp pricing after a certain point.

MS BENSON: I think we are working on a benefits principle, that everybody in the network benefits from use.

THE CHAIRMAN: But how you allocate or determine those benefits is the tricky part.

MS BENSON: Yes.

THE CHAIRMAN: We will take you and others up on that important issue. You have preempted my second question, which was postalised pricing. You probably have already answered it by saying that you would like IPART to determine at what point you cut into that. The proposal before us is a move to an even greater postalisation. Is that something that you have a view on, to treat all of NSW as one?

MS BENSON: I think we need to take that on board and provide you with more information.

THE CHAIRMAN: Another issue that you have raised -

and it is one that is not confined to gas, it goes to electricity - is the question of contestability and competition. There certainly are - and I must confess I don't recall what is yet public and what is not yet public, costs associated with contestability - capital costs and other costs. There will be some costs subject to regulatory scrutiny associated with the ability to choose a gas supply. Do you have a view about the appropriateness of incurring and passing those costs through to customers, including customers in the tariff part of the market, so that they may have the delights of being able to choose their retail supplier.

MR RIX: I am glad it is you who have described it as the delights of being able to choose the supplier. The question of contestability and who bears the cost of introducing contestability, as you have pointed out, is an issue not just for gas but is also an issue for electricity, and may in fact be more of an issue for electricity in some respects than it is for gas, because of the metering situation, although the issue also does arise a little for gas I think in terms of the quality of the gas that is provided at any given point in time. I would have to check that a bit more closely.

The issue is who are the beneficiaries of contestability, and who therefore should bear the cost of the introduction of a contestability market. Contestability is one of those things which is claimed to be of significant advantage to end use customers, particularly residential customers. My understanding of the international situation is that in most jurisdictions there has been a very low take-up rate by residential consumers of energy products, except in the case of gas in the UK. I think that there are some specific circumstances which go to explain that situation.

So the question is, then, if consumers internationally are showing a marked reluctance to take part in the market, who is the getting the benefits of creating a contestable market? The answer would have to be two other groups. If it is not residential consumers, in fact it is three other groups. If it is not residential consumers, who is it? It is the contract market, it is the network provider who has the advantage of shifting gas more than one supplier, and it is also the suppliers of gas at the well head, if you like. That's a term I use.

In that situation, the bulk of the costs of the introduction of a contestable market should be borne by those who get the most advantage. If you want to drive the benefits down to the residential consumers, then the issue of cost allocation is an interesting one, and you have raised it. But the question is, how do you make it desirable for residential consumers to take part in a competitive market? That should be the primary concern of all those who are actually advocating a contestable market. How do you make it desirable? If it needs to be made desirable for residential consumers to actually join in a competitive market, then those who are arguing for its desirability surely should be those who bear the cost.

THE CHAIRMAN: But, if I understand you correctly, you are extending beneficiaries' concepts of cost allocation right through, including the cost of contestability.

MR RIX: Yes, but we are saying, who are the primary beneficiaries in the case of contestability, and, as I have said, the fact that residential consumers internationally appear, from our knowledge, to show a marked reluctance to enter the market, it is not residential consumers who in the first instance get the benefit; it is others in the market.

THE CHAIRMAN: Finally from me, you have raised an interesting issue, that is one of triggers which the code - to the extent I understand the code - does allow. I don't think there have been a lot of submissions on triggers, but it is clearly an issue that we have potential interest in. You see triggers as perhaps a substitute to the length of a determination. I think you mention volume benefits as one potential trigger. Again, it may be something that you want to take on notice, and perhaps others may want to take on notice. Do you have other thoughts about what triggers may be appropriate, I guess always bearing in mind the reluctance to have too many things in there which perhaps make a determination, or a period in which an access undertaking is in force, potentially meaningless if you have lots of figures. Do you have any other thoughts on that?

MS BENSON: Not at this stage. When I was saying the three reasons why we were preferring a shortened determination, it would seem to me that it is not only increases but it could also be decreases in volume, especially around the eastern pipeline, so that could well be an issue. We can get back to you on that.

THE CHAIRMAN: I think we would like to have that on the table as well.

MR COX: Thank you very much for your submission and presentation. I guess I am rather uneasily aware that you are one of the very few groups appearing before us that will speak on behalf of residential customers. It is not entirely clear, but it looks as though our proposal is for increases in tariff market prices in general, network prices, which would naturally flow through to increased prices for residential customers, one would imagine. It is not entirely clear. I guess that is something we have to grapple with. I guess what I would like to hear you speak on a little more is, to what extent a price increase is acceptable to residential customers, both customers in general and also, in particular, those with low incomes.

MS LEE: From our point of view, as I have indicated, in terms of speaking specifically about low income people, price rises will impact enormously given the huge range of affordability issues in housing, in a whole range of Commonwealth government cut backs, in employment assistance, for instance. The difficulty is in separating those people out from the main group in terms of being able to buffer them effectively. It may be arguable that other parts of the residential market can sustain increases but, from our point of view, low income people cannot. There are very few mechanisms in place to support their capacity to pay increased prices. They are not there. The basic concessional voucher arrangement that exists for electricity only goes a fraction towards their costs. So it is not there for low income people.

MS BENSON: I would like to go back to AGL's rationale for having proposed price increases in the tariff market. They are saying there is a cross-subsidy.

MR COX: That may or may not be so.

MS BENSON: If you say that there is no cross-subsidy, you then have to say there should be no tariff increases. That's our point. I think we have said in our submission, but it was brought home to me this morning, that AGL keeps saying that the tariff market is profitable. I am an armchair economist and I fail to understand that, if you have a profitable tariff market, they are not paying their way. They may not be paying their way as much as some people would like, but that implies to me that there is no cross-subsidy. I just wanted to make that point.

MR COX: Suppose on further investigation you find that there is a cross-subsidy, in those circumstances are you prepared to accept some price increase to residential customers to remove that cross-subsidy?

MS BENSON: Possibly. We have not done any detailed research about how much price increases people will wear. I'm sure IPART is probably better placed in some respects to say what price increases will shock residential consumers. We will take that on notice.

MR RIX: You will recall that some years ago IPART, I think then as the Government Pricing Tribunal, did a survey of residential consumers in the electricity, gas and water markets which produced some very interesting results. I think that each of us sitting at this table would actually find it amazingly useful if IPART did it again, because that was a document which became a resource which was useful and usable over quite a considerable period of time. I think it is beyond its use-by date.

THE CHAIRMAN: We will certainly look again at that.

MR COX: We will. Perhaps we should take that on notice, and if you could take that issue on notice as we are anxious to hear from you. You say, I think, that there should be some price regulation following contestability. Could you explain what you have in mind a bit more please? What should it be? How should we do it?

MR RIX: There should be price setting by the regulator for those elements of the market which, for various reasons, do not join the contestable market, or cannot join the contestability market. We made the same recommendation in respect of electricity. There will be consumers who may not even be invited to join the contestable market - let us call it a dance, the contestable market dance. If they are not invited to join the contestable market, they are going to be, essentially, consumers. It is important that that class of consumer be protected be from unjustified tariff increases in what would otherwise be a competitive market.

MR COX: Are you suggesting consumer price control or something for small customers?

MR RIX: Yes, for a class of consumer.

MS BENSON: There is a similar situation in telecommunications where Telstra still have CPI minus X on a number of services, despite competition.

MR COX: So you form a judgment about which customers could expect to benefit from competition or who could reasonably expect to?

MR RIX: I think you would have to take into account what Kate has said about the lack of information which is provided, or which is able to be provided, by the companies about the nature of their customer base. It can't be done without that information.

THE CHAIRMAN: I guess you wouldn't want to have a regulatory system designed that prevented competition opening up as information improves?

MR RIX: No.

MR COX: I have one more question, and it relates to the public education campaign. Again, this is perhaps a question you might like to take on notice. Could you develop your ideas about what exactly is required?

MS BENSON: Sure. It probably needs to be applied to the electricity retail contestability as well. I think it is very important.

THE CHAIRMAN: There have been some increases in the fixed charge by AGL as part of the old Gas Council formula. Has there been any experience of problems, either generally for residential customers or in particular for the low income groups, with these changes of fixed charges in gas?

MS BENSON: Not necessarily complaints about fixed charges. There are some consumer groups who strongly dislike these charges. I think fixed charges would be more acceptable if people actually understood what they were. I know that some of the pensioner groups are strongly opposed to fixed charges in general.

THE CHAIRMAN: I have been reliably informed that recently the gas companies in Victoria have announced that they will participate in the Victorian energy ombudsman scheme. We will ask AGL in their final session tomorrow to comment on that. Thank you very much indeed.

FORCENERGY

THE CHAIRMAN: Finally for today, we have Forcenergy. We ask you to identify yourself for the record and we will see how we go.

MR GILL: Glen Gill, vice-president marketing for Forcenergy Australia. We are a new entrant to the E&P companies of America, out of Miami, Florida. Our busiest area for drilling happens to be New South Wales, so we have a bit of a different perspective. I will explain a bit of the background.

I would like to go through about a 10,000 foot view rather than go into detail. We talked in a lot of detail this morning and there is a lot of detail in my submission, but I would rather just set the stage and challenge a few paradigms.

We are basically a Miami-based independent oil and gas company. We are not vertically integrated. All we want to do is find gas and oil and produce it. We are quite a quick growing company, as are many new entrants when the market is actually opened. We work predominantly offshore in Alaska and in the Gulf of Mexico, We are predominantly an offshore player but in Australia we are onshore.

(Overhead: "Current Production Profile")

Just to briefly show our production, we predominantly drill for gas. This is often the scenario with new players in America who actually drill for gas rather than oil. You might find this is totally backwards to Australia where gas is sort of "Oops". It is better than water, but in Australia, it is not a targeted production yet.

(Overhead; "Forcenergy / First Source Energy Alliance")

I will talk a little bit about New South Wales gas activity. We basically have an alliance with another US company out of Michigan. We have a multiple basin position across the country in 10 basins - all onshore. We are targeting gas, which is a contrary type of strategy, but we think it matches the opening of the market, and we have no excess baggage. We have not done an alliance with an incumbent player for a very good reason and we are happy to challenge the status quo. We think a lot of challenging has to be done.

(Overhead: "PEL 238 Prospect")

Our prospect in New South Wales is really up in the Narrabri area, and it is called PEL 238. We have drilled about a dozen wells to date. We think there lots of markets in New South Wales and the east coast, but yet to be demonstrated, actually in our view, is emphasis on effective open access on the AGL system.

(Overhead: "What attracts us to New South Wales?")

What attracts us to New South Wales is the fiscal regime. The State here really wants to develop a gas industry. We are attracted by the liberalisation of the gas market in the State and across eastern Australia. It is relatively unexplored with, we believe, lots of potential. We have close proximity such as real estate locations, and contrary to AGL, we think there is a lot of latent demand, and I will come to that. To say otherwise we believe is nothing but rhetoric.

The hope of low cost transportation tolls on the AGL system however is a fundamental tool in being successful, not unlike the eastern gas project. Incidentally I was at BHP and started that project so I know a fair bit about that.

(Overhead: "Historical Drilling Activity")

Historical drilling activity in Australia is pretty low by North American or international standards, but it is still significant. New South Wales, however, has had no activity until recently. You can see recently there is a lot of hope and the State is really promoting its resources. We are a big part of that. I think we are the dominant landholder in New South Wales and the dominant driller for gas.

(Overhead; "The Resource is out there!")

The resource is out there. These are pictures actually of gas found up in Narrabri, just to show you there is hope. This is out of coal seam methane. We have both coal seam methane and conventional gas.

(Overhead: "Historical NSW Gas Demand")

We think the status quo situation in New South Wales is very dismal if not embarrassing. The contract market has been killed. We say there has been 13 years of stifled demand. To say that that is the future of New South Wales is

not good. There is activity in the residential commercial market, but we do not believe the forecasts of demand by AGL are very accurate at all. We think a five-year period is very dangerous for that and other reasons.

It has been proven around the world that the industrial market is actually very gas sensitive, highly elastic to price and grows tremendously once deregulated with open access on transmission. Even in mature markets like America, it grew 25 per cent. So to say in a market that is typical to New South Wales that it has no potential is problematic. We think, actually, what is behind a lot of this is the development a bit of a war chest to keep new entrants out of the marketplace.

(Overheads: "Gas Penetration" and "State Comparison")

This is another statistic that is nothing for New South Wales to be proud of. The gas penetration in New South Wales and Queensland is very poor vis-a-vis the rest of the country and very poor by international worldwide standards. We think it reflects a market failure. Maybe it is the circumstance that both of those States are dominated by cartels. We believe that Santos and AGL are charging fairly high rents.

(Overhead: "Market Reform Resistance")

Market reform resistance probably comes as no surprise when you are vertically integrated with these positions. AGL owns the pipeline to the existing supply basin and to Victoria. They own 100 per cent of the distribution essentially in the state. The two trunk lines we think are really pipelines not networks at all. Of course, they serve gas to all but two of the 750,000 customers. The only two are Sithe, where they flip the gas to BHP, and Incitec. Incitec are the brave ones who actually tested the system. That is a very entrenched monopolistic system. It is very dangerous. Most places would not have it.

(Overhead: "Little has changed in 158 years!")

Little has changed in 158 years. AGL's first customers were convicts and 750,000 still feel like prisoners. I apologise for the truncation of the slides on the screen.

Somehow I am missing a slide on California which you might find interesting. The situation in northern California was analogous to AGL's entrenched position in this State. Pacific Gas & Electric used to own the market. They basically served all the customers. They owned the pipelines to Canada, where they bought all the gas. They had gas under contract for 15 years with producers in Canada with take or pay, very similar to the Santos contract.

The regulator in California, the Public Utility Commission, opened up the access to the market in California, at least on paper. After two years, the regulator looked at it and not too many people had left the utility. They said it was not working and they prohibited PG&E from actually selling gas to the contract market.

This is where intervention sometimes has to happen. They actually made PG&E sell their pipeline to Canada and disband all their gas supply agreements with hundreds of producers and to sell the marketing company. They had six to nine months to do that. It was quite a quick process. I was there at the time and that is what the regulator did to PG&E, which is a very large company.

(Overhead: "Pricing Methodologies")

This slide shows some pricing methodologies. It is supposed to say "Cartel" over at the bottom right-hand side and above it, it should say "Market Bearable". Really that is what AGL is proposing to do with the contract market. I think they misquoted my submission a bit. Under competition, occasionally you have an adequate return on your long run marginal costs. You cycle down to short run marginal costs and back to long run. Time is the only thing that keeps you. It depends on which part of the circle you are in. We see that in electricity today with the pool pricing.

I believe AGL is proposing to charge the tariff market based on short run marginal costs or something but a small contribution to fixed, and the contract market is up here and I cannot see how that is acceptable.

(Overhead; "Change force field for NSW")

I am sorry these slides are all truncated. A lot of forces are trying to drive changes in New South Wales. Of course, IPART is one of them. We are hoping that they will actually accelerate change. There are a lot of forces, as in any time of change, trying to stop it. They include the high distribution margins that AGL charges. I am sure if AGL were prohibited from

selling to the retail market, their tolls would change drastically to the contract market because they would be looking for volume and other people are doing that for them. The recapitalisation of EAPL did not help. The slide also refers to free and fair trade, in the top right-hand corner.

We have a vision for New South Wales. We do not think that the past is representative of the future at all. It is really up to this group here to make sure that change happens. The 13 years of stifled demand should not be extrapolated for another five. We think that is important in this State, otherwise it will be at a disadvantage, and we heard that about that this morning.

(Overhead: "Why settle for anything less?")

ABARE and others forecast a lot of growth. We hope that New South Wales will not miss out on all this. West Australia has charged ahead in a big way. Why settle for anything less? Multiple city gates are really what it is all about. We talked about Wollongong with the eastern gas pipeline. We would like to build a pipeline down to Newcastle, or have someone build one, coming from the north with New South Wales gas.

We believe that interbasin competition is very good, and we are a producer. Cooper versue Gippsland versus indigenous New South Wales, Gunnedah basin, whatever, is very healthy. We believe that gas penetration going to 25 per cent is not unrealistic and should be a target for this State. For a developed country and a developed economy, that is a worldwide average.

We believe city gate prices could decline by 10 to 20 per cent in real terms in the next five years. These are discontinuities that you really have to watch in a five-year forecast of demand. It is not steady state conditions. Delivered prices to industrial customers we believe could decline by at least 50 per cent over the next five years with the right open access environment.

(Overhead: "Eastern Seaboard Latent Demand")

ACIL see a lot of elasticity not so much in Victoria but particularly north of Victoria. I have an expanded version here of Sydney. We think they are perhaps a little conservative based on work we have done, but you can see a $3 delivery price and a lot of growth in the market. Of course, at $6.50 or $5.50 there is not growth, but we hope that is not extrapolated.

Einstein used to say, "No problem can be solved with the same consciousness which created it". We are at a time of change here, not a time of status quo or base line looking back 13 or 15 years. Let us keep that in mind.

(Overhead; "Translating Vision & Strategy")

In terms of vision, we believe gas reform has four components to it. New South Wales has contestability schedules and is very aggressive on the retail competition. Efficient regulation has really started here. I used to make trips up to the Gas Council way back in 1994. We talked a lot about stranded costs and so on and had a debate for a number of years. Pipeline connections are happening with the Wodonga-Wagga connection, the eastern gas pipeline and hopefully others.

Really what is missing is the wholesale market or the bulk market. We think that is a key. With a wholesale market all this happens; without it nothing really happens. That is why we are not seeing any contestability. The wholesale market is really driven by the industrial, the contract market. We believe that is really a wholesale market. Those are wholesale participant, and we say residential commercial is retail.

(Overhead: "The 1990s")

In the 1990s, what is in? Unbundling, gas to gas competition, accountability, economic regulation of monopolies, free and fair trade on the commodity side of it, menus of service offerings are all in. You hear this everywhere. What is out? Utilities selling gas really doesn't make the market work. Cross-subsidies are leaving everywhere. Secrecy, government protections, monopoly rents, utility mentality, which we really have to watch here, and anti-competitive behaviour are things which, hopefully, are leaving. When will we join this program? I think it is high time. The transition should be over, in our mind.

(Overhead: "Definition of 'Effective Access'")

There is access and then there is effective access, and there is a big difference between the two. As we saw in California, it was not effective so the government intervened. You need full disclosure. We believe that we do not have full disclosure at this time. We agree with those who commented that there needs to be a

whole rework of the information.

It must be non-discriminatory for all players. AGL Retail cannot make special deals or have a war chest of funds set aside to keep retail players out of the game. In our view, either we have that or we have a prohibition on them selling gas to the contract market - whatever they want.

Flexibility must be extended to shippers, i.e., no onerous penalty for being out of bounds. If it is not a problem to the system, there should be no onerous penalties at all. We need transparent services and rates - meaningful ones not the ones you discount off. We should follow user pays principles and have less minimised cross-subsidies.

We need standardised contracts. Fair asset valuation, we heard about that. There can be no artificial barriers. There should be no differences in gas quality between New South Wales and Victoria. Gas should be fungible and then the wholesale market works. We need a reasonable certainty of long term tolling methodology. That is where we are looking to the regulator to give us a lot of certainty.

Talking about either bypass or negotiate is really a regulatory failure, in my view. People need certainty as to what the methodology is and they need to know that they we can trust IPART to discipline the monopoly.

Queuing procedures have been a very big problems, as well as interconnections. It was a big problem in Queensland when I was up at Allgas.

(Overhead: "You will know that effective open access exists when you see the following is observed:")

It is a bit like pornography - it is hard to explain open access but when you see it, you know it sort of by the fruits of it. You really should have multiple shippers everywhere on the transmission and distribution links. If you do not have all these things, you do not have open access. You have intermediaries standing between customers and suppliers and between end users repackaging. You have an exhaustive menu of services, not just two or three. As Henry Ford used to say, you can have any colour you want as long as it is black, and that is what utilities tend to offer people. You have only a small fraction of customers really purchasing system gas from distributors, and that is not bad.

In America we saw a lot of growth in volume. Distributors always think this is terrible because they are not in control. What really happens, if you talk to them, is they make a lot more money in volume and the merchant function, they let it go, gladly. Vertical integration will no longer be a concern. So all those concerns about AGL owning everything do not have to be a problem; it is a problem only if we do not have effective access, and then you get a very healthy vibrant industry.

(Overhead: "Effective open access on AGLGN")

With effective open access, you maximise use of industrial power generation sectors. We saw you huge growth in America. There should be many more times that growth here. With effective open access, you encourage the development of dormant gas supplies, i.e., New South Wales gas production, even unconventional gas.

It is interesting that in the Fortune 500 recent listing, Burlington Resources was selected as the most favourable mining oil and gas company in America. They are built on coal seam methane, so do not discount coal seam methane.

Effective open access will maximise the use of infrastructure and result in many retail wholesale and participants. That is where it will lead to, in our view.

{Overhead: "Distribution costs in Australia are off the planet')

I have just a few closing observations. I had a picture I wanted to show you, but this is more important. The other slide showed a policeman setting a radar screen out in the outback somewhere, policing the speed limit. Let us police industry appropriately by going for the 80/20 rule.

This slide shows distribution margins. The first five are in Canada. The first two show 23 cents Canadian per gigajoule. That is very close to the Australian per gigajoule. These are averages, so there will be people better than this. This is for the whole industrial segment of the market. You can see that from the point of view of manufacturing industries, industrial market participants in New South Wales competing on a global basis do not have much hope with today's tariffs. This is what creates the jobs and gets the economy going.

You can see the US is a little bit higher. This is some benchmarking that the Ontario Energy Board did to see if they could keep industry in Canada. I think New South Wales should be trying to keep industry in New South Wales and attracting industry from the other States. You will not do it under the proposed access arrangements.

(Overhead: "The secret to success in America")

Again this slide is cut off, but you can see over time what happens when you have competition. This is in America, which is a much more mature market. You can see everything has decreased, and I have forgotten the numbers. What is more important is that industrial customers are down 25 per cent, I believe, with power generation $2.74 going down to $2.02. This can happen in this State. There is no reason that it can't happen. That stimulates demand in a big, big way, so it is all about price.

(Overhead: "How does the entire value chain look?")

Here is little more benchmarking data. Unfortunately it is cut off, but it shows different units, US dollars. Do not worry about the units. If you look at per cent terms of delivered prices, that is what you have to focus on. You really have distribution and storage margins of 53 cents on average in the US. If you do a per cent of delivered price, it is very low. I forget what it was in Australia. In New South Wales it is very high and that just kills the market. It was 3.36 out of 6.88, so almost 50 per cent. That does not cut it.

(Overhead: "The brave new world of global competition")

Everyone is going through tough times so I feel for AGL a bit - perhaps. This is the mining sector in Australia. You can read all about commodity markets, the WACC. We do not agree with the WACC level at all. It does not reflect the risk profile or the opportunity profile that AGL has. Every oil and gas company has suffered with the oil prices. I think we all have to suffer together to get the economy going. There are no free lunches. I suggest it is not so much like a banquet but a six-course dinner.

(Overhead: "AGLGN's growing credibility gap")

There is a bit of a credibility gap and that really is a problem. AGL's position is on the left of this slide and the mainstream position is on the right. We have heard a lot about that today and I think you will hear more tomorrow. There is not much in AGL's position that is a mainstream position; therefore, their credibility is gone. We think it has to be significantly reworked.

(Overhead: "Stomp out AGL's rhetoric")

We have to get rid of market bearable pricing, cross-subsidies, inflated asset bases. I hate this "No worries, mate", I think we have a lot of that here. Every time I hear that, I worry. But to hear "Trust me, I know what's best" from a monopoly is not a good sign. Market control is really favouring the retail part of their basis, and we have to get rid of anti-competitive barriers. I think there is a lot of that in AGL's submission. That is all I have to say.

THE CHAIRMAN: That gives us a perspective of a potential gas producer. If I distill from your submission and from your presentation today, for which we thank you, you are saying a number of things. One of the things you are saying is that the cost of the use of the distribution network is too high for a variety of reasons. You indicated that there are some other problems in the way that the current arrangements work. I wonder if I can take you to some of the other non-price issues and ask you to tell us what you see as some of the major impediments in the proposed access arrangement and, in particular, how you see the arrangements working or likely to work in the case of Victoria, or indeed in Western Australia, again in terms of the non-price arrangements for access so that we have some sense of what the really big issues are in terms of open access from your perspective.

MR GILL: I think Victoria has a model that they copied off electricity, which is creating liquidity and an easy entry and exit to the game. I like a contract carriage model, but as was discussed here, the model has to be right; otherwise, you go to the pool model - the market model. I think Victoria's model, if we cannot get it right, should spread across the seaboard because it actually does get the market going. Other than that, I think the services are very, very restrictive. Assuming everybody wants firm service is very, very naive.

Either we are going to get to a free and fair market or we are not. If we are, those are

but two basic services and there is a menu of other services that people enjoy and actually prefer. I've put some of those in my submission. Interruptible service and partial haul were talked about and multiple city gates are vitally important services.

THE CHAIRMAN: You are really saying that a lot more should be spelt out rather than left to negotiation?

MR GILL: A lot more should be spelt out. You cannot negotiate with a monopoly. It is so inefficient you do not do it.

THE CHAIRMAN: I think Jim Cox asked AGL earlier in their session to try to anticipate what a competitive market might want. You have mentioned some what are they?

MR GILL: I think the code says we have to put in anticipated services. Because of these discontinuities, and that's why it took so much time to explain the discontinuities, a lot of services will be required that we probably won't even guess, but we should hit most of them, the ones we can think of. Not to do that is an abdication of our responsibilities. Because you cannot negotiate, you get frustrated, and it leads to economic inefficiency because you tend to not negotiate and bypass and do silly things because you are frustrated.

THE CHAIRMAN: In one interpretation - and I do not disagree with you, I note with interest what you say - the way in which gas regulation has been developed has been as a compromise in one sense against the backdrop of the Hilmer committee report. It really has a model of primarily negotiating and then arbitration. The model that has emerged is, if you like, a "bastardised" version of that. If I hear what you are saying correctly, you are saying, "Look, this is not going to work. You may as well spell it all out and forget the negotiations".

MR GILL: I've negotiated or tried to negotiate with AGL since 1993 on the eastern gas pipe, and they fought that. When I was general manager at Allgas we tried to do things. We couldn't get pipelines interconnected without a huge fight. If you have that position, you are coming from such a position of strength that when you have all the cards, it is easy to win the game. I just do not think it is an efficient process.

If you set up an arbitration, that may works. I have heard of some in Victoria working quite effectively. I mentioned I think baseball arbitration is used in the United States, where if you are extreme, you lose. But with arbitration or negotiation, even arbitration without well-defined references is so inefficient. You are just paying lawyers and you are frustrated.

THE CHAIRMAN: Thank you.

MR COX: Thank you for your interesting submission and your presentation. We discussed briefly the latent demand issue with AGL this morning. They said, "Well, you know, the power market is very difficult. Prices are so low there will be no co-gen for the next 20 years", or whatever. Where is the latent demand coming from? What sorts of loads?

MR GILL: I think I have listed them in my submission, but there is no reason that you should not have more feedstock industry here, Incitec is one company, but that is very price sensitive. Power generation is another. The State tells us they want to move from reliance of 94 per cent on coal-fired generation down to 80 per cent and gas is what they want to use.

We hear all kinds of messages from the government about policy, yet it will not work uphill. The city gate price of gas can be zero and with these tolls, it will not work.

AGL did not do the Smithfield deal. Actually I helped consummate that deal. It was done because BHP did some things differently. All the growth in New South Wales that I think is material was done by BHP over the past five years.

I should mention this marketing cost of X millions of dollars. All they should be doing is selling capacity. If they are marketing to markets that do not want gas or trying to sell ice creams to Eskimos, then that is their business; it has nothing to do with their network business. To market capacity, I think I could do it for less than $1m a year, quite easily.

MR COX: You mentioned in your submission and in your remarks this afternoon that the price to use the networks should come down by about 50 per cent. Have I understood that correctly?

MR GILL: I said delivery of prices to the contract market could come down by 50 per cent quite easily.

MR COX: Can you explain the basis for that.

MR GILL: Well, if costs were allocated properly and depreciation, I think it is easy. We are comparing basically new pipes with old pipes and the new pipes are winning. If you put in depreciation, there is no reason - this State has no different pipeline grid from any other country or State that I have ever seen and if Canada can get it down to 25 cents a gigajoule just through depreciation, I do not understand why New South Wales can't.

MR COX: Essentially you are benchmarking New South Wales against other jurisdictions.

MR GILL: If you just take the cost, DORC or whatever - depreciated actual, I mean - and from when the pipe was built, actually through in the capital contributions as taken off the capital base, I am sure you would get around 25 cents or so. We are strangling the market here. It is just a huge cross-subsidy. It is a self-fulfilling prophecy. If you actually charge that way, of course, the market won't grow.

MR COX: Just to be clear, you are talking about the delivered price to the contract market?

MR GILL: Yes, I think it is twice what it should be.

MR COX: You showed an interesting graph, I think, on one of your transparencies where you looked at the price and what the demand would be in each of those prices. Do you recall that? It is this one here.

MR GILL: That is ACIL's work actually. That is showing elasticity of demand in the price-sensitive market, which is really your contract market. It is feed stock, processing and power generation, and that type of thing.

MR COX: Just to make sure I understand what we have here is the delivered price of gas?

MR GILL: Yes, and how the market would grow.

MR COX: And the demand is the demand, if you like, in the contract market.

MR GILL: I think it is all New South Wales, but that is where it is coming, that is where the growth is, yes.

MR COX: The wholesale market - you said that the key was the growth of the wholesale market. Perhaps you could just explain to me what you meant by that and then perhaps also explain what you think the impediments are to the development of the wholesale market as you would like it.

MR GILL: It depends how you define market. I said it is important to have a wholesale market where people buy and sell gas. That could be traders marketing companies, producers selling to each other. Gas is bought and sold about 10 times - the wholesale market in America is 10 times consumption. That shows you in a very efficient market you buy and sell many times. That is efficiency because you arbitrage out inefficiencies. That is the only way you can arbitrage. So wholesale market is important.

The other way I define wholesale is large end users who are sophisticated buyers, like Mr McLeod. To say that you need a licence to protect them from a retailer abusing them is a little silly. I also include them in my wholesale definition of participants. You need a wholesale market, people buying and selling gas that have options in terms of fuel switchability, or whatever. What you are doing is arbitrating out inefficiencies.

MR COX: What are the impediments of that developing in New South Wales, apart from price?

MR GILL: Well, access. You need access, not on a disinsensitive basis; you need the most flexible you can get. By definition for arbitrage, you need to have a lot of flexibility and a lot of ways to exit and enter the market.

MR COX: Obviously one problem is the absence of alternative sources.

MR GILL: Oh, exactly, but before four or five years is up, we should have a lot more flexibility in terms of alternative sources.

MR COX: I am trying to understand whether there are impediments within the structure of the access arrangement being imposed that would make it more difficult than it needs to be and what needs to be done to address that problem.

MR GILL: There are significant impediments. You need to develop a hub, if you will. If you research the successful hubs in America, they are very successful where you have multiple buyers and sellers trading gas. Sydney could be a great hub with these pipelines that are being proposed. To do that, you need to have a backbone system of pipelines. That is why I think the trunk lines are really pipelines and

the sooner they are treated that way, the better. The tolls have come down, but they are still way too high, given the historical costs and the volumes that flow through those. Then you start to have a wholesale market transacting on the three pipelines coming into New South Wales plus on the trunk line. That would happen very quickly. Victoria has created a wholesale market through the pool. That is what a pool does.

MR COX: But that was a sort of fundamental design option that we may not have in New South Wales.

MR GILL: Well, it is a different model.

MR COX: I am wondering what there is within the context of the access arrangement that is now in front of us.

MR GILL: You need interruptible rates, you need backhaul rates, you need disinsensitive rates, you need to be able to sign up for one-month deals, or whatever - you need lots of flexibility.

MR COX: Thank you.

THE CHAIRMAN: Thank you very much for that. That was most helpful. That brings today's hearing to an end. We will resume tomorrow at 10am.

(At 3.30pm, the Tribunal was adjourned to Thursday, 1 April 1999 at 10am)