INDEPENDENT PRICING AND REGULATORY TRIBUNAL

PUBLIC FORUM
INTO
FORM OF REGULATION REVIEW

Held at the Level 2, 44 Market Street
Sydney, NSW, 2000

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MR COX: Good morning, everyone, and welcome to the tribunal's forum on form of regulation. I hope it will be interesting and enlightening. I would just like to make a few introductory comments and then ask people around the table to identify themselves and indicate what their interests are in the forum.

I just want to explain that we will be transcribing the proceedings today. The transcript will be kept by the secretariat and will be placed on the public record. For the benefit of the transcribers, could you please introduce yourselves when you speak and also speak slowly and clearly; and can I ask the transcribers to let me know if that is not occurring so that we can get an accurate record of what is being said.

We are going to have two sessions. One session essentially will talk about criteria for assessing the form of regulation. During that session we will be interested in listening to your general views about the form of regulation. That will take us through to about half past 10, then there will be a further session on particular options for the form of regulation that have been developed by the secretariat.

We are here to listen to your views and we are interested in anything you have to say. When we go around the table, I ask that people try to limit themselves to about five minutes and also we would like to hear people without interruption. Once we have gone around the table, obviously there will be an opportunity for further comments and discussion and points of clarification and so on.

Let me first move around the table to introduce ourselves and then Anna Brakey will go through the process and the timetable. I am Jim Cox and I am a member of IPART.

MS BRAKEY: Anna Brakey, with the secretariat.

MR MELHUISH: With the secretariat.

MS TOWERS: With the secretariat.

DR PARRY: Tom Parry, IPART.

MS SKUTA: From the Ministry of Energy and Utilities.

MR DUNSTAN: From the Sustainable Development Authority of New South Wales.

MR ZULLI: Country Energy.

MS TERRI BENSON: Country Energy.

MR MARTINSON: Energy Australia.

MS CIFUENTES: Tribunal member.

MR WELLSMORE: From the Public Interest Advocacy Centre

MR LIM: From the Energy Markets Reform Forum.

MS TRISH BENSON: From the Public Interest Advocacy Centre.

MR HIRD: NERA.

MR RAY: Australian Inland Energy and Water.

MR OCKERBY: From Integral Energy.

MR CREES: Essential Services Commission (Victoria).

MR BARR: From Electric Power Consulting Pty Ltd.

MR COX: Thank you very much.

MS BRAKEY: Just to quickly go through the processes and timetables for this review, this review is actually part of the 2004 review project for network examination. The timing of this particular review is driven by the National Electricity Code, which requires two years notice to be given for a change to the form of regulation, and our current determination expires on 30 June 2004. If the Tribunal wants to change the form of regulation for the next regulatory period, it must notify stakeholders by 1 July this year.

This review commenced with the tribunal releasing a discussion paper which was DP48 in August 2001 and it called for submissions on that discussion paper. The secretariat then prepared a discussion paper that provided more detail than the tribunal's discussion paper and it presented five options for the form of regulation. It also presents more criteria for assessing the form of regulation. The aim of that secretariat discussion paper was to facilitate discussion at today's round table.

The options presented in that paper are options allowed under the code which allow for a revenue cap or a weighted average price cap. The public forum today is really about you discussing the issues that you consider important and that concern you, and also to propose what you believe the form of regulation should be.

There is an opportunity after today to put in supplementary submissions and there will be a week for you to do that. They are due by 28 February, supplementary written submissions about issues arising out of today. The tribunal will then consider the form of regulation and issue a draft report in about a month to six weeks and we will call for public consultation on that, or written submissions on that draft report, before finalising the report and releasing it by 30 June for any implementation on 1 July 2004.

Just on the slides provided, there is a box showing the timetable there so you can see quite clearly what the timetable is for this review. Are there any questions on the process?

MR COX: We might move onto the first substantial session on criteria for assessing the form of regulation. I do want to emphasise, as I have said before, Anna has introduced the topic but we are interested in general views in this session that you choose to put forward.

MS BRAKEY: The tribunal really needs a framework to assess the form of regulation. So what we are doing is trying to set up some criteria that will provide a framework for assessing the different options. There are objectives and principles set out in the code that the tribunal has to have regard to in establishing its regulatory framework and its determination. They are set out in part D of chapter 6 of the code. If you look at the slides there are quite a few of those objectives and principles listed there that also apply to the form of regulation, so they provide an overarching principle that the tribunal is working towards in assessing the forms of regulation.

They include things like promoting efficiency, preventing the extraction of monopoly rents, balancing the interests of stakeholders, maintaining financial viability of the electricity supply industry, encouraging efficient behaviour and efficient pricing, providing an incentive based regime, providing reasonable regulatory certainty and consistency, creating an environment in which generation, energy storage, demand side options and augmentation options are considered, and considering the allocation of risks between network owners and users. That gives us a high level set of principles.

What we have tried to do is break that down into a set of practical criteria targeted at assessing the form of regulation.

We have set out a number of criteria and I will quickly run through them before opening it up to discussion on the actual criteria and whether stakeholders consider these criteria to be

appropriate and if they have other criteria that they think the tribunal should consider as well.

I guess the first one that we have is the reliance on forecasts and correction factors and impacts when the forecasts are inaccurate. Demand forecasts have been a contentious issue in this regulatory period and have an important impact on the businesses.

It is important to note that all forms of regulation actually involve some level of demand forecasting but different forms of regulation are more sensitive than others to demand forecasting and when that demand forecasting is inaccurate.

A question that the tribunal could ask is whether the forms of regulation provide an effective mechanism for reconciling forecasts in actual demand and in fact whether a mechanism is actually needed or whether the form of regulation deals with that issue without having to have a correction mechanism at all.

The next criteria is earnings and price volatility, questions like, do the revenues track costs, what happens to the earnings of the businesses if actual demand differs from the forecast demand. Another issue is the price volatility and do the different forms of regulation lead to more or less price volatility, and just to note there that the issue of limits on price movements does not fall exactly into the area of regulation review. It is actually a matter for the 2004 review and the questions that the tribunal will consider at that time are whether limits on price movements necessary and, if so, what are the levels of those limits on price movements. Although it is related to price volatility here, they are actually issues that the tribunal will consider later.

Other questions that the tribunal may ask in assessing the form of regulation is, will the form of regulation give the businesses the incentive to price efficiently and does the form of regulation allow the businesses to set and restructure their prices.

Another issue is the role of the tribunal and the workability of the form of regulation. Questions to ask are, does the form of regulation minimise the role of the tribunal during the regulatory period. Is the form of regulation understandable and are there other significant practical issues associated with the form of regulation.

The final criteria that we have listed here is the impact on demand side management of the forms of regulation. What we are really here today to do is to get the stakeholders' views on assessing the form of regulation and how important you think these criteria are and are there other issues that you think the tribunal should consider.

MR COX: Thank you, Anna. I would now like to seek comments from people sitting around the table. I just remind you, keep your initial comments to about five minutes and hear one another without interruption. There will be a chance to add comments later on. Someone has to start first, it is always a difficult task, but if I could ask Chris Dunstan to kick off.

MR DUNSTAN: What did I do to deserve that? We are talking about criteria alone at the moment?

MR COX: And general issues about the criteria.

MR DUNSTAN: Let me first start with criteria. In looking at the criteria that are listed, the one that is implicit in most of them but is not explicit is to ensure that incentives are provided for the DNSPs to price in a way that minimises the cost of providing energy services to customers. Essentially that is why they are regulated in the first place and I guess from the perspective of the one that people probably expect me to focus on, which is demand side options, energy efficiency and those sorts of things, yes, they have environmental benefits but I guess from the point of view of most consumers the potential benefit there is to minimise essentially energy bills and I think it may be worth looking at each of these possible forms of regulation from that perspective.

In terms of general issues, one other thing I would say is that of the options that are listed there, I think there are some other possible options that can address some of the quite real difficulties with the current approach but hopefully we will get a chance to talk about some of those later this morning.

MR ZULLI: Country Energy is generally supportive of the criteria set down in the IPART discussion paper, each of which will have different implications in terms of the objectives and principles that have been set out by the secretariat. Whilst we generally agree with the bulk of the principles and objectives that have been set out in that discussion paper, we wanted to make special comment on one or two of the criteria that have been outlined, the first of which relates to risk and the allocation of risk to distributors and network users, as well as the impact of the form of regulation on revenue and

profit risk.

Price control can have an impact on distributors earnings risk, particularly where it is driven by output and energy throughput. Therefore the question arises as to which parties should be responsible to bear the volume of the risk and in principle we believe that the risk should be allocated to the party that is best able to manage it. Therefore there needs to be some discussion about controllable and uncontrollable risks.

Generally volume and energy throughput, particularly demand and energy, are generally uncontrolled by the distributors but, having said that, we believe that the form of regulation should therefore recognise which risks are uncontrollable risks, which risks are controllable, and therefore not artificially increase the risk to the distributor because of that.

Having said that, obviously we don't wish for customers to bear the total volume of the risk but equally, if the risk to the distributor is increased, this obviously will be reflected in the price of service and obviously the cost of capital.

The second important criteria is the financial viability of the distributors. The tribunal needs to deliver through its form of regulation a commercially sustainable revenue path for distributors that recognises efficient pricing costs, the pass-through of transmission charges and also recognises past investments in providing an adequate commercial rate of return on those investments.

The third criteria that we wish to highlight is encouraging pricing efficiency. Although each option does have its different abilities in terms of encouraging distributors to opt for efficient pricing, we believe that a caveat is the flexibility provided in prices but in particular the rebalancing constraints that are imposed and so therefore even though the issue of side constraints is not an issue that should be discussed at this particular forum, we believe that the tribunal needs to consider carefully the implementation of side constraints and also the level of side constraints.

In terms of promoting efficient behaviour, we believe that this is an important criteria in the selection of the form of control and we believe that the meaning of efficient behaviour is output in terms of volume and so therefore the form of regulation should not necessarily restrict or provide incentives for distributors to increase output which is not efficient. Therefore that has a linkage to providing distributors with incentives to meet efficient demand and so there is a linkage therefore to maximise efficiency in terms of dynamic efficiency.

We also believe that the form of regulation needs to provide an incentive-based regime and obviously that has implications further on in terms of the 2004 review in the sense of providing an incentive for distributors to maximise efficiencies and to pursue efficiencies and would allow the distributors to retain those improvements over time and potentially over greater than one regulatory period, but certainly over a number of regulatory periods.

In terms of administration, we believe that the form of control should minimise regulatory burdens and administration both on the distributors and the IPART Secretariat. It should not be overly complex, particularly in its initial establishment and also in its operation. From our perspective, they are two key elements.

In terms of demand management, we believe that the current regulatory framework does not necessarily provide incentives for distributors to pursue demand management initiatives. The key elements for distributors are basically incentives to pursue efficient prices and also to make efficient investments in the network which at the same time considers demand management alternatives.

We believe that the regulatory framework for encouraging distributors to pursue demand management should be distinct from the form of regulation. We believe that the appropriate mechanism for demand management is the prudency test that we would encourage the Tribunal to develop and publish.

At the same time, we believe that an appropriate incentive for distributors to pursue demand management is to provide a framework that encourages distributors to contract with providers of network capacity support services.

Having said all of that, the key issues, therefore, from our perspective are revenue and profit volatility. As mentioned earlier, we believe that the form of price control should not necessarily artificially increase risk for distributors due to volume volatility. Secondly, it needs to ensure that there is flexibility to re-balance prices. Thirdly, another key issue is the reliance on forecasts.

The X-factor we believe is an important issue that needs to be sorted out. Obviously, it is

probably beyond this public forum, but there are key issues associated with how that X-factor will be established and set and the linkage of forecast to the X-factor and allowances for forecast errors in demand, given the distributors don't necessarily have control over the level of demand and energy throughput.

Therefore, we would encourage the Tribunal to consider making a statement of principles associated with the X-factor and how it is going to be derived. A key issue is past transmission and other pass-through costs. We believe that there needs to be a similar mechanism to the current form of regulation, where transmission costs and other pass-through costs pass through in terms of the form of regulation. Thank you.

MR MARTINSON: EnergyAustralia is pleased to be given the opportunity for its views to be heard on this very important and obviously timely topic. As outlined in previous submissions, we believe that the pure revenue cap that is in place has performed inadequately in meeting the key objectives and principles of network regulation as set out in the National Electricity Code.

In particular, the fact that the revenue cap does not allow volume risk to be managed has caused significant difficulties, which has led to pressure for significant price rises in future. The under and overs account has worked poorly. We believe it fails to provide an incentive to set efficient prices. It focuses on revenue stability at the expense of pricing and profit stability. We believe it leads to overall heavier handed regulatory intervention with higher associated risks and costs.

Since the last determination EnergyAustralia has been faced with the pure revenue cap. It has been extremely difficult to apply from both an administrative and financial standpoint. All capacity for the financing of higher than forecast capital expenditures was lost.

When provided estimates of growth proved to be incorrect - as is the nature of forecasting - EA's network business has been unable to achieve its allowable rate of return on capital invested. Further pressures on EA's cashflows have become unacceptable.

These cashflow pressures have arisen as EA aims to maintain network reliability and discharges its legal obligation to connect new customers by investing in new infrastructure. To ensure that the taxpayers of New South Wales are not disadvantaged by these developments, EA needs to maintain the appropriate risk adjusted returns paid to its shareholders.

We believe these issues have made the administration of the current determination very difficult for both EnergyAustralia and the Tribunal as there are no mechanisms available for either party to manage the significantly higher volumes. The lack of flexibility is a concern, particularly as the only certainty associated with forecasts is that they will be wrong or that the magnitude of such variance will always be inherently uncertain.

While EA has suffered under the pure revenue cap, the reconciling of actual and allowable revenues which is required under any form of revenue cap has also been problematic. The application of the under and overs mechanism has resulted in allowable revenues in the latter stages of determination being reduced, at a time when the costs of providing network services are increasing.

The disconnect between revenues and costs that can occur in situations where volume growth is materially higher than forecast causes problems not only in the current regulatory period but also in the transition to any subsequent regulatory periods.

EnergyAustralia estimates that the total capital expenditure that we will invest beyond what was allowed in the yearly report is in the order of $400 million. The revenue requirement associated with capex is materially higher than that allowed in the Tribunal's December 1999 determination.

The total shortfall in allowable revenues necessary to fund the additional capex again is significant and if capitalised and rolled forward to the end of the regulatory period, it would result in a total increase in the regulatory base of over $400 million or an 11 per cent increase in the asset base.

The implications resulting from a one-off inclusion of additional assets and return of depreciation and opex would result in a significant price increase based on current estimates of growth. While we don't believe such an outcome was ever the intention of the Tribunal when it did adopt the pure revenue cap, we believe this has been the effect.

All that said, in assessing the appropriate form of regulation we believe that the following criteria are of utmost importance: it must manage volume risk in a symmetrical manner; it must not have an under and overs account; it needs to provide an incentive to set efficient prices; it should focus on profit stability and pricing stability

rather than revenue stability, as we believe is the case with the pure revenue cap; and it should result in lighter handed regulation.

It must also be noted that we believe the form of regulation is a poor vehicle for executing demand management policy and I think, as Lawrence alluded to, we believe the outcomes will almost certainly be biased and that the capex reviews conducted at each regulatory reset are a far more effective tool for this process.

We can't overstate our desire that the Tribunal adopt a form of regulation that addresses the above criteria. We believe that the weighted average price cap using the lagged actual volumes approach is superior in meeting the above criteria and the code's objectives and principles of the four initial forms of regulation proposed.

Moreover, had the weighted average price cap been in place in the last review it would have ensured a revenue stream that was closer to the additional costs that we have incurred and it would have maintained a balanced pricing trajectory without the anticipated pricing volatility leading into the next determination. Thank you.

MR WELLSMORE: Broadly speaking, we are happy with the criteria that have been outlined. From our perspective, though, I would just like to make some brief comments on a couple of the key areas. One area upfront, obviously, is that simplicity and transparency I think goes hand-in-hand with that.

I suppose what we're really talking about is understandability, if you can cope with that word. With respect to the community sector and low income households whom we mostly advocate for - that is to say, who PIAC is advocate for - the resources just don't exist for us to dig into this stuff in anything like the necessary level of depth or detail.

The more simplified the process can become or the more simplified the rules and form of regulation can become the better it is going to be. That also is what transparency entails, people actually being able, at some point, to put their finger on what's happening with the prices that they're paying.

Side constraints are, I suppose not surprisingly, a big issue for us and we would be very keen to have discussions with stakeholders and with the Tribunal in a couple of years' time about those, but we figure they continue to have an important role in regulation, particularly in relation to monopoly businesses.

The other things that really stand out for us I think are, firstly, the relationship to costs. We think that ultimately there needs to be some reconciliation between revenues and costs. If that's how you're going to drive it, it seems to us anyway, in part at least, that they're incentives for efficiencies.

The concern from our perspective I suppose there again is about the producer surplus, the monopoly side of things. Having said that, we're also quite interested in a model which contains an allowance for growth.

From our perspective again we certainly can see the difficulties that have arisen with the under and overs approach and we would quite like to support a model which doesn't have an under and overs approach and doesn't have too much sensitivity, I suppose, to forecast it. What we're talking about there is the spectre of people trying to gain whatever model is put up at the end of the day.

Risk has been mentioned already. I wasn't going to say anything about risk because we are sitting here representing a large group of very small customers of State owned monopolies and from our perspective the shareholder is really only a proxy for the same people who are paying electricity bills. We are in a bit of a different mind on the issue of risk but I'll leave it at that. Thank you.

MR LIM: I would like to make a couple of general comments. The first one relates really to the importance we do give to the promotion of efficiency and the prevention of monopoly rents and the need to determine properly the level of efficient costs and of course the proper allocation of costs.

It is very important from a major customer viewpoint that those four criteria, so to speak, are given sufficient attention in whatever form of regulation might be agreed upon, but we'll come up with more detailed comments on the forms of regulation at a later stage.

There are a number of a priori higher level questions which are very important because at the end of the day we're probably talking about only 25 to 30 per cent of the final cost of electricity.

I would like to make one important point and that is the level of intervention by the owners of the networks or the absence of intervention. Those questions are very important. Irrespective of which form of regulation we use, the Tribunal will still need to determine the level of efficient costs.

Also, the level of efficient costs will heavily depend on the asset base that the Tribunal has to examine.

I still recall the direction the Tribunal was taking at the last price determination, by the owners of the network, as to what sort of costs it should use in determining the capital costs. That is a very important prior question before we get into the nitty-gritty forms of regulation.

The second I think is important too - again, it is a wider issue - and that is the level of competition that we have in the New South Wales electricity market. I am not sure that we do have the right sort of comparative market structure in the New South Wales market and at the end of the day that competition or the lack of competition will determine the final price of electricity. Here again we're talking about perhaps 35 per cent over the cost of that final price of electricity.

The final remark I would make is the issue of gaming. There is no question that there was a lot of gaming by some of the distributors when the Tribunal was undertaking its previous pricing determination and clearly demand forecast was one of those key areas where the distributors "gamed" the Tribunal. Whatever model is decided upon it should reduce the level of gaming, especially the demand forecast. I shall refrain from continuing but those comments are sufficient anyway.

MR HIRD: Could I perhaps emphasise three points. The first is there is an objective that isn't explicit in the Tribunal's criteria. Any form of price control should deliver symmetry of outcomes to unexpected events. If volumes are higher, then there may be some benefit to the businesses. If volumes are lower, there is going to be a loss and that is just another way of saying that the expected returns should be the same as the form of price control.

That is true for price control of itself but also true in terms of the intersection with other forms of regulatory regime. I am specifically talking about side constraints on prices. If one form of price control appears to give you a symmetry of outcomes but only by virtue of the fact that you're implicitly assuming that businesses can change prices beyond current side constraints, then obviously it doesn't give you symmetry of outcomes.

It is not possible, I don't think, to set out objectives for full price control without looking at or deciding what the other elements of the regulatory regime will be.

The other thing I would like to emphasise is we would argue that the businesses are selling capacity to the network and not energy. In looking at their incentives to price efficiently, we should be looking at some of their incentives to price capacity rather than energy. That has a direct relationship to any issues in terms of demand site management. Thank you.

MR RAY: I would like to follow up on a number of points that have been made by the other distributors. Our main objective is a clear revenue path forward - that is, simplicity in administration whatever form of regulation is chosen - a form that addresses the volatility in DUOS that we're currently facing both in this current determination period and moving forward into the next period.

We have to balance stakeholder interest and returns to shareholders and price paths and service delivery to the customers. There has to be a balance achieved there. The form of regulation should be light handed as much as possible and the important thing is a transition from the existing determination in terms of prices and price paths.

MR OCKERBY: I would like to thank the Tribunal for this opportunity to elaborate on the points raised in our submission and to comment on the Secretariat's paper. Just focusing on criteria for the moment, we roughly concur with the criteria that the Secretariat has put forward in terms of evaluating the options.

Could I suggest maybe a little bit of re-ordering. I think our number one criteria is for stable cost re electricity end-user prices. At the end of the day customers do not want prices changing up and down, either within a regulatory period or between periods.

When we are evaluating the forms of regulation we should pay heed to practical outcomes, such that we would want to avoid price distortions being created by fluctuations in sales volumes. Rather, we would want prices which reflect the underlying costs to the customers.

We have seen in the past determination the combination of a revenue cap, side constraints and rules on price fluctuations generated by the overs and under account rules which have created price paths which are uncommercial and have created price distortions between customers of two DNSPs within the same vicinity which are not cost price differences but rather regulatory based price differences. That is of great concern to

customers.

We would also like to see the practical outcome of the form of regulation to allow us to signal to customers costs of serving them as their demand changes. As new areas are built with significant demand capacity, then customers should expect to pay for that capacity. I concur with Tom's comments on pricing capacity rather than conditions.

The other critical criteria is for us to clearly earn a sustainable commercial revenue stream. Each form of regulation and each option which is outlined essentially manages price variation around a path. The path is actually more important to us and more important to our customers.

We would like to see a situation where the focus is on allowing within that price path efficient capital investment, reasonable operating expenses more critically than those two and an incentive for us to maintain and improve services. Thank you.

MR CREES: The Commission supports the criteria put forward by the Tribunal. When we were going through the last determination a form of price control was raised with a revenue yield form of price control and we moved to a tariff basket. We are restricted in our choice because under the tariff order we use a revenue cap.

Basically, the criteria we saw as the most important was incentives to pricing efficiently by the distributors. We felt the tariff basket did that better than the revenue yield where the revenue equalled price.

We also found that the revenue yield relied too heavily on forecasts when prices had been put forward each year and created the potential for large correction factors which we've seen on a year-to-year basis, which brought in some price volatility. That also had an effect on the ease of the administration, on a year-to-year basis, of the approval process both for distributors and the Commission. Thank you.

DR BARR: I come here today as a consulting engineer with a lot of experience, with networks right across Australia and also dealing with electricity customers and I believe the temptation of a tribunal like this, in a hearing like this today, is to treat the network as a black box that has a value, depreciate the level inside as an operating cost and you can deal with it in a very clinical sort of a way and come up with a determination.

Underneath that black box is a very complex system of transformers, power lines and a network that, unless it is dealt with properly, is going to can cause significant problems later on. The point that I raise is that as you go through the determination process there's a real risk of under-investment in the network underneath.

This under-investment in a network can sit there undetected for a long period of time until something very, very significant happens. Auckland is the classic case. It has happened in New Zealand and we are not immune to such problems here in New South Wales.

I see a risk that if we proceed down certain paths we're going to end up with distributors who have not got sufficient revenue to operate. People here have spoken about consistency of profits but that can lead to a significant problem within the network because the right incentives haven't been put in place.

The concerns which I think need to be addressed through the process are under-investment in the network, which is ultimately seen through reliability of supply. With respect to reliability of supply, there are measures which exist but it is a very hazy sort of measurement. You can have high reliability one year and low reliability the next. I wonder what the reliability of supply at Auckland was? There are underlying aspects of reliability of supply that are not clear and can come out of the blue.

The other aspect is quality of supply delivered to customers, particularly in relation to voltage levels, harmonics - unbalanced technical things - but there need to be drivers in place for network owners to make prudent investments in their network that are going to deliver to customers what they need.

One that I've seen over a long period of time is network losses. There are many, many projects in networks that would have net present values at very high levels, internal rates of return above 20 or 30 per cent, that are not being pursued because under the existing pricing arrangements there's no incentive for networks to do it.

Ultimately, the losers at the end of the day become the customers and the community as a whole because the drivers are not in place to cover that particular aspect.

In conclusion, what I would like to say is as you go through the regulatory process don't just

treat the network as a black box that has value and costs and depreciation and all these financial things. There need to be real incentives built into this process to give customers what they need over a long period of time. Some things, particularly reliability and under-investment, can lie dormant for long periods of time and become apparent very, very suddenly at times in the future.

MR COX: Thank you. Tom, do you have any questions?

DR PARRY: No.

MS SKUTA: Basically, the Ministry of Energy and Utilities would consider the criteria to be appropriate. I suppose we would be looking forward to mechanisms that would protect consumers in the sense of creating price stability. We want to ensure that efficiency gains are continued to be driven.

I suppose one of the other key things we would be looking for is that demand side options be promoted. You have covered those, so I feel that the criteria is satisfactory.

MR COX: Sir, would you like to make a comment?

MR ROLLO: My name is Joe Rollo and I represent the Energy Users Association of Australian, or the EUAA. Could I extend apologies for Raymond Domanski who is not available. I would like to put some minor points forward at this time and we will later on put points as to the forms of regulation in more formal form.

With respect to the discussion today of the criteria and so forth, I understand that the Tribunal will use its formal balance of interests in determining the ultimate solution, but there are issues that we would suggest ought to be borne in mind. Obviously, prudent investment is one, the form of regulation must support that, and efficient cost of distribution, as our friend across the way suggested.

There are solutions that sometimes don't fit into the form of regulation nominated, so that is an issue. The risk issue was mentioned. We would probably have a different view generally, as Jim also mentioned.

With respect to the risk issue, there is often a short-term risk in the cashflow side rather than long-term in terms of ultimately retrieving the revenue required to cover the investment.

Volatility is an issue for users. Price shocks is certainly a thing we would not want to see under the form of regulation. The revenue cap has provided some ability to retrieve or to change prices. There was some adjustment for some of the major DBs, in the most recent period, which has alarmed them, but the benefit there is at least there is a roll through to the ultimate users in the form which we currently have, where some of the proposed forms may not have that degree of retrieval or pass on.

Transparency is a very important issue. I think there has been insufficient transparency in the current form so far provided that certainly at the public level it's very difficult to follow and again the complexity of the overs and under accounts and those sorts of systems do provide a degree of difficulty for independent observation.

Quality of services is an issue that needs to be rolled into this form as well. There still has not been an adequate recognition in the form of recognition of the quality of services. Something through the price path or X-factor needs to be added. It is anticipated that IPART will provide mechanisms for that.

Again, I think they need to be presented in perhaps a more formal and comprehensible form for the interested parties. Those are just a few points that might be taken on board. Thank you.

MR COX: Does anyone have any further comments?

MR LIM: Thank you, Jim. I completely agree that there need to be incentives for long-term reliability, the sorts of things that you and Joe Roll have spoken about, because there can be adequate incentives built into the price paths that regulators do provide.

I wonder whether those incentives that are awarded by regulators should actually go into a sinking fund to ensure that those funds are actually used to improve the reliability and implementation of the networks to guarantee the sort of concerns that you are talking about rather than just incentives that could disappear into shareholder dividends in the short term. So it is a question whether it is feasible to require a sinking fund.

MR COX: What I got out of all of that was firstly some sort of sense that the form of regulation is only one part of the whole regulatory package and that other things like the choice of the X factor is also very important, but the code does require us to look at the form of regulation first, although we recognise there are other issues.

I don't think anyone particularly liked what we have got at the moment. I hear people saying that the form of regulation in the determination has not worked really well. I think that is important. I am not sure if everyone agrees but there was sort of a sense that the form of regulation is not the most important mechanism for demand management. Chris may want to comment on that again.

I got a sense also that people thought we had got the criteria more or less right and in particular they are pleased with things like simplicity, light-handedness, price and profitability, efficient prices and incentive to invest. They seem to me to be things that came out of the discussion.

That is what I got from listening to you. If I have got it wrong, please tell me.

MR DUNSTAN: Has the current system performed as well as everyone would have liked? I think the consensus is no. As to the reasons why it hasn't, there are quite a variety of views on that. Is it because of gaming, poor forecasting, or because people are getting used to a new system and need time to learn from the incentives created by that system? Is it because of trying to have a belt and braces approach in terms of having incentives in the form of regulation in terms of revenue regulation and then side constraints?

So while I think everyone can agree that it could be improved, if you asked people there would be much less consensus about how to improve it. Suggestions on how to improve it may be in opposite directions. In terms of whether the form of regulation is the appropriate mechanism to encourage demand management, I think there is probably a fair degree of more consensus there than is immediately obvious.

If you will indulge me, I would not mind reading from a Government Pricing Tribunal document from 1995 on exactly this issue. I should declare an interest, as I was actually working at the GPT at that time. There was a document put out then addressing a lot of issues we have here and we have learnt something from that time as well. One of the questions was, will revenue regulation be sufficient to encourage an efficient, robust energy services industry. That is on page 21.

The answer to this - this is well before the regulation in its hybrid form was introduced - was that this is unlikely in the short term, that is, it is unlikely that revenue regulation would in itself encourage energy efficiencies. Revenue regulation will simply remove a bias against distributors investing in energy efficiency on equivalent bases to investing in the supply side options and it will not actively promote an energy efficiency industry.

Then I will skip a little bit. Revenue regulation is intended to remove an existing bias against energy efficiency and not to substitute the policies designed specifically to promote energy efficiency, so we should not damn revenue regulation for not achieving something that it was ever expected to achieve.

MR COX: Any further comments? I will give a chance to people sitting at the back, if they would like to comment.

MR BEDFORD: Greg Bedford, New South Wales Treasury. I would like to say that in terms of the tribunal's criteria, we are very supportive of the criteria listed and also supportive of the comments made by the distributor representatives. I think in particular, as discussed before, the criteria relating to revenue tracking costs is a very important one from the point of view of the shareholders and, as Energy Australia stipulated before, it has been unsuccessful during the current determination to do so.

We see price stability, simplicity and transparency as other important objectives. We don't think that the unders and overs mechanism has been successful so we are looking at some alternative moving forward.

I would just like to make a few responses to comments from Mr Lim. Firstly, he referred to asset valuation issues. It is important to note that under a linked building block revenue approach that the construction of the building block component is identical under all forms of regulation and to a certain extent it is outside the scope of today's discussions. Therefore in terms of the level of competition, we are talking about regulation of monopoly network businesses, and again I think his comments in terms of the level of competition are irrelevant.

His third comment about distributors gaming in the overs during the last regulatory, it is gaming to the extent of some $400m and there we would look for any opportunity to reduce gaming.

MR COX: Any final comment before we break?

MR LIM: Just one word - sensitivities.

(Short adjournment).

MR COX: We will resume for the second and probably most difficult session, which is the options being considered. Rohan will introduce a few options for the form of regulation, then we will open it up for discussion. Obviously we are open to suggestions from people sitting around the table for alternative or possibly improved forms of regulation as well as the opportunities that Rohan will discuss.

MR MELHUISH: The secretariat released a discussion paper for today's forum. That paper outlines the detailed formulation of five options for the form of regulation. We also distributed a brief paper today showing the derivations of some of those formulations, so if you have not been able to work out how those formulas are arrived at, you might look at that paper.

I am not proposing to go over the detailed form of any of the models today, firstly because it is quite complex and I think we will get bogged down in the detail but, secondly, I think it is more important to focus on the major features of each of those models. You can look at the criteria against each of those models to understand the detailed formulation.

There are five options in the discussion paper and they are listed in the second slide there. In terms of the 2004 review in general there are two distinct processes. Greg mentioned that the building block revenue process or a benchmarking process is quite distinct from the revenue regulated process. What we are really talking about today is how the DNSPs recover revenue.

I will briefly touch on the building block or benchmarking process. I have called this a notional revenue requirement process and what would happen under any of the forms of regulation is that we would develop notional revenue requirements for each year of the regulatory period. These will require forecasts of sales volumes, peak demand and customer numbers to develop them. The same forecasts would be used for any of the models so there is no difference whatsoever in terms of developing those notional revenue requirements and it is quite an independent process to the consideration of the form of regulation.

As probably mentioned a couple of times today, the major unknown is the growth rate in demand. There are probably a few other issues such as peak demand that might enter into it, but really the major uncertainty is how demand will grow over the regulatory period.

I think there is an underlying assumption that if costs are not fixed and you do get the demand forecasts wrong, there is some profitability impact. So what that really means is that costs are not going to be equal to the notional revenue requirement you have forecast.

It is probably worth saying that if you do get the demand forecasts right, the model essentially ends up being the same, so really a lot of the differences arise from how the various models treat differences between the demand forecast and the actual demand.

Of the five models, three of them actually target revenue so they are directly targeting the revenue requirements through the benchmark process; and two of them target the price charged by distributors or a form of average price.

I will turn to the models now. Option one in the discussion paper is a pure revenue cap. People are probably familiar with how this works. You set a maximum allowable revenue for each year of the regulatory period. In practice you might specify this as a CPI minus X in the revenue for each year of the regulatory period and the X factor is determined at the beginning of the regulatory period.

The revenue you set is a maximum allowable revenue so any overs or unders have to be returned or recovered from customers. That requires a correction mechanism. It is currently handled through an unders and overs account. It would not necessarily require that unders and overs account but there has to be some mechanism for adjusting actual revenues to the allowable revenues.

The second option is a revenue yield price cap. This sets a maximum average price per unit of consumption for each year of the regulatory period. Again, you could specify that as a maximum average charge for the first year of the regulatory period to be changed by CPI minus X in subsequent years. How you set the maximum average charge is to take the revenue requirement you forecast each year and divide it by the expected demand and that would give you the maximum average charge.

This does not actually affect revenue, as your allowable revenue is equal to your actual output and throughput. You compare that maximum allowable revenue with actual revenue and adjust through a correction mechanism for any difference. Again, that does require a correction mechanism and that operates as an adjustment to the next year's price.

You might not need an unders and overs account if you directly adjust for that.

The third model is the weighted average price cap. This is the model currently used and it is also known as a tariff basket. It is probably a bit daunting when one looks at that formula. If you look at the right-hand side, it establishes a ratio between the two notional revenues. In effect what the equation there does is constrain the rebalancing of those tariffs. What it actually is is a ratio between averaging pricing one year and averaging pricing the previous year. The left-hand side shows the change in average price from year to year. That is expressed as a CPI minus X.

There is also a Y factor. Y enters into the equation as the average growth expected over the regulatory period or for each year of the regulatory period. It does not require a correction mechanism. The average price is actually dependent on the relative growth in demand for each tariff, so it differs from a revenue yield price cap in that it does not require correction if the forecast volumes in each tariff turn out to be different from the actual tariffs.

The fourth model is a self-correcting revenue cap. What we are doing is building up the ratio of two revenues and it does not require a correctional mechanism because if you set the prices in one year based on the growth in the previous year, what this actually does is if you get high growth in one year you will over-recover, but you would build that high growth into next year's prices and you would likely under-recover for that year. In effect, it turns out to be very similar to revenue capping with the expected revenue over the regulatory period being equal to that under a revenue cap but it does get around having a correction mechanism.

Finally, the variable growth revenue cap. This is similar to a hybrid model that the tribunal has used before. It does not require a correction mechanism for the same reasons as applied to the self-correcting revenue cap. The formulations are a little bit different but essentially it links the revenue increase from year to year to a growth factor. The growth factor could be a composite of customer numbers, output, peak demand or just one of those factors. We have put in a quarter as the coefficient of the growth. That would be subject to determination during the cost building block process, as would what factors feed into that growth factor. Again it does not require a correction mechanism and it does adjust prices from year to year so that over the course of the regulatory period the actual revenue would be very close to the notional revenue.

MR COX: I think we might take comments now, unless there are specific questions.

MR MARTINSON: I guess I just wanted to flag that on the weighted average price cap as presented here, we don't believe that is the model that is best used by ORG because of the Y factor. We don't believe there is a direct Y factor. We understand that the X factor in that equation would need to incorporate growth implicitly but we don't believe that that is actually the model that was used by ORG, but I could stand corrected.

MR COX: We will come to that. I would ask people to comment, comments on the five models in particular that are put forward. If you want to suggest an alternative model, now is your opportunity to do that.

MS TERRI BENSON: I should start by saying that after working through the five options we have not actually identified one preferred option. We have narrowed down the field to probably two. There are a number of details that need to be clarified prior to the application of each being fully understood and until we understand that it is difficult to make a decision.

We need to better analyse the impact of the options on customers and distributors. Therefore we would recommend that we do further analysis on that. While we are attempting to do that at the moment, there are some things we need further clarification on before we can finalise it.

Before I discuss the options proposed I wanted to put it in a Country Energy context. Country Energy has a relatively low stable growth. We have pockets of high growth along the coast, which is smoothed by relatively stagnant growth in the inland areas. Therefore, in the last period we have not been capital constrained to the same extent as probably metropolitan distributors would find themselves and we are presently slightly over-recovering the allowable regulated revenue but we expect to be slightly under-recovered at the end of the regulatory period if we ignore the FRC costs.

Given the stable growth, we probably are better able to handle the revenue cap that we have had and it probably has not been as problematic for us. That is probably the context to some of the comments I will make later.

Also, some principles we would like to see following on the from the last section in the form

of regulation, the things we considered as we worked through the options, the first thing we would like is the ability to reflect the actual growth that is occurring in the network, which has already been said, and the reasons we need to do that were discussed last session. They need to provide commercially sustainable levels of revenue, they need to have appropriate pricing signals and it is also important that we understand the impact on customers.

Based on those principles and based on the Country Energy position, we believe that the tariff basket, option 3, and the variable growth revenue cap, option 5, provide advantages over the present form of regulation and we think are worthy of further consideration.

Option one, the revenue cap, the reason we probably don't want to see that go forward is there is no relationship between the actual revenues and costs and it does not have the ability to reflect changing growth. Also customers bear an unnecessarily high level of volume risk under this model. If growth is lower than was expected, prices will be increased in order to obtain the revenue and we don't think that is necessarily a fair burden of risk on customers.

Also, there is reliance on forecasts which we spoke about before. It also has the incentive to minimise cost of service once the revenue has been set, which is not always the right decision-making framework for a network to be in. While it is a short-term approach, it potentially has long-term problems.

The revenue yield approach - Option 2 - we would not support. The link to kilowatt hours is not appropriate. That is not what drives costs for network business. We don't think that's an appropriate form of regulation.

Option 3, the tariff basket, as I said, it's one of the ones we would prefer. It creates a link, being between revenue and price structures, and it moves with increased demand on the network. We have some concerns about this tariff basket and the link to side constraints, which is relevant to Country's revenue due to our large number of tariffs.

We at the moment have over 250 tariffs, so the transition with that number of tariffs when they don't reflect effective pricing structures would be a problem, as the tariff basket provides the incentive to produce cost reflective tariffs, but the side constraints would reduce the possibility of this occurring.

Regardless of the form of regulation, side constraints will probably be an issue for Country Energy anyway, but it's probably more problematic in this form of regulation.

A point we need further clarification on concerns the price structures. There is an assumption in the model about price structures and we would be concerned if this was a statewide average or even a Country Energy average. We need clarification whether that is going to build up on actuals or some form of assumption about price structures.

We can see the benefits of legislation to this if it is designed properly. It dampens the profit earnings risk to see the extent that the structures reflect the cost of service. Unfortunately, with respect to CE's situation not all our price structures would reflect cost structures.

I haven't really considered Option 4 because the formula is very similar to Option 5. Option 5 gives us the benefit of building in growth, which we think is a better outcome. We would rather leave it on Option 5.

It rolls forward revenue requirements according to the movement in underlying cost, which is a good thing. It allows for changes in demand, which is the G-Factor in the formula. This means that revenue is allowed to vary with increased output. That is preferred to the pure form of a revenue cap because it links our revenue to the distribution cost drivers as to proxy changes in costs arising from changes in customer numbers or demand.

It could be more complex in application from a regulator's point of view. The effectiveness of the G-Factor will depend on the variable elements or cost drivers that are identified and the marginal cost weights that apply to those cost drivers. The cost drivers obviously need to be determined but we think that is achievable.

There has been a lot of work done on cost drivers in network businesses - the weights and the application of those weights. How those cost drivers impact revenue would also require work. We would also like to point out that the application of a single set of weights would not satisfy all distributors. It would vary from distributor to distributor because of the different operating environments they are in. We also need to be conscious of the fact that those weights may change over time if the operating environments did change.

In conclusion, our support is for Options 3 and 5 because they reflect growth, but we do say they require further analysis and we look forward to undertaking that analysis. Thank you.

MR MARTINSON: In relation to the five options that are put up - and I will limit my discussion to the five options that were in the recent IPART paper and not some of the other options that were in the initial paper - with respect to Option 1, I really don't want to spend too much time on that, Option 1 being the revenue cap, because I think this morning's previous session addressed a lot of the concerns.

Could I perhaps summarise the situation. The fact is that the revenue cap doesn't allow volume risk to be managed. The under and overs account has worked poorly. It has failed to provide an incentive to set efficient prices and has focused on revenue stability and not profit or pricing stability. We believe it leads to overall heavier handed regulatory intervention with higher costs. That was basically discussed this morning and so for those reasons we don't believe the Tribunal should consider the revenue cap.

Option 2, the revenue yield - and I guess when we get to our friend from the ESC he can probably expand on why the ORG did not support the revenue yield approach - just to clarify, Rohan gave an introduction of what the revenue yield was, but I want to add a couple of bits to that.

The revenue yield calculates a maximum average price by dividing the total revenue by the total output and it sets a cap on the maximum average revenue that DNSP is allowed to earn per unit of output. The key difference between it and the weighted average price cap is the way in which allowed revenue per additional unit is treated.

The allowed revenue from each additional unit varies according to the actual price for that unit. Under revenue yield the allowed revenue per additional unit is fixed. There is a difference between it and the weighted average price cap.

As noted in the Tribunal's August 2001 paper, the ORG moved to weighted average price cap from a revenue yield because the revenue yield does not provide an incentive to set efficient pricing. It leads to volatility in profit stability, resulting in changes in demand. It relies on forecasts and a correction mechanism which is complex to develop and implement.

We believe that the Tribunal should not be considering the revenue yield as its preferred form of regulation. The requirement for an ex post correction mechanism makes this approach unattractive, particularly when combined with the lack of incentives for efficient pricing.

Hopefully, we have Options 1 and 2 out of the way. In our view, it really comes down to Options 3, 4 and 5. The three remaining options from the recent IPART paper are similar in that they do not require the use of an under and overs account. They do not require the use of forecast volumes in the annual pricing reset process. They provide the same incentive, albeit limited with respect to changes to any fixed and variable components of tariff setting. We believe that they are all similar in that regard.

Given that we could be here for days or weeks trying to go through all the aspects of each of the five models, we're really just focusing on the main aspects.

The weighted average price cap is clearly the model that is supported by EnergyAustralia and was the model supported by all of the DNSPs in previous submissions. Under this option, with respect to the cap set on the maximum average price that can be charged for the tariff basket or baskets, the Tribunal could assess upfront whether the proposed prices comply with the price control formula by calculating the weighted average of the proposed prices. Again, we can go through the formula but it is probably not that helpful.

One of the things that I think is very important, though, is that it is a proven approach. What we are putting up is substantially similar to that implemented by the ORG for the regulation of the Victorian DBs. I have to say Options 4 and 5 are approaches that have not, to the best of my knowledge, been implemented anywhere else in the world and the risk to the businesses and the Tribunal of adopting an untested and untried approach I think is very high and this is particularly the case given these options were not included in the original August discussion paper and had only been provided to us two weeks before this session.

I have to qualify that all our comments are based on the fact that we've only recently seen these options and we haven't had time to really do a thorough analysis on them, which I think is quite critical. That concerns Options 4 and 5.

The weighted average price cap uses a lagged actual volumes approach and the single tariff basket. It must manage volume risk in a symmetric

manner. The expected reduction in revenues associated with volume reductions is the same as the expected increase in revenues associated with the same volume increase. We expect that it would be symmetrical.

We believe that this is not the case for Options 4 and 5. The weighted average price cap does not require an overs and under account. It is superior in its ability to have the incentive to set efficient prices, which we believe is essential for signalling efficient usage and investment. We believe it focuses on profit stability, which is critical for any commercial organisation, as well as pricing stability, which is what customers see at the end of the day, rather than focusing on revenue stability, which we believe is the main driver of the revenue cap.

We also think that the weighted average price cap would result in lighter handed regulation, particularly as compliance is on an ex ante basis which only requires controls to ensure that weighted price movements meet the price control formula and any side constraints.

Moving on to Option 4, as we understand it, Option 4 being the variable revenue cap, the objective of this model is an attempt to combine a revenue cap with a weighted average price cap. Revenues would change with volume variations from forecasts, thereby eliminating the need for an overs and under account, which is similar to the weighted average price cap. Any revenue variance due to volume changes would be limited.

We still believe that many of the underlying problems with the pure revenue cap are still evident with this model which does not satisfactorily adjust to incorporate the high cost of increased growth.

Initial modelling results reveal that this option does not, we believe, produce the intended result and significantly reduces any incentive to price efficiency. If actual volumes in one year in the regulatory period are higher than forecast, this will result in marginally higher revenues.

There are some positive relationships between increased volumes and cost. However, in our additional model if actual volumes in one year are higher than forecast, we think that the revenues will be marginally higher. That is fair enough. It is not a problem if you accept that there's some relationship between higher volumes and higher costs.

However, the modelling that we've done shows that if actual volumes in one year of the regulatory period are lower than forecast, the option also results in marginally higher revenues.

It is easily explained why the model works in this intuitive way - and I would be happy to walk through it with anyone who is interested - but there certainly appears to be a structural flaw in the model that we think would need to be addressed before we could consider any support for this approach.

We believe that the weighted average price cap does not suffer from this anomaly and provides predictable and symmetrical results.

Moving on to Option 5, the rolling growth revenue cap, we understand that this option is really a combination between a pure hybrid model and price cap. Under a pure hybrid revenue cap, which was in the initial paper but is not part of the recent paper, the Tribunal sets a maximum allowed revenue for each DNSP for the first year of the regulatory control period.

The allowed revenue is linked to one or more parameters which may result in changes to the overall revenue should the parameters change over time. It must be noted that, unlike the revenue yield, the regulator rate sets marginal revenue parameters as close as possible to marginal costs rather than average costs.

As noted in the paper which was included as part of our initial submission, if the regulator were able to perfectly estimate the marginal parameters, this form of price control would provide no incentive to price efficiency. Business has no pricing incentive to set prices equal to pricing control and an efficient use of the network.

It is highly unlikely it would be successful in setting the parameters correctly. This is because there's really no simple variable that drives marginal costs. If the Tribunal can accurately identify all marginal cost drivers, the relative importance of these would be constantly changing.

The drivers of marginal costs are likely not to be linear. In summary, at best hybrid revenue caps won't create an incentive to pricing efficiently; it will create an incentive for inefficient pricing.

Option 5 appears to be a combination of a hybrid revenue cap and the problems outlined above, particularly where the regulatory intervention required to assess the marginal cost parameters - which we believe will probably be wrong - associated

with the hybrid still hold.

The initial modelling we have done suggests that if the marginal coefficient that is incorporated in this model is set close to one - which means 100 per cent of the marginal revenue - this model appears to be close in expected revenues to weighted average price cap, but we believe that the additional regulatory intervention and the limit on efficient pricing is not a good outcome.

If the marginal coefficient is close to zero we think this option is pretty close to Option 4, which we don't believe is appropriate. While this option appears to be a bit of a bet each way, the increased complexity costs and impact on efficient pricing, we believe, makes this option unattractive. Thank you.

MR COX: Do you want to comment on the Y-Factor?

MR MARTINSON: I understand why the paper actually had the Y-Factor and it is really to recognise the fact that at the time of establishing the building block revenues, if you're moving to a weighted average price cap, you do need to incorporate somehow the fact it is likely that there may be an estimated change in growth over the period.

We would believe that the X-Factor itself needs to incorporate the fact that at the time when you set the building block revenue and when you set the X-Factor for a price cap, you have to take account of the forecast growth at that time. It is merely a mechanical mathematical approach where you're just adjusting for the forecast growth.

I wanted to flag having an extra variable in the model as presented with the Y-Factor which attempts to do the same thing. We believe it makes it look like it's more complicated than it actually is. It is unnecessary, in our view.

MR WELLSMORE: Could I comment very, very briefly. Trish and I came along today with a particularly firm view about the options. We had hoped to get something to the Tribunal by next week so as to give a little bit of guidance with respect to what the low income consumers might want.

I suppose though, just off the cuff, it seemed to us that we would be less disposed towards perhaps the first couple of options, if that was our choice. We are quite interested in the idea of a lagged demand mechanism. Where volatility is used in different places in the discussion paper, I guess we'd be a little bit concerned about that if pricing constraints were to remain in place in some form.

I suppose at the end of the day, as we said before, a lot of this from our perspective comes back to the simplicity of the modelling and the ease with which it could easily be understood. Unfortunately, Y-Factors and so forth tend to mitigate against that. In any event, we hope to get something in writing to the Tribunal next week.

MR LIM: I am in the same position of not having had a chance really to look through the various options in detail. All I can say at this stage is that I wouldn't reject or support any particular option at this stage, other than to say that in the case of Option 1 clearly the demand forecasting and overs and under aspects are efficient and need to be looked at, but that doesn't mean that all other elements in Option 1 are necessarily rejected by us. We have an open mind at this stage.

We would certainly support - and I'll be very keen to hear the comments around the table - any option that increases the incentives for the DNSPs to set efficient prices: in other words, increasing the incentives for the DNSPs to price to customers according to the use of the system. Any model that incorporates that simple objective we would certainly be sympathetic to.

MR HIRD: Could I make a point of clarification. I think the point is if you're going to have a Y-Factor, which is fine, you can separately put it in there, but you also need to consistently put a Y-Factor in Option 4 and Option 5 as well because exactly the same issues that have applied to your growth forecasts will affect your price path in Options 4 and 5. It may be less than the weighted average price.

MR RAY: The situation facing us is somewhat different. The biggest issue facing us in this process is the translation of the revenue from the building blocks into prices with acceptable increases. I will just put that in the context of where we are at the moment.

At the moment, we've got existing under-recovery of revenue, minimal load growth, static or negative customer growth and we're probably looking at significant DUOS increases within the existing regulatory period and also going forward into the next regulatory period.

We have uncertainty of future load requirements of major mining load, which is a significant revenue element. Although there are some potential new developments in the air, they're going to require significant capital works that aren't included in the current determination forecasts.

There are increasing opex costs in the short term in the balancing of side constraints. Irrespective of whichever form of regulation is chosen, the major issue we're looking at is the transition from existing prices to new levels to recover the revenue within acceptable limits.

I certainly support the comments made by Country Energy in terms of Options 1 and 2. I won't dwell further on those. Every form of regulation requires the development of accurate load forecasts and then obviously translating that with prices to recover your costs.

At the moment we're obviously doing more modelling and I guess we're looking closer at Option 3. Options 1 and 3 are the only ones that we're giving a lot of thought to, but none of the options jump off the page with any particular benefit, from our point of view, because there are a number of other issues that we need to work through.

We agree that there needs to be the inclusion of an X-Factor in whatever model to indicate future service standards and there also needs to be the facility of other costs, as has occurred in this regulatory period with things like FRC. Obviously, with the transmission or the DUOS components that we're looking at at the moment there's a significant risk there and there are not a lot of things that we can do to reduce the components due to demand or energy. It depends on where that goes.

At the end of it we will be doing more modelling and we'll put in a further submission, but at the end of the day we would certainly support further work on Option 3. We haven't really looked closely at Option 4. Due to the minimal load growth in our area, we haven't given any consideration to Option 5.

MR OCKERBY: We would like to restate the two key criteria which we assessed the five options on and they were stable pricing and cost reflective pricing and for us to be able to do it on a commercial revenue stream over the course of the determination. By that I mean as costs vary over the course of the determination, so should revenues.

Could I briefly comment on 1 and 2. Our position is that we would like to see these essentially off the table in terms of Option 1. As has been stated many times, the revenue cap has not worked as expected. Revenue certainty has not yielded price certainty and has not yielded prices and revenues as to costs. Neither of our criteria involves mechanisms and site constraints which drive those two results.

In terms of Option 3, we would also like to hear from the ORG about their reasons for moving away. Our key issue here was the fact that it does provide some very distortionary incentives on pricing, given that you get an average price allowed which is different from your actual prices.

Clearly, again it also does involve an error correction mechanism and annual forecasting and those will similarly drive some fluctuations in prices which are just not economic. They are regulatory based and that's more of an outcome for consumers.

As stated in our submission, as to the first consultation paper, we're supporting a single tariff basket approach: that's Option 3. We had similar concerns as to the drafting of the Secretariat's paper and the inclusion of the Y-Factor. Our initial interpretation of the Y-Factor was that it would result in a revenue path which was amended over the course of the determination due to price and tariff growth. That is not as we understand the ORG's model which we're working on. We think the Y-Factor can be incorporated in an X-Factor.

Our reasons for supporting Option 3 - the single tariff basket - is clearly that it fits our criteria in that it offers price certainty for customers. It does put substantial onus on the DNSPs to move our prices to being cost reflective, but our gains from doing that are reducing our risk and maximising our earnings and there should be two key drivers there.

The other reason we like it is it doesn't involve an error correction mechanism. It has an inbuilt structure within the forecast which it does utilise, as is trying to be described, in that Y-Factors are those which are included in the building blocks. There is no additional forecasting and there's no annual forecasting in the regulatory reset.

The other thing to note in terms of Options 3, 4 and 5 in that regard is they both utilise the same level of forecasting and each incorporate side constraints and all three lack the need for an error mechanism. We favour those.

In terms of Options 4 and 5 then it must be said that these are not old methods; they are new to us. We too don't recognise any regulatory precedent for those and our modelling, so far as the outcomes of 4 and 5 are concerned - particularly four - is that it does not offer price stability. The

self-correcting nature of the revenue cap in Option 4 will translate into significant price changes for customers on an annual basis to reconcile to the revenue cap.

There is a comment in the simplified derivation here at the bottom of the page that over the regulatory period the under and overs recovery are likely to cancel each other out. I don't think that's correct. I think the method tries to address two types of demand changes. One is a step change where the forecast is completely wrong, so we get 4 per cent as opposed to 2 per cent and it handles that reasonably well.

What it doesn't handle are seasonal spikes in growth forecasts. You can get circumstances where you actually get a growth reduction spike in one year due to seasonal changes and you actually increase your revenue over the course of the determination. That is clearly not what's intended by that.

In terms of Option 5, we have a bit more sympathy for this option if the coefficients can be correctly estimated and we've heard some of the issues that Mike raised. One of the problems we do have with Option 5 is that come 1 July the Tribunal could inform us that Option 5 is the way forward, but setting the parameters of that G-coefficient are critical to the outcomes. You can structure G such that it's Option 4 and we end up with all those problems associated with the revenue cap and price variability.

It could potentially not suffice, the two criteria we're trying to achieve. We would be keen to work with the Tribunal in establishing what those coefficients might look like and how they reflect prices. Thank you.

MR CREES: Basically, I'll just go over what I said this morning in the earlier session about circumstances placed on ORG at the time. We did have a revenue yield that was covered by the tariff order. The problems we saw with that, which were articulated by EnergyAustralia at the start of the year, were the average revenue or average price was pretty much set using forecasts.

From that the major incentive for the distributor was to increase volume because the more volume they put through the more revenue they got, by the fact that the following year there would be a correction mechanism, which meant they would actually earn their allowed average price asset for that particular year.

We moved away from that to the tariff basket. Any additional units of energy or customers added to the network would earn the actual price of that, so that, in effect, marginal revenue equalled price. We felt that that was a stronger incentive for distributors to price efficiently.

The one other thing which was picked up in the paper is that it does provide scope for the distributors to set higher prices where the demand growth is stronger and that is true, but we felt that if you're going to be setting higher prices where there's stronger demand growth, that could effectively lead to a dampening of that growth in demand through the fact of higher prices.

The tariff basket is good in the way that it uses actuals. However, there are limitations that need to be pointed out when introducing new tariffs. It is the fact that if a new tariff or new tariff component is introduced in a particular year, there are no actuals for that.

There still does need to be some form of estimates, if you like, which through the Commission's model it is probably not necessary or needed to correct for. That is just one thing that probably needs to be pointed out. That is one of the administrative issues that we face down there and hope that it is not always actuals. That is pretty much all I have to say.

MR COX: Do you want to comment on the Y-Factor?

MR CREES: I agree with EnergyAustralia's viewpoint. We include the X and Y-Factors in that. "X" is derived from the building blocks plus the forecast in demand. We could have separated that as well but we chose to keep them together.

DR BARR: With the range of revenue options I look at the signals they give to the distributors and the drivers that apply on them and then look at the following impacts on customers. There are good and bad things that need to be considered with all of them.

The idea that the revenue caps provide an incentive to reduce costs I think is an excellent feature of this. A dollar saved in operating costs falls down to the distributor and eventually some of that will be cast back to customers through these procedures and I think that's good for the community in total.

Some of the signals in some of the models will encourage distributors to go out and connect new customers, to go and find new customers, to go out

and market, and some would actually provide incentives to cut customers off - disincentives to connect customers. Those are drivers that need to be considered. Some of the models would encourage the distributors to go out and sell more energy and some models would encourage them to sell less energy and these are drivers, that ultimately have an impact on customers, that need to be considered.

I go back to the point I made earlier about under-investment in networks. There are isolated pockets in many networks that I believe require development. Are there drivers in here for a distributor to go and invest in key part of the network? I see no incentives whatsoever. That needs to be carefully considered.

There are incentives in this process to cut out over-investment because if over-investment is made in the network, it will come through the valuation process and the optimisation part of that valuation process is a real driver to cut back gold plating on the network.

We don't have a reverse where there's under-investment. I see no incentives to improve the quality of supply to customers where that is required. There are some parts in networks where customers would benefit from quality of supply improvements. I see no incentives for liability improvements. We are talking about pure revenue numbers here and we've isolated the things the networks are designed to do.

I see no drivers for network owners to manage their networks well to reduce losses that involve some operational aspects and some capital investments, some capex expenditures. We have to be careful of the signals that we give to distributors as to the drivers that we require and the impacts on customers. That is the point I would like to make.

MS SKUTA: The Ministry appreciates IPART's intention to improve its methodology of regulating pricing in the industry and we would be closely monitoring the approach that it does take in the future. With respect to what impact it will have on how pricing is approached in the future, the Ministry does not intend to comment.

MR DUNSTAN: One of the things that struck me as we went around the table was the networks themselves obviously put a lot of time into understanding this. We have a very sophisticated and well informed view on these issues. If you listen to everyone else around the table they're struggling, a bit like me, to understand exactly what each of the formulas mean and then, if you get that far, what the implications of them may be. I don't exclude myself from that.

The first issue in terms of good regulation - as Jim Wellsmore mentioned - is in terms of simplicity. In terms of the way in which the options have been presented, they are not all presented in a consistent way. For example, the revenue cap is presented in terms the details of which I won't go in to.

There is not a consistent presentation there. Even with the ones that are presented in a consistent manner I think there's significant scope to make them easier to understand. I think at the very least the customer representatives should be able to access that. I am sure they could if they had the time, but they're probably a bit like me in the amount of time available to them.

I think there is scope for that and that that probably should happen in the next month or two. In terms of changing from the existing form of regulation, obviously what we're trying to do is retain the best elements of the existing one and remove some of the worst aspects.

From that point of view, we need to be addressing what are the problems, whilst also being conscious of the problems that have been addressed under the current form but don't present themselves because they're not a problem at the moment.

Mr Martinson from EnergyAustralia listed their concerns in terms of volume, risk. There is the issue of dealing with under and overs. There is the shortfall in terms of not sufficient revenue to cover the capex that's required because of the increasing demand.

In terms of the previous criteria, I think we need to be identifying the perceived problems and addressing those quite specifically in how we assess the options.

In terms of the specific options, as Rohan mentioned, the way that they are put together is that for each of them you need to figure out what the appropriate level of revenue is first and then you do some sort of a manipulation to it to ultimately get what the customer sees, which is price. From that point of view, we need to have the clear understanding of what is driving costs and ultimately, therefore, driving the requirement for revenue.

Option 2, the revenue yield, the weighted average price cap and I guess 4 and 5 - although there are adjustments in that - are all focused on

that key term in "Q", that is, the quantity of kilowatt hours and for network businesses, as we all know, kilowatt hours does not directly drive costs. We use kilowatt hours because it is not a bad proxy for what does drive costs, which is I guess, firstly, peak demand and, secondly, customer numbers. I think there is some sense in doing that.

If you simply were to make your price calculations driven by peak demand, then you need to look at the incentives that that is providing. Peak demand jumps around. It is highly volatile, much more volatile than kilowatt hours sold, but moreover if you were to charge on peak demand then your price goes up with the peak demand and that is not what we want to see, we don't want to provide incentives for networks to bump up peak demand, that is completely the wrong direction.

Similarly, nor do we want to be providing incentives for networks to bump up kilowatt hour sales. I have heard from networks in the past that kilowatt hour sales is beyond their control. Largely it is but in significant respects, particularly in terms of pricing policy, there is influence of networks on the kilowatt hours sold. We need to be very careful if we are moving towards any formula that bases the return in terms of price or revenue on factors that the networks themselves have an influence over.

In terms of the specific options, option one on revenue regulation, the pure revenue cap, there are some problems that have been identified and I think that they should be addressed, so let's maybe move beyond that. The revenue yield cap does not seem to have a lot of support from anyone here, and I would endorse that, because it provides - it is tied very closely to kilowatt hours and I think everyone has recognised the problems with that. Weighted average price cap takes a step away, and for the first time courtesy of Sean's explanation I understand the difference, I think, between the incentives created under the revenue yield and the weighted average price cap. I think it is a step in the right direction but it still leaves that incentive for networks, where they can, to in the short term increase their sales, particularly where it does not increase peak demand.

Number four, self-correcting revenue cap, obviously addresses the unders and overs problem but does it with a fairly blunt instrument if I understand it correctly. It says you need to adjust fully for the discrepancy between your allowable revenue and your actual revenue in year one in year two. That would lead to prices bouncing around quite a bit and I can understand customers getting a bit confused to say the least as to what was going on. I think there needs to be a smoothing allowance over a number of years so you don't have prices jumping around higgledy-piggledy.

That leaves us out of these options with the fifth one, and I think that is closest to something that we should be working towards, with one proviso, and that is the one I mentioned before, the G factor. It says here the revenue requirement is linked to one or more observable marginal cost drivers. For example, aggregate demand, meaning energy sales, throughput, and I think we need to be careful how we analyse that, so kilowatt hours is one, customer numbers and peak demand are others.

If it were to be on kilowatt hour sales, that creates problems in terms of discouraging energy efficiency and behaviour that increases kilowatt hour sales. At least in the short term in terms of customer numbers, there is some scope for gaming there but that would not in itself address the concerns that EnergyAustralia has faced in terms of over-recovery on unders and overs and not getting the revenue it needs to invest as they see it. And also peak demand, if we were to tie it to that, creates some strange and perverse incentives.

In terms of other drivers or proxies for what actually drives the costs, one I would like to suggest is economic growth because in terms of the forecast error, or errors that are being seen, particularly in the case of EnergyAustralia, it has been suggested that part of that is due to a forecast error that may or may not have been partly deliberate in terms of gaming, as was the suggestion, but probably more importantly economic growth has been faster than anticipated and I think it is quite legitimate where it is driven by economic growth that we should consider an adjustment on that basis because in terms of revenue the economy is growing, people have more money in their pockets.

And there is the reverse. We should not forget that just because we have been in a period of boom that the reverse can happen. What are the consequences of this form of regulation if we hit a recession? Some of the concerns we have expressed here would be quite the reverse if we had a different economic climate over the last few years. If you were to tie it to economic growth, that has some significant benefits if you do go into an economic downturn because it means effectively you need to reduce your prices in a time of economic downturn or at least the impact on customers through bills. I just leave that suggestion with you.

There were a number of issues about what you do about adjustments, whether it be the revenue target not actually being met or the price basket target not being met. We should not forget that if we don't have a simple price cap that there will be errors, differences between actual and forecast outcomes on the price basket as well.

I think there are other options in terms of addressing the unders and overs question as well. For example, the very simple approach is to do it at the medium term review and leave it until then. There are also other options, as Bob Lim has suggested, in terms of a sinking fund so that if there is a huge over-recovery happening, whether it be under the context of some sort of price cap or revenue cap, perhaps that could go into a separate fund which could then be returned in times of under-recovery or be directed to what is causing the problem in the first place, to reducing demand, peak demand or energy consumption, which is an issue I guess that could be considered by IPART's demand management review or inquiry.

The last comment I make is to try to bring it back to earth, that we need to be conscious that there are a whole range of other regulatory reforms underway at present. For example, the Government has announced an intention to have a stronger enforcement regime for the greenhouse emission benchmarks on electricity retailers and I think it would be very unfortunate if we create a system where there are incentives for the networks in terms of increased kilowatt hour sales that is diametrically opposed to the incentives being given to retailers in terms of trying to reduce greenhouse emissions through reducing electricity sales, whether that be through switching from electricity to gas in various applications, whether it be through energy efficiency programs in residential or for business customers or whether it be through things like co-generation. So we just need to be mindful that we are not driving parts of the business in opposite directions.

I will leave it at that.

MR ROLLO: The word that I have got apropos the sensitivities is struggling. They are all a little bit struggling with the mass, although I am appreciative of the detail in some of the attachments. I have a couple of high points to highlight. If there is a change in the form of regulation, transmission issues should be keenly thought through and they will be different for different forms of regulation.

I did think that the inclusion of a tracked growth factor is a very useful part of smoothing and bringing to bear less volatility in this scene. I feel that what needs to be recognised still is that among those five options there is a difference between a revenue capping and a price capping. That is a fundamental issue we have to bear in mind.

Revenue capping will provide an efficiency incentive that is constantly borne presently. Price capping will provide comfort to parties that are seeking to retrieve costs incurred but the investigation of those costs incurred will be very much post the event, so there is a difference in the soul there that needs to be talked through.

I also am aware of the diversity of interests. The flexibility that needs to be provided in tariffs to fit these forms of regulation is quite different for different purposes, metropolitan versus rural, whatever, and you need to have enough flexibility in the setting of those tariffs following on from whatever regulation is set so that the drivers in those areas, low growth inland or the spotty city scene, is enabled and these efficiency drivers and demand drivers and other incentives that we have out there such as greenhouse and so forth are recognised.

At the end of the day the major influences on the resolution of these forms of regulation will be the X factor prudency test in its application within these cases and ultimately the reset frequency, the regulatory reset frequency, so whether you go to a future four-year or one- or two-year result, quarterly attempts to chase this growing number or whatever, they are all a very fundamental part of what is chosen.

As to whether one, two, three, four or five is best, I really don't think we have yet considered that closely enough. I do not reject one as a totally unacceptable solution. It has created certain difficulties in the forecast and growth period that we have recently seen but as a method it is one that we need to think about maybe enhancing, and some of the proposed directions here may well provide that. Five promises much, but it needs more work.

MS BRAKEY: I want to clarify a point that relates to the Y factor. The Y factor was put in as a Y factor for illustrative purposes only and if the tribunal were to adopt that, it just decomposes the old X factor into what our current X factor is but recognises that it has another element to it as well. We put it in only to show that the X factor under that form of regulation is not the current X factor that the tribunal has adopted. That is the

only reason why the Y factor is put in, it represents a decomposite of the X factor and going forward we would not have an explicit Y factor.

In their determination I note that ORG did decompose that into a number of issues and so the tribunal may manage to do that in its final determination. However, the Y factor is for illustrative purposes only.

MR MELHUISH: Can I just add, the X factors are different under revenue-based form of regulation versus a price-based form of regulation. It is in their as a separate factor, I emphasise that.

In attachment 2 there is some derivation of the difference between a revenue-based form of regulation and a price-based form of regulation. That is also explained on page 2 of the paper that was distributed today. There are differences between the X factors under the various forms of regulation and particularly under a price-based form of regulation and a revenue-based form of regulation.

A quality of service factor could be implemented with any form of regulation. It is not a critical component of the form of regulation at this stage but it is something that the tribunal would consider in the next price determination, that it could be incorporated into any form of regulation.

Also I think the discussion paper for today did mention that there has to be a mechanism for pass through of transmission costs, miscellaneous charges and other costs. They could be accommodated under any of the forms of regulation.

One other point about the volatility of prices, in each of the models we have used one year's lag demand but it is possible under any of those forms of regulation that gives a lag demand to actually use an average of past rates of growth or past quantities to dampen any volatility if we wanted to introduce growth price stability. That is relevant to options four and five.

With the G factor you could use an average price growth rate and a composite of that.

MR COX: Any further comments?

MR MARTINSON: A few points. I guess from what I have heard from Sean that has provided some good information about ORG's thinking with the weighted average price cap. Just to clarify, we provided a detailed technical paper to the secretariat that addressed issues like S factors, pass through costs, new tariffs. And I guess on the issue of new tariffs, while I take the point that is an area of concern or an issue that has to be dealt with, the weighted average price cap, I do not believe that is any different for options four and five. If there are new tariffs, you may still have to review the actuals. That applies to all models.

I guess the second point is that I sympathise with everyone around the room, particularly the non DNSP people. We have been working on this for two years and we are having a really hard time coming to grips with options presented to us two weeks ago, so I sympathise with others.

The weighted average price cap: We believe that is far superior in setting efficient prices. When we look at all the other things said, that is one of the key points.

I just wanted to pick up on what Jason Ockerby mentioned earlier, that we believe that if the tribunal does select option five as the preferred model it is absolutely critical that what is in that G factor is actually established now as part of the determination for June 30 this year because whatever that G factor is is critical to whether the model is more like a price cap or a revenue cap or in between, so I take the point that if the view is we can get the model across the line then and worry about the coefficients later, we would raise some serious reservations about that approach.

Lastly, I have heard a few comments about a sinking fund. I think it looks and smells like an unders and overs account and I am not really attracted to that model. Thank you.

MS TERRI BENSON: With option five, while we said it is worthy of investigation, it is dependent on what the G factor is. For any level of certainty, we would need to discuss how those components of the G factor and particularly the weights are determined.

MR OCKERBY: The other point, on a similar line I guess, the tribunal has decided to leave aside the issue of side constraints. That is problematic because options 3, 4 and 5 each involve a degree of price volatility and that translates in the DNSPs into earnings volatility. If, for example, in an early year in the determination we were to experience a growth reduction, some seasonal impact, it will send us down on a price trajectory that we may never be able to recover from due to the side constraints. They are critically interrelated to this issue, so while there may be some other issues we would like to see in the decision some understanding of how the

side constraints impact on the sort of incentives and outcomes of each of these three.

They may not yield the incentives and outcomes in terms of certainty but we think they will because of price side constraints. That is critical in the revenue cap position. The side constraints for those that are under-recovered are the form of regulation and for those that are over-recovered, the rules in the overs and unders account balance are the form of regulation to set the prices. I don't think that was envisaged at the time.

MR LIM: Just a question to the Essential Services Commission spokesperson. Is their efficient pricing to reflect peak demand in Victoria the equivalent of the option three IPART paper?

MR CREES: Are there efficient prices for demand?

MR LIM: Yes, for high demand or peak demand periods.

MR CREES: We have seen a couple of the distribution businesses under the new tariff basket approach particularly identify peak demand and pricing of peak demand, especially in the summer period in Victoria where it is quite peaky, so we believe the tariff basket has allowed for the DBs to target a particular area and a couple of them thus far have done so.

MR LIM: That is interesting because I have heard of anecdotal information that one DB is actually offering cheap loans to purchase airconditioners. Obviously we will get to the bottom of this but it is interesting. If that is happening under the tariff basket then I will be very cautious about leaping to that immediately.

MR DUNSTAN: Can I just clarify, Sean, does that mean that there is essentially seasonal demand prices in Victoria?

MR CREES: Yes, one company has put it in. One company has a summer demand, from November to March, those five months, and there is an extra demand charge.

MR DUNSTAN: Is there a significant difference between the two halves of the year?

MR CREES: No. It is around about 10 per cent extra, that charge.

MR DUNSTAN: Is that a monthly demand charge or annual peak?

MR CREES: Monthly, and measured between hours of the day.

MR MELHUISH: A number of comments about the complexity of the models. I might just mention that the analysis of the incentives under each of the models is far more complex. There are a number of factors that we need not really talk about today. One of them is the relative growth between different tariff classes, the pricing structure. There is also the fixed costs and the marginal costs and the ratio between those. There are also issues of elasticity of demand. It does introduce a whole range of questions of capacity of DNSP affecting demand under various tariff classes, what the pricing structure is and what the incentives created by the pricing structures are.

Can I just make one comment on the weighted average price cap. Sean made the comment that there is an incentive to increase price in the tariffs where growth is highest. Is that correct?

MR CREES: Yes.

MR MELHUISH: I just throw in the thought that that is fundamentally contradictory to the idea that a weighted average price cap encourages efficient pricing. You increase prices where that growth is highest and that isn't necessarily in those classes where the costings are.

MR CREES: It is where the weightings change.

MR MELHUISH: It is not necessarily to align prices with costs.

MR HIRD: It is not necessarily consistent, although not inconsistent, if higher growth is occurring in areas that are forcing costs up, efficient to increase your prices for those elements of supply that are increasing demand. On top of that - that is one issue - that is an endogenous or exogenous increase in growth. Obviously, if you can't control that growth you might change your prices to respond to that growth to increase your revenue, but the real efficiency driver for pricing is where you can influence demand; and where you can influence demand then your incentive is to reduce prices on those that you can influence most significantly towards marginal costs. That is fairly clear.

Also, I suppose I would like to add that, just looking forward one year, in each of those three, four or five options precisely the same incentive exists to respond to changes in demand, so to an extent it is regarded that that is something necessary, demand growth, and the incentives to respond to that under a weighted average price cap are equally a problem with options four and five.

MR OCKERBY: I am not sure that it was the tribunal's or secretariat's not understanding that those incentives only exist in only three or whether those same incentives exist in four and five. In fact, it goes further than that. Option three actually gives us the incentive to minimise our risk through structuring our prices to reflect our variable and fixed costs whereas option five gives us essentially the hybrid formula, structured correctly, actually gives us a certain revenue to reflect our costs, gives us lots of certainties regardless of how we price.

There are some quite uneasy incentives in four and five that are not there in three.

MR COLEBOURN: Harry Colebourn, EnergyAustralia. There has been a lot of discussion today about the pricing control mechanism being symmetrical, that is, if there is an increase in growth, the revenue would go up and it would be marked by an equal change in a downward direction. The point I want to make is that the DNSPs costs are not symmetrical. When growth goes up, sure there is an additional capex, an additional opex in order to provide for those additional customer connections and to augment the system, but in the reverse direction it is not the equivalent, there is not an equivalent reduction in costs. The opex would remain largely static and the capex could not be cut back to the same extent. I think that needs to be factored into the choice.

MR COX: I think if there no further comments we will try to wrap up the session now. I will ask Anna in a moment to speak about the next steps but in terms of the discussion, firstly, I have a lot of sympathy with people who are saying, "hey, what we have talked about is only one path of regulation, it matters what the side constraints are and what the X factor is and what the service quantity factors are".

They are all very important aspects that we have not considered today but we do need to bear in mind that they are important in terms of what we are considering about the form of regulation. I also have a lot of sympathy for people saying they find the subject very hard to understand. I do too. Minor changes in the formula seem to have major difficulties for people. We do have to see what we can do to communicate or redouble our efforts to communicate effectively on those issues.

I also note that a lot of people say that more analysis is needed and I think that is right. We need to do that. In terms of those able to say what their preference was, there was a message that option three seems to have more support than the others, though there were I think three or four people who said we should look at option five as well, without specifying what the G factor problem there is. We take that message on board.

Obviously I don't think we have reached a final position today. We need to keep on talking about these sorts of issues but we are grateful to you for your time and trouble and comments and we have listened to what you have had to say. I pass on to Anna to talk about what will happen next.

MS BRAKEY: Quickly to recap, if you would like to provide supplementary written comments to back up what has been discussed today, please do so. If you could get those to us by next Thursday, 28 February, that gives the tribunal the opportunity then to go away and consider the issues and then come up with a draft report in about 6 weeks on the form of regulation and then there will be further submissions called on that draft report. Unfortunately, there is a firm deadline on that of 30 June and we can't go beyond 30 June, so we do need to resolve the issues within the next couple of months. That is a plea to meet the deadlines that we set.

MR COX: Once again, thank you for your attendance.

(At 12.30pm the forum concluded)