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TRANSCRIPT OF PROCEEDINGS

PRODUCTIVITY COMMISSION

INQUIRY INTO THE NATIONAL ACCESS REGIME

MR G.R. BANKS, Chairman
MR J.H. COSGROVE, Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON WEDNESDAY, 6 JUNE 2001, AT 10.10 AM

Continued from 29/05/01 in Melbourne

MR BANKS: Good morning, ladies and gentlemen. Welcome to the first day of public hearings here in Sydney for the Productivity Commission's inquiry into the National Access Regime. I'm Gary Banks, I'm chairman of the commission, the presiding commissioner in the inquiry, and my colleague on the left is John Cosgrove. The purpose of the hearings is to give those with an interest in these issues the opportunity to present submissions in response to the commission's position paper, which was released at the end of March.

As we've noted previously, the commission released that position paper earlier than is usual for a draft report, to allow it to coordinate its findings with two concurrent inquiries on overlapping issues; namely the inquiry into telecommunications competition regulation, and the inquiry into the Prices Surveillance Act. Since then, we've also been given an inquiry into airport pricing, which again provides a further area of overlap but also allows the commissioner, in a sense, to test its considerations on the National Access Regime against the requirements of specific industries where those same principles apply.

I noted in the Melbourne hearings at the outset there that we've received many excellent submissions, which has made our task a lot easier - also perhaps more difficult in that they don't all agree with each other, but that has been a very useful part of this process and that will continue here in Sydney. After the Sydney hearings, having had hearings in Melbourne last week, we move on to Brisbane and then Perth, and we'll take the information that we've received in those hearings and further submissions into consideration in preparing our final report, which we need to complete by September, again to align it with our final report for telecommunications regulation.

I note just for the record that while we conduct the hearings as informally as possible, a transcript is kept, and we'd make that transcript available as soon as we can on our Web site. Hard copies are also available of that, and while there's no formal oath-taking, the Productivity Commission Act does require participants to be truthful in their remarks. Written submissions to this inquiry can be made until the end of June, including in response to submissions of other participants, and all submissions are also made available on our Web site and also can be purchased in hard copy. I'd now like to welcome our first participants this morning, and perhaps just ask them to give their names and the capacity in which they're here today. Thank you.

MR LIM: Thanks. Has that come through? Thanks, chairman and fellow commissioner, John Cosgrove. My name is Bob Lim, I'm a consultant. I've been helping BHP on this issue for several weeks now, and I'm here as a consultant on behalf of BHP.

PROF JOHNSTONE: David Johnstone. I'm a professor at University of Wollongong. I have a longstanding research interest in the topic of asset valuation, and I'm speaking today on behalf of both the university and my own work, and BHP.

MR BANKS: Good, thank you very much. Well, thank you for attending today. The fog delayed things a little bit, and we were hoping perhaps that Bill Henson from BHP might have been able to appear as well. We've still waiting on a submission - I think it may have arrived, but we haven't yet seen it, and there may be a subsequent opportunity to discuss that with BHP. But in the meantime, we're very pleased to have this detailed submission, and - perhaps ask you to address the main points in it. We're in your hands.

MR LIM: Yes. Chairman, if I could make a couple of introductory comments before asking Prof Johnstone to make his presentation.

MR BANKS: Sure.

MR LIM: I just want to point out that BHP had commissioned two papers from Prof Johnstone. It was basically in response to the PC's position paper, which invited comments on DORC and raised a number of very specific issues. It's in that light that those two papers have been commissioned, and we would like Prof Johnstone to go through his papers and perhaps answer any questions that the commissioners might have, today or perhaps in any follow-up comments. Prof Johnstone is one of possibly two or three academics that we are aware of who have basically written on this sort of issue, so he is, in a sense, one of our leading experts on asset valuation and DORC issues. So with the commissioner's permission, we will ask Prof Johnstone to take us to his papers.

MR BANKS: Good thank you.

PROF JOHNSTONE: Well, this presentation is a brief version of the paper submitted to the PC. It's a draft paper, but largely complete. The issues discussed here today are discussed in more detail in the paper. The issue of asset valuation, regulatory asset valuation, is extremely important because the way that the mechanism works is that unlike normal accounting contexts, the accountant in a sense creates the world rather than just observes the world. In a private sector environment, the job of accounting and asset valuation is to observe things that exist independently of the observer, whereas here, the asset valuation rules are actually designing the world. For one thing, they play a very large role in the tariff stream that will occur through access thereafter.

Now, this is an extremely difficult problem that probably hasn't arisen before Australian public sector or even in the private sector, and that is the problem of contriving market-like outcomes when no markets really exist. The problem is extremely difficult both academically and practically, and as a result, there is no widespread understanding of it or clear view of what is the right answer. An implication of that is that vested interests are able to be persuasive. Of course there is no clear answer - the weight of opinion, as promulgated by various vested interests, can become the conventional wisdom very easily, and that's my view of

what has happened with DORC. I feel that DORC has become the conventional wisdom largely because the vested financial interests at stake have most to gain from DORC, and that is the largest vested interest.

For example, the big example of this would be through public sector asset sales, where governments are attempting to maximise the proceeds from asset sale and as a result would like to define tariff streams available to new owners that are maximal, and the way to do that through the tariff formula I'm about to explain to you is to maximise the asset value, to put the biggest possible value on assets so as to maximise the tariff stream, so as to maximise the proceeds from privatisation. This was extremely effective in Victoria - in fact, people would say it was more effective than even it ought to have been. But nonetheless, that's a natural incentive and probably a very strong one.

So the tenor of what I'd like to say about DORC is that it's flawed for three main reasons, and this is really a summation of the talk that I'll give. The first is that even if it has a theoretical basis, which I'll argue that it doesn't, practically it doesn't work, because it's too susceptible to creative accounting. Replacement cost asset valuation generally has been rejected in the private sector because it is too subjective, too open to be manipulated, unable to be audited.

There are several quotes in my paper from very authoritative theorists and practitioners in the private sector, saying that whatever replacement costs advantages conceptually, where and if they exist, it just can't work practically because it's too open to manipulation. That's a great worry in this situation where the gains to manipulation are potentially so large. The incentive is obviously there for creative accounting. Now, creative accounting, as we've seen very recently, exists strongly in the private sector. It's a natural thing to happen in a free market. In fact, accountants and economists can be considered like the providers of any other products, able to please the customer wherever possible and willing to do so for the sake of higher revenues.

So the first reason for why DORC can't work is that it's practically impossible to work in a way that will be objective. Then secondly, it's claimed theoretical basis is actually spurious. The ACCC particularly has put theoretical arguments for why DORC, in principle, should be the asset valuation basis. This is a noble attempt at theory, but the theory there is simplistic, and I'll give reasons for that later on. I actually see this theory as an example of what Watts and Zimmerman, in a famous paper, called the market for excuses, described as an excuse.

This paper by Rochester Economics in United States said that scientists and academics generally will produce theories that suit vested interest because there's a market for those things, and they call this the market for excuses. So for example if you want to pay less tax, you go to an accountant who puts together an argument, using numbers, for why you should pay less tax, and you pay for that argument. I see the DORC - I see the theory put for DORC as a good example of the market for

excuses; the market for ideas or the market for excuses, rather than something which, if the academic community was asked to judge on its academic merits, would be seen as correct and good.

So the second reason for why I'm saying DORC is wrong is that the derivation is spurious, and then finally, even this derivation itself, this economic theory from which DORC is derived, doesn't lead to DORC. If it's applied properly, it actually leads to ORC, not DORC. So DORC is wrong on its own terms. That's the third point that I would like to make, and I'll now go into these things in a little bit more detail.

Some background - and perhaps some people here will not be familiar with the formula that has been used to derive tariffs, as a generalisation. This is a good idea from economics where if we work on a cost basis, including capital costs, and we reimburse asset owners for all their costs, then we've done an economically logical thing. The formula that does that is to reimburse operating costs, as defined efficiently, and then to look at capital costs, of which there are two. When you involve capital in a venture, there are two kinds of capital costs. The first is that you lose capital through deterioration. For example, if you buy a car to carry parcels around, the car will deteriorate and you lose capital that way.

Secondly, there's another cost, and that is the opportunity cost of tying capital up. When you tie capital up, you're foregoing interest that you could have earned elsewhere, and as a result you should be reimbursed for that as well. So there are two elements to capital costs. Add those two together with operating costs and you've got the full costs in a sense of the operator, the service provider. So if we reimburse those, then we're actually paying the provider a tariff stream which in finance terms has a net present value of zero. Another way to look at that is to say that we're paying a rate of return on that investment equal to the cost of capital incurred by the investor.

Now, just in short, to explain that, imagine if you owned say an apartment which you rented, then you should get for your investment a return on your capital, defined as a market yield, and you'll do that in a normal market. What we're trying to do through this formula is to give asset owners the same kind of thing; a reasonable and appropriate return on capital employed. Now, the big issue, however, is how to measure capital employed. That's where the formula starts to break down. The formula works beautifully in practice. It has got the rationale that it's both obviously correct in terms of reimbursing costs, and less obviously correct in that it provides a net present value of zero, which is the criterion in efficient markets for an investment, as defined by an efficient market.

That is the finance - uses the NPV or zero criterion as the definition of a market, essentially. Capital markets only provide NPV of zero, or in other words, they only provide the market yield on that asset. You can't invest in an apartment in Sydney and earn 20 per cent yield. You can only earn 4 per cent or 6 per cent yield,

which is the market yield on such an investment. If you get that 4 or 6 per cent, then you're getting an NPV of zero. That's the definition.

So the formula in principle is fine. The economic rationale that you see on the slide there is what I've just described. It can be put in either terms of reimbursement of costs or NPV of zero. But the problem when we go to apply the formula is in the valuation of capital, because so far we've just talked in general terms. We've said that we want to actually reimburse owners for their loss of capital. How do you measure loss of capital? Secondly, we want to reimburse them for the interest lost on capital tied up. How again do you measure capital, so as to measure that interest lost? That's where the subjectivity comes in and the problem, the problem of valuing assets.

So the big issue then is how should we value assets? We'll start of with the issue of existing or sunk assets, because to begin with, of course, they are predominantly all the assets we have. We're putting in incremental capital every day, but at the moment service providers have largely existing assets. There are new assets coming on stream, but predominantly their assets are sunk. So how do we value those assets for the purposes of operationalising the formula? Well, the first thing we should understand is that however we come to the asset value, which I've called the RAB, the regulatory asset basis, however we've come to it, via whatever criterion, we must be aware that each $1 of RAB equate to $1 of present value or tariff stream to the asset owner.

So by whichever rule you come to that RAB, you are giving $1 of present value in finance terms for every dollars you put on that balance sheet. So a paper entry, a recognition on paper of a RAB of $1000, equates to actual cash flows with present value of $1000. So it's a very important piece of paperwork that we're doing when we value the initial RAB. Now, this is there our problem differs from the private sector. In the private sector we're observing market prices. We could actually measure capital values by observation. Here we're creating capital values.

Now, the corollary of what we've just said is that if we set the RAB at $1000, then we're offering a PV of $1000 in tariffs, and that might be gained by the asset owners for an outlay of merely say $400, in which case there is a windfall of $600 to the owners. That's the vital concept that must be understood in asset valuation to do with existing assets. Now, I would say that that's very much like a bank error in one's favour, where you've deposited $400 in the bank and you go to the bank to check your account and you find there's $1000 attributed to you on paper. That would be a nice thing to have done. This, of course, is very much in the interests of assets owners to have that kind of asset valuation.

Now, so far the history of regulation in energy transmission in Australia is that regulators have almost always set the initial RAB at DORC, and that's regardless of whatever costs were actually incurred in establishing those assets, historically. Now, the DORC has been some written down version of ORC. ORC is the optimal

replacement cost of the assets. So in principle, you look at an asset and you say, "What would it cost me to buy a replacement for that asset in terms of service potential at least?" In other words, the minimal replacement cost, that's why it's called optimised - so we value assets in that regard, which as I said before is a very subjective thing to do because it hinges very much on all sorts of conditions about how you see that asset and how you would think of replacing it, in what chunks, for example, would you replace a gas pipeline, things of that nature which I'll talk about more later on.

But apart from its subjectivity, we could understand the notion of the replacement cost of an asset, and to find its DORC, we then take some part of that away. We write some part off, which has typically been 20 to 30 per cent, to allow for the fact that these assets aren't new. Now, how much you write off in the first instance is a very subjective thing. No two experts would agree on something like the estimated useful remaining life of these assets, and as a result the proportion that you write off initially is subjective. That's just one of the parts of the subjectivity of DORC. But nonetheless, that's where we've been starting - that's been the history - 20 to 30 per cent write off giving us a DORC from an ORC and we kick off from there. So that would be the initial RAB.

The theoretical argument explaining that is that this DORC thing, this 80 per cent of the optimised replacement cost of the asset however estimated, is regarded as a proxy for the second-hand value of these assets. There is no second-hand market for these assets. It's not like, say, going and buying a second hand Falcon where you can actually buy such a thing. You can buy a three-year-old or a ten-year-old or a thirty-year-old Falcon on the market and pay a second-hand price. Here there is no market for used in situ gas transmission or energy transmission infrastructure. As a result DORC is being seen as a proxy for such a thing, if it can be considered to exist in any sense. This is the regulators' view. The regulators argue that the DORC is the measure or the proxy for the second-hand value of these assets. Why, in principle, do they want this thing called DORC?

Their argument has been put in these sorts of terms. There's all sorts of phrases supporting DORC. For example, DORC sends the right economic signals. DORC emulates a competitive market. These sorts of shibboleths are actually nothing that you can respect in terms of theory. We need a reason for why DORC sends the right economic signals. On what economic argument is that said to be true? In what sense does DORC emulate a competitive market? There's been too little support for such phrases. We see these phrases all the way through the submissions of various interested parties without support. In many of the regulators' published findings, the same sorts of phrases are unsupported.

However, to be fair, the ACCC particularly has tried to put in places some paragraphs arguing for why these phrases are actually economically logical. The essential reason that they put is the thing I have in the box here which is the

DORC-based tariffs are seen as the maximum possible tariffs short of those at which a new entrant would be motivated to duplicate or by-pass existing infrastructure. So in other words, an astute, opportunistic asset owner would price up to that point at which he or she cannot go any further without promoting competition and losing the business. That's intuitively the argument for DORC - the economic argument for DORC.

To understand that better, I'll now talk about the logic of this argument, the logic of a new entrant, as I've called it here. This is a nice, simple way to understand it. It makes I think - this reconstruction that I put here of it actually flatters it because in a moment I'll say that it's wrong. But this is the fairest reconstruction that I can do. Take the case of a shopkeeper who pays a carrier X dollars each to have parcels delivered. Obviously there's some X value at which the shopkeeper will say, "Too much," and buy his own truck. Now, simply that could be calculated this way. Suppose that a second-hand truck equivalent in services to what he's actually been getting in the past cost him $20,000. Imagine he's delivering a volume of 500 parcels over the life of this $20,000 investment. Therefore, the maximum X is $40 a parcel.

Now, if the carrier, the private sector carrier, actually starts to charge 45 or 50 or 55, then the user will start to be motivated to buy his own truck despite the fact that he's not in the business of owning trucks and doesn't want to own a truck. He'll get pushed to that level, in theory at least. That's the argument. To maximise profits, the carrier will push the tariff X to the highest point short of losing the business. That's an extreme position. Even if you take this literally as sensible, even it is a very extreme thing to do. It's really like an exertion of monopoly power where the owner of the asset says, "Well, I'm going to extract the maximum out of that asset. It's up to you to be profitable when you pay that value X." Even that is an extreme position taken as if it is correct.

But I'll argue now that it's actually not even fair on its own terms. Just before I do that, notice that the conclusion from this argument is that the regulators would apply such an argument and set tariffs at DORC because it's the equivalent of the $40. DORC gives you the $40, the effective maximum level before you start to incite a new entrant. The regulators argue that beyond this point another party will by-pass this massive infrastructure and provide the service more cheaply which of course is a qualitatively different thing to buying a truck. That's something I'm going to talk about shortly. Now, what are the mistakes in the logic? It looks pretty sensible superficially. First mistake is that, in the case of gas or any other energy transmission infrastructure, you can't go and buy a second-hand truck. You actually have to buy the real thing in its new form. So you don't pay the second-hand price, the DORC equivalent, you pay the full price which is ORC.

In terms of the regulators' argument, if they were to apply genuinely they would actually have to price tariffs on an ORC rather than a DORC basis because that's the upper limit in theory at which a user would be motivated to buy their own

truck - so not DORC but ORC. What I'm saying, therefore, is that by the regulators' own argument tariff should be set not at DORC but at ORC. In fact, just lately Agility in a submission to the ACCC has seen this and turned this argument back on the ACCC and said, "Well, by your standards, we should be actually getting effectively ORC-based prices, not DORC," which, in other words, means that they should be earning tariffs as if assets were brand new rather than used in any sense depleted. That's the first mistake in the logic.

The second mistake is much bigger and more important and that is, would asset owners really be motivated to bypass such massive infrastructure just because the price got to $40? You take the case of the guy paying $40 for his parcels to be delivered. In reality, he wouldn't go and buy a truck as soon as it got to $41, not even maybe 50-60, maybe not even 80. He'd put up with it and be unhappy - but put up with it because economically it's a very distracting thing to do and probably very hard to actually set up yourself as a carrier rather than as a contractor - as a user of a contractor. But that's even more the case with infrastructure of the scale we're talking here. Buying your own truck is one thing, but actually rebuilding national infrastructure just for the sake of bypassing existing owners is just realistically not on no matter almost how far the tariffs are pushed above ORC - not only above DORC but above ORC.

In fact, you could say that tariffs based on double ORC would still not motivate users to actually bypass infrastructure at that trunk level. Maybe some of the more peripheral pipelines, yes, it may be possible; a little bit of cherry picking, for example. But in principle there would be no bypass just because tariffs got to a DORC basis; in fact, no bypass even if they got to ORC. I would argue no bypass even if they got to double ORC. It's just politically and economically not on to do that. You may say, "Okay, the theory still has some nice sense to it and it gives us a place to work from," but I argue that the practical ramifications are in fact terrible because the implication - corollary 1 on the next slide - is that the sky is the limit when it comes to creative accounting. The asset owners, realising that there is no genuine possibility of bypass even if tariff was set on a double ORC basis, will push their book DORC, that is, the DORC they write on paper - they'll push their book DORC to the true ORC, to the true double ORC perhaps.

This is feasible given the creativity that is possible within something as subjective - endemically subjective as replacement cost valuation. Replacement cost valuation is famous in private sector debate for being woefully open to manipulation. What we have here is an asset valuation basis that is awfully able to be manipulated with no constraint, no theoretical constraint despite the appearance of a theoretical constraint. It would be possible easily for asset owners to push their DORC, that is, their book DORC, to true ORC or to true one and a half ORC or maybe true triple ORC. We don't know just how far it could be pushed but we know it could definitely be pushed a long way past DORC without motivating any bypass. Although in some superficial theory there is a market discipline applying to asset valuation, the truth of it is, the true market situation is that there is no discipline apart from some very high

point that which we can't even identify.

How do we conclude out of that? What we say is that the DORC framework actually incites pervasive overstatement of asset values. Asset owners, being very astute, would really this clearly and, of course, would never admit such and would say that the values are independently verified, but that, with replacement cost valuation, is just not possible. Rather what you have is a situation where the valuers are generally employed by the asset owners to produce a result. This is the same situation as causes auditing to break down in the private sector. Auditing breaks down the private sector because the auditors are paid by the auditee. The auditee pays the auditor and, as a result, the auditor goes to any lengths possible, short of going to jail preferably, of pleasing the client. We see instances of this repeatedly. There's a long history of corporate failure with compliance on the part of the auditing profession. The same thing will happen with the engineering valuing profession where to keep the job, to maximise the proceeds from the job - whatever you say, whatever appearances, there is a natural economic tendency to push the values up. That's just an economic fact of life. Any other world would be just too idealistic; just doesn't exist. That's the first corollary of DORC valuation.

The second one is that this opens up the free lunch that comes just like the bank error in your favour when you've spent some amount of money on your assets but you get attributed a much greater book value for those assets. Therefore, you earn a tariff stream on those assets that is equivalent to what you would have got if you just bought the assets at today's replacement cost. In other words, you're being rewarded as if the assets are brand new. If my former argument is correct, as if you paid double what you should have for those assets. That's the potential free lunch which comes with DORC valuation. It's a free lunch to asset owners and it's a massive penalty for the cascading effect on all downstream users of energy.

The most absurd representation of DORC is in the case of easements. Even the regulators have baulked at valuing easements at DORC because it is so manifestly over-generous. Easements are an asset like any other asset as part of the infrastructure but they typically cost very little. So unlike infrastructure they typically cost little and they also don't depreciate. The regulators' argument, the DORC argument, is that we should value easements at DORC like any other asset. That's the pure ACCC approach to DORC valuation. The ACCC is held to that line. This is a massive free lunch. It's like saying, "Okay, what would it cost us to replace an easement today?" First of all, how could anyone imagine what it would cost to buy those easements today? You could ask property valuers to tell you and they'd give you a number. They always do. Property valuers are the witch doctors of the economic profession in that they can come up with numbers according to recipes that are internally inconsistent, mutually inconsistent - all sorts of things wrong with them - but they certainly will provide a number, a value for what it would cost to buy an easement.

Everybody knows from their own experience what it would cost to buy an

easement is anybody's business - anybody's business. It depends on all sorts of things. But nonetheless the valuers will come up with a figure and that figure will then generate tariffs as if the asset owner actually paid that amount of money today for that easement which they never did. So this is the most extreme case, what I call a reductio ad absurdum of DORC as a valuation mechanism. Now, I, appreciating the absurdity of this kind of thing, have actually retreated to DAC valuation in the case of easements, whereas the ACCC, being economically much more committed in an ideological way to DORC have said, "No, DORC is the rule, DORC applies to easements as well as anything else." My argument is that if I and other external parties feel that DORC is wrong for easements then DORC has some more general ridiculousness that should be accepted rather than just being an ad hoc basis that in an ad hoc way drop when it comes to easements. If it's wrong for easements it's wrong for other assets as well. If it's right for all assets it's right for easements. IPART doesn't seem to think that it is.

Now, more general problems with DORC: I've mentioned the first already. DORC is what you want it to be. This is the problem that's been appreciated in the private sector. DORC is intrinsically subjective and unauditable. It is impossible for one valuer, working independent of another, to come up with a DORC figure that is even in the same ballpark generally as the first. So rather what happens is that if you want independent corroboration of a DORC valuation you have to know the starting point, you have to be given some assumptions about things like level of optimisation, how we define the assets, whether it's greenfields optimisation, brownfields optimisation, whether it's incumbent on DORC - all these sorts of ad hoceries that we need to know because we can say, "Yes, that DORC figure is reasonably okay." So in truth there is no independent way to verify a DORC figure. You'll have as many DORC figures as you have independent valuers and that's because of the intrinsic subjectivity in DORC.

For example, imagine this: suppose you want to replace a Falcon. So you can buy a Falcon as a car or you could buy it as a collection of bits. Now, if you bought it as a collection of bits it would get incredibly expensive. So maybe instead of bits you buy the engine as a whole and you buy the chassis as a whole and you put it together that way. However you define the construction of the infrastructure you will arbitrarily affect the replacement cost up or down. So by defining asset composites within the overall infrastructure arbitrarily, we can arbitrarily affect DORC, we can arbitrarily affect the bottom line. So that's a massive problem of subjectivity. Some people argue that the answer to that is that you would just take the asset composition which gives the least DORC, the smallest DORC. But the problem with that is that in general, because of economies of scale, the least-cost way to replace something is to buy it as a whole. If you were go and buy a national pipeline as a whole, what is the replacement cost of a national pipeline as a whole? Well, no-one knows because no-one has ever bought or sold a national pipeline as a whole. There's no such market. Unlike the market for a car as a whole, there's no such thing as a market for this asset as a whole.

So rather what you would have is independent valuers again, each asked to estimate the cost of rebuilding the whole thing, the thing as a whole. When you get to that level of aggregation, the variation, the variance in the quotes that come from different valuers is extreme because the problem is the infrastructure you're looking at is just so vast that to estimate its replacement cost, reconstruction cost as a whole, is intrinsically a subjective thing to do. You can't go and get the market price off the market for that, unlike the market price of a three-year-old Falcon. So there's no way out of that subjectivity. That's a big problem.

Secondly - now, this is a problem emphasised by the economist, King, from Melbourne University - DORC causes systematic under-use of sunk assets. Now, put it this way, in very intuitive terms: for a country, a nation, an economy, whatever, to build highly productive long-lived infrastructure and then not use it because it would cost a lot to replace it, to rebuild it, is like an Aesop's fable. It's economic absurdity. We have an asset there to use. It's sitting there, there's no cost in using it, no marginal cost, very small marginal capital cost in using it, but we don't use it because it would cost a lot to replace.

Now, this problem is well-known in accounting. In fact, in a consulting job I did a few years ago, I came across an entity that had a mainframe computer and the whole organisation linked to that, right through to its word processing. Now, every time a word processor turned the machine on to do some work, his or her section was charged a replacement cost based charge for the use, and so what happened was section managers said, "Don't use it." So it sat idle, having been purchased at great cost. Now, that's the kind of lunacy you get with sunk assets, where you ration the use of sunk assets based on an amount of money as if you had to buy those assets today. You've bought them, the cost is sunk, and if you don't use them because they would cost a lot to replace, you're doing something that's fairly ludicrous.

Now, this is all the more so with this infrastructure because the marginal cost of using it is very low. It's long-lived. It's not as if you wear it out. You don't wear gas pipes out by pumping gas through them. Corrosion is more a problem. So its use is not actually bringing on wear and tear and additional cost. Its use is coming almost essentially free, and therefore at the extreme - this is an argument that has been put again by King - you could actually value these assets not at DORC but at scrap value, and that would lead to no misallocation of resources. In fact, the asset owner, as long as they were receiving a return on scrap, would not be motivated to scrap them. So that's the other extreme of the valuation spectrum, and people would say that's ridiculous, but what we've done is gone to the other ridiculous extreme. We've gone to the DORC end, where the DORC is effectively unconstrained.

So rather than going somewhere in the middle and achieving a compromise more artistically, we've adopted for this pseudo-theoretical upper limit, which is justified only by superficial economics anyway and which has massive ramifications, one of which is that we don't use existing assets because they would cost a lot to replace. Now, the third point I'll lead, because I'm using a lot of time - so I'll just

move on to the possibility of future asset revaluations, because this is a dangerous thing. The DORC revaluation mechanism is not set in stone. The gas code, as I understood it, said that when you value the initial capital base, it should stay there forever. But the ACCC doesn't seem to appreciate that that should happen. The ACCC rather says that replacement cost valuation should be periodically valued up to the new replacement costs. So assets should be DORC revalued, I think, on, say, a five-year basis or something like that, which means that not only is there potential for the initial free lunch, but then a later revaluation which is a mere book entry, a mere stroke of the pen, would lead again to a heightened tariff stream with no additional investment by the asset owner. So the effect of this is that the asset owner earns a return on an investment that was never made, and again that has got an element of absurdity to it. The asset owner is being looked after very well; in fact, basically protected against - well, given the benefits of all inflation in asset values.

Now, the potential for abuse there is great because what we've said is DORC valuation is subjective to begin with. If we can periodically keep revaluing it, we've got this potential for a perpetual free lunch, a very long free lunch - not only a free lunch, but a long one as well. Now, the NPV equals zero argument says that asset revaluations should not occur, so in other words, if you take the finance criterion that when somebody invests money in, say, a new asset, which is not the easier problem, they put $10 in, they should be given an NPV of nought on the $10 investment, not an NPV of nought on a later revalued investment of 15, 18, 19 dollars.

Now, coming to the problem of the valuation of new assets, which has been specifically mentioned by the PC, in principal DORC and DAC are the same for new assets. So these are the two valuation mechanisms that have been most advocated, and they are the same for new assets, provided that DORC revaluations are precluded. We're not imagining that DAC would be revalued. That does happen, however, in the private sector where creative accounting is an art form. But DAC in principle, by its nature, does not get revalued. It's actual cost. It's historical cost, whereas DORC in principle might be revalued. That's the ACC position. So that would explain why asset owners and those, for example, attempting to maximise the proceeds from the sale of government assets, would prefer DORC not only for existing assets but also for new assets, because with new assets, you get the same starting point with DAC as DORC, but you get a better future with DORC, because of the potential to revalue, the potential for book entries improving our tariff stream; bank errors in our favour, in a sense.

So asset owners argue for DORC for new assets because they (1) anticipate these future revaluations and (2) there are DORC-related depreciation patterns, depreciation patterns which claim to be particularly appropriate to DORC, and they happen to be very slow depreciation mechanisms. Now, slow depreciation is very useful for asset owners, because the asset base is a bit like the money you've got in the bank. When you take it out, you don't earn interest on it any more.

So if I take money out of the asset base by depreciation, I no longer earn my

WACC rate of return on it, and I want to keep earning those WACC returns so I therefore want to maximise the asset base for as long as possible, which means to prolong or postpone depreciation as far as possible. So that's the second reason for why DORC is preferred by asset owners, that DORC-related depreciation schemes give you a much more drawn-out depreciation path, and therefore they maximise the total number of tariff dollars from any given outlay on new assets. You'll get a lot more tariff dollars over the life of an asset under DORC than you will under DAC, despite having spent the same amount for it.

Now, some general conclusions. The last line - you'll see the impression that I have, and that is that DORC is much like a blank cheque. It's a dangerous thing. It's open to manipulation in all sorts of ways, in its initial setting, in its revaluation, in its depreciation schedules. In all sort of ways, owners have the ability - within limits, of course - to actually define their own tariff stream. That's a very dangerous thing for an economy, especially when the whole ethos of the Hilmer reforms was to actually make access to these things cheaper and therefore to expand industry rather than to handicap injury, by favouring a vested interest, that is, the asset owners.

To date, regulators have in effect taken the owners' side. Now, the asset valuation spectrum, which starts at scrap value at the bottom and goes up to DORC, I would say ORC, or I would say maybe even a multiple of ORC, within that spectrum of possible regulatory asset values, the regulators have gone to the top end, which in effect means that rather than compromising or reaching some economically artistic and proper valuation in the mid-range somewhere, they actually have opted to go with the asset owners in full; that is, to set the asset values at the top end of the spectrum. Now, King himself said that this was a curiosity and he said the equally ridiculous position would be to go to the other end, where sunk assets would be valued at scrap, which would be seen as manifestly ridiculous, but DORC to me is equally manifestly ridiculous in the other direction.

Now, two things that haven't come out from the regulators' discussions, first, regulators have suppressed the history of rejection of DORC in the private sector. Some quotes in my paper - and there's massive literature in accounting, both written by practitioners and theorists, saying that replacement cost asset valuation just can't work in the world, and it's not applied in any private sector accounting context anywhere and never has been, apart from very short flirtations by one or other vested interest group that have never been accepted. For one main reason, replacement cost is just too subjective, too unauditable, too open to manipulation by powerful vested interests.

The last point, regulators have ignored the experience of the US regulators. Australian regulators have ignored the whole history of US regulation, where assets are valued on a DAC basis and essentially always have been. Now, it's curious that something as useful as that experience has just been rejected out of hand by our regulators. It's quite worrying in terms of us as a country reinventing the wheel but actually getting a square rather than a wheel, tending to build our own empire, our

own regulatory empires, and ignore the experience and the benefits of experience of all the litigation and all the discussion of the US regulators.

Now, it's quite disconcerting to me as an academic observer that regulators can actually suppress these things. To me, the regulators should have an independent role and they should be open and promulgating this kind of background information. Rather, in all the reports that the regulators have put out on asset valuation, there's not a skerrick of a mention of the outright rejection of replacement cost based valuation generally in the private sector in every country in the world. Well, that's a potted version of my arguments, probably not put as well as could be with more time, but at that stage, I think I've used my available time, so I'll defer to the commissioners.

MR BANKS: Good. Thanks, professor. I think that has been quite helpful actually. I mean, we've read the paper but I think the way you went through it with some of those examples clarified some of the points in your paper. We have a number of questions to ask, but perhaps to begin where you just finished, and that is, what struck us, and we mentioned it in the position paper, was the virtual absence of this methodology, DORC methodology, in US regulatory practice. Are you aware of how it is done in the - I just wondered whether you might be able to elaborate a little bit on how the US regulators go about - - -

PROF JOHNSTONE: Well, as it happens, there is - one of the most wonderful books in all economics is a book authored by Bonbright in about the 1930s, and brought up to date in the 1990s by two other economists in the US. It's the entire theory of the regulation of tariffs, tariff regulation, what's called rate of return regulation. Now, in that book, replacement cost valuation is given very genuine consideration and rejected for the reasons mainly that I've put today (1) it's too subjective, too litigious - see, in the United States, industry is much more powerful than here. I think if we had a more industry based economy in Australia, you would have massive protests from users on DORC valuation. But because industry is relatively weak in the Australian economy, users just don't have the resources or possibly the knowledge or the support of think tanks, economic think tanks, to actually put their case effectively, whereas in the US, the US being an industrial company, the users are much more vocal.

So as a result, you have massive litigation in the US, which we could possibly get here in the future too. If regulators start to allow asset revaluations based on the replacement cost, it could get to the point where users are motivated sufficiently to actually litigate. Now, that's the first reason; subjectivity and potential for litigation. But the second reason is this resource allocation perspective, and that is the problem of not using something that already exists, because it would cost a lot to rebuild it. That's the fundamental economic weakness in the whole DORC thing. If you have an asset that you've already paid for, and further use of that asset is marginally very inexpensive, to not use it is, as I said before, something that would seem ridiculous to any independent, unconditioned observer.

We actually have a sort of a DORC theology in this country amongst regulators, where people are inculcated in the DORC mythology or theology, and people with that inculcation would find it very hard to respond to this most basic argument that anyone could understand, and that is when you have a sunk asset, if you don't use it, every day you don't use it you've given up a resource. Why are we not using it? Because it would cost a lot to rebuild it, when in fact to use it doesn't mean to rebuild it. You know, it's just an amazing economic illogicality that is implicit within DORC. DORC makes that happen, and so that's the second reason - I recommend strongly that the Productivity Commission buy a copy of Bonbright, which costs about $400, a massively expensive book, and a wonderful book, because that is the theory of rate of return regulation when it comes to things like cost of capital and asset valuation. Bonbright, the authority, says that replacement cost asset valuation is off.

MR BANKS: It sounds like they've got some market power with a price like that.

MR JOHNSTONE: That's right, yes.

MR BANKS: I mean, one of the questions with DAC I think that we raised is questions about potential for gold plating and so on, and we've raised this question of prudence reviews. Do you know anything about how they're conducted and - - -

MR JOHNSTONE: Well, no, as an outside I don't. But in principle I cannot see the difference in the need for prudence reviews, whatever the asset valuation basis. If you're going to bring assets onto the balance sheet or decide whether they should stay on there, the prudence review would be the same whatever the asset valuation basis. So, for example, if I want to invest in a new asset and I want to bring it on at DAC or DORC, the regulator should still look at me and say, "Is that asset warranted? Is the investment in that asset warranted?" and that would be the same whether DAC or DORC is the valuation basis from which it comes. I think people are confused by the "O" in DORC. They think, "Oh, yeah, DORC has got optimisation in it, DAC hasn't. DAC is really DOAC, that is, depreciated optimised actual cost.

Now, what has happened here is that we've reinterpreted ORC as DORC. Sorry, we've reinterpreted DRC as DORC. We've added the optimisation element and that's a good thing to do. But we could equally add the optimisation element to DAC and in fact that's probably done in the private sector although it has never been articulated as such. This acronym DORC, interestingly, has never existed until the regulatory debate in Australia and that is because private sector accountants who fully understand replacement cost valuation and depreciated replacement costs have never actually articulated the optimisation element and put a word on it. Therefore the "O" thing is new but it's not unique to DORC. It can be applied to actual cost or any other asset valuation basis. So DAC is really DOAC and should be rewritten as such if it is to be compared fairly with DORC.

MR BANKS: I guess the other question that I had - and I think you've clarified it to some extent but we need to think a bit more about it. I mean, you make the point that when an investment is undertaken that DORC is equal to DAC but the broad thrust of what you're saying nevertheless is that DORC would generally be greater than DAC. Now, there may be situations in which there might be a significant shift in technology and so on, so that in principle you can imagine DAC values overstating the worth of the asset.

MR JOHNSTONE: Yes, that's right. When an asset comes onto the balance sheet, a new asset, it initially comes on at the same amount whether it's DAC or DORC. But as you said, in the future with DORC it can be different to DAC. It can either be revalued upwards or revalued downwards. In principle if there was a reduction, say, through technology advancement in the replacement cost of pipelines, then in principle you could have a downward revaluation. Now, that's a risk that asset owners seem prepared to take for the much more likely potential of general upward revaluations.

MR BANKS: So what would happen, for example does anything happen in the US? Is any adjustment made in a situation like that?

MR JOHNSTONE: Look, I can't say I'm any expert on what happens in the US, except for the fact that in principle the asset value is actual cost. So it's a simple situation where we say, "All right, you're spending $100 on a new asset. We agree on the optimality of that investment. We're going to give you a real rate of return of whatever, let's say 7.75 per cent, on $100 and you'll keep that real rate of return while ever that asset is in use." But you'll never get 7.75 per cent real on $110 or on $200, whereas with DORC you potentially can. With DAC you can't and that's the qualitative difference between the American and Australian regulatory regimes.

MR BANKS: Perhaps I might just break for one minute, just while I check out what's happening.

MR BANKS: So we'll resume now, okay. Perhaps if you'd just like to complete your answer to that question.

MR JOHNSTONE: Yes. Your point is correct and that is, with DORC there is the potential for either upward or downward revaluations in principle. But in practice the potential is almost entirely for upward revaluations and that's because the whole of the asymmetry in terms of valuation where the asset owners and their employed valuers have far more power to determine the replacement cost of existing assets, sunk assets, than does any regulator for example who hasn't got the same resources to spend, can't go and have an independent valuer do a truly independent valuation. So the potential there, in the same way as the blank cheque I argued before, is for asset owners to, if not always, at least much more generally get upward revaluations

than downward.

In a sense they have a free option where at least they'll get the CPI because there's an institution at the moment where assets are indexed by the CPI. At least they will get that, but they've got the potential also to argue for over and above CPI upward revaluations if the replacement cost of infrastructure can be shown to be increasing at a rate greater than CPI. So it's a cake and eat it too situation where you'll definitely get the CPI but you may get more and I think the genuine potential for less than the CPI, not in a specific assets case but as a generalisation, is zero.

MR BANKS: Thank you.

MR BANKS: I'd now allow you, Bill, to just announce yourself for the transcript.

MR HENSON: For the record, my name is Bill Henson. I am gas marketing manager for BHP Petroleum in Melbourne. BHP has commissioned Prof Johnstone and Bob Lim to provide some papers in support for our position put forward to the Productivity Commission. If I could just add a further comment, just to elaborate on David's point about the upside potential, I guess one of the issues we've seen, particularly to do with low pressure gas distribution networks is that these are originally installed particularly when there's very little infrastructure around. So in a greenfield situation the new estate is being laid out and the infrastructure gets put in on, sort of, day one and the costs of doing that are sort of greenfields costs.

Over time of course then all the roads and the rest of the infrastructure is put in place. So then when you come to look at what's the replacement cost of that, of course you've then got to take into account the costs of digging up and restoring all of the roads and nature strips and the like, and that in itself can probably add another 50 per cent to the replacement cost. So just because they're sort of subsequent development of other infrastructure around them, then that sort of creates this upside potential which David was mentioning.

MR LIM: Mr Chairman, you probably have seen this slide before but I just wanted to bring it up again because it does show quite clearly the creativity that can come from various studies on asset values of any particular business. You can see from the ORC values that values depending on who has done the study could actually vary from $1.8 billion to about $3.1 billion. That's the sort of example I just wanted to put up to show the creativity of the use of DORC and of course the other point I want to make is that apart from the dependency on assumptions I think I should point out that the numbers also depend heavily on who actually commissions the studies and it's often the case that the studies are commissioned by, as I've already said, the access reviews.

The other slide I wanted to put up, which you may not have seen up to this

point, concerns the valuation of easements. The numbers here concerned valuation of easements by two different valuers commissioned by the New South Wales Treasury on the easements of two electricity distribution companies. Again if you look at the total numbers you can see the great variation, even by two different valuers working for the same employer. But I wanted to make that point because if the numbers given by the valuers were accepted by the regulator the capital valuation of the two distributors concerned would have grown by as much as $5.6 billion or about 73 per cent, and that average electricity prices would have increased in the order of about 77 per cent.

Needless to say, those numbers would have created quite some riots in the franchises of those distributors. But I wanted to illustrate that valuing easements at DORC could actually make those two distribution companies become real estate companies rather than be in the business of providing network services, thanks. If I could leave those two slides there with the commission.

MR COSGROVE: I guess I find myself going back to rules of thumb to do with opportunity costs and so on. But, Prof Johnstone, I wonder if you could comment on what would be the correct way then of valuing the easements?

MR JOHNSTONE: The old-fashioned and good sense of economics was that when you use an asset you costed it at the marginal or incremental cost of using it. So for example that table we're sitting at today is costing us nothing to use it and we'd get no benefit out of it if we didn't, but we would have still incurred its costs three years ago. So taking the case of easements, this is the most ridiculous situation where we set very high tariffs on the basis that if we had to put a new pipe through that field today we'd have to get an easement today at today's price. Now, to let that sort of consideration set the tariff that you set today, you know, it's the height of economic madness and I can only attribute it, not to economists being mad but to economists being bought, and that is a market for excuses.

There will always emerge a pseudo-theoretical economic explanation for whatever the vested interest prefers and that's a law of economics. It's the greatest embarrassment in economics. There was a Nobel prize winner called George Stigler who said, "Let's use economics to look at economists and we'll see whether economists abide by their own rules. Can we be bought? Are our theories the sort of things that people want to hear? Are the most successful economists the people saying the things that are politically most acceptable?" and sure enough this was the case, and very quickly George Stigler shelved this whole area of theory.

It's one of those things, it's a skeleton in the closet of economists and they don't like to actually apply their own ideas to their own behaviour. But the group who did were (indistinct) in an article "The Market for Excuses" and they basically said, "When it comes to the supply of theories and the demand for theories there's a market there. If you want an economic theory to support cause Y we'll get you to go on a theory to support cause Y."

MR BANKS: I think, unless I remember incorrectly, it was also George Stigler who coined the term "the economist as preacher".

MR JOHNSTONE: Yes, that's right.

MR COSGROVE: In all of this though, you know, we're hearing from access providers dissatisfaction with regulators' use of DORC.

MR JOHNSTONE: Yes.

MR COSGROVE: So neither side of the marketplace, if you like, seems to be satisfied. Yet your argument to us today has been that really this is a system which is, you know, a free lunch for the providers.

MR JOHNSTONE: Well, there are definitely elements of a free lunch. There's no doubt about that and it's only to be expected. To shore up support for DORC you would argue that DORC is not enough. Now, it's a natural economic thing to do. I think - - -

MR COSGROVE: But that can work on both sides of the argument of course.

MR JOHNSTONE: Certainly, that's right. There's no doubt about that. But the regulators have opted for one side of the argument in the extreme. That's the way that I see it, with the consequence that we don't use assets today that are sitting there under-utilised. Gas pipes at 50 per cent of capacity could be utilised further at no additional cost and we don't do that because the tariffs are too high, because the tariffs are set on what it would cost to rebuild that pipe, when it's already there. You know, that's the reductio ad absurdum of the DORC argument.

MR HENSON: I think it's fair to say actually, although there have been some complaints about how the DORC; ie, it has produced a big enough number, almost without exception in the case of gas the service providers or infrastructure owners have put forward DORC as their preferred asset valuation methodology quite simply because it generates numbers typically two to three times than historic cost valuations. So I think perhaps having gotten that valuation would they like that DORC process to be continued to be done, I'm not so sure about that because I guess there's obviously - while there is generally risk on the upside there is also risk on the downside, given that this is a bit of a lottery, and perhaps having gotten the good number in the bag they may prefer to sort of keep it there rather than have it re-examined at some future date, and I think that would be particularly the case in electricity where, as far as I know, there's been very little effort put in to getting a critique of the DORC valuations which have been done so far.

Just one other point which I'd like to add on the costs of using DORC, and we do elaborate on this in our submission, to genuinely estimate the capital cost of a

system is a - and to do it in a manner which has got any real substance to it is a very time-consuming and expensive exercise. I guess estimating capital costs of projects is a pretty commonplace sort of challenge and within BHP I guess we have developed some sort of guidelines, rules of thumbs, for how much money we need to spend in order to estimate the capital cost of a project to get that estimate to a quality where we could then decide whether to go ahead with a project or not. The general rule of thumb has been between two and 5 per cent of the capital cost of the project has to be spent in terms of developing a reliable cost estimate and understanding the risks and other issues associated with the project. Even after spending between three and 5 per cent we would end up with a capital cost estimate we'd probably say is plus or minus 10 to 15 per cent; ie, the actual cost would lie somewhere in the range of 85 per cent of the estimate, 115 per cent of the estimate. Now, these are sort of general rules of thumb and we do have some spectacular examples of having fallen outside of that range with some recent projects. But I think those sort of guidelines would be common practice with other companies.

So we are talking here about $50 billion worth of regulated infrastructures, a figure I've seen quoted - it may well be higher than that - to actually do a proper cost estimate, a replacement cost of that, would cost somewhere between 1.5 and $2.5 billion. Under some regimes it's proposed that this is repeated every five years, I understand. This is just an enormous ongoing cost that DORC brings about. Now, of course what happens in practice gets more complicated than that because, as Bob illustrated, the service provider does a replacement cost estimate, then the regulator does a replacement cost estimate and then if they can afford it, the users will do a replacement cost estimate. So you're talking about two, three estimates being done, so it's not just a question of the stuff being done once, it's being done many, many times. Of course, in practice what happens is people - obviously nobody actually spends that amount of money so they completely shortcut the process and degrade the quality of the results. But if you actually wanted to use replacements cost and you wanted to get it on a halfway reliable basis then you'd need to be setting aside three to 5 per cent of a capital cost to do those studies in a half-decent manner.

MR JOHNSTONE: Which of course is a mad thing for the economy to do, given that the assets already exist. To be worried about what they would cost to rebuild when you're not really ever contemplating rebuilding it is a funny thing to devote resources to. But that's what we're drawn to by a regulatory regime that requires such.

MR COSGROVE: Even under a DAC valuation system, wouldn't it be possible for the valuation of the asset to rise in line with say reassessment of the earning capacity of the asset?

MR JOHNSTONE: Yes, the idea of DAC is, it's the idea that you don't rewrite history. Rather, if someone invests $100 then the regulator will guarantee them 7.75 per cent real return on $100 for the life of that asset. So for example if inflation was 2 per cent, simply 9.75 on the $100. If next year inflation is 6 per cent then they

get 13.75 on a hundred, but it's always on a hundred. So that's the idea of DAC. You can define all sorts of asset valuation bases. For example, you could have DAC with the potential for upward revaluations, which is what happens in private sector accounting. Theoretically, private sector accounting is DAC but it's not really because there are always these revaluations that are allowed through by auditors and as a result you've got sort of nothing in particular and that's one of the main problems with private sector accounting as it is. It has no coherent framework. But the answer to John's question is that you would not need to revalue DAC and if you did you wouldn't be able to find an argument to explain why you did it, except for the fact that you wanted to grant a tariff-free lunch and that's the implication.

MR COSGROVE: But why would be a tariff-free lunch?

MR JOHNSTONE: Well, again, suppose you invest $100 and you know you're getting 7.75 per cent on it forever. It's like I invest my money in a fixed term deposit at the bank. I go an put $100 in and I'm going to get this known rate of return for while ever I leave it in there. That's one economic environment. Another one is that from time to time we would just deem you to have a different balance in the bank account without you actually putting any more money in. So all of a sudden the bank says, "We're going to pay you the same rate of interest but we're going to pay it not on the hundred any more that you deposited but on 120 or 90 if you go back the other way. Now, why you would do that could only be explained by the ACCC argument and that is the ACCC says that the asset owner should be able to exploit the market, should be able to exploit the fact that it's got harder now for a competitor to build new assets. So I'm the asset owner, you are contemplating building new assets, I see it's got harder for you, so what do I do? I push my price up a bit more because I know now that the cost of replacement is higher and therefore you are less likely to do it. So in other words, I push it to the limit all the time.

That's the ACCC point that we shouldn't allow the asset owners to push their pricing to the limit. My argument with that is that for one thing the limit is indefinite because the true limit is not the current replacement cost of all new assets, it's bigger than that. Because companies like BHP or all gas users in Australia will never build their own pipelines, almost no matter what tariffs they have to pay because it's just off the agenda for them. It's not that big an issue in terms of the bottom line for the whole company that you couldn't push these valuations way beyond true replacement cost, and BHP would complain but could not act to actually constrain you.

MR HENSON: I think the other comment on this is that assets valuation, I guess it depends to some extent what it is you're trying to achieve. If the intention is to encourage new investment or ordinary investment but otherwise to charge prices which are as low as can be achieved while still encouraging new investment in order that you have an internationally competitive economy that it would say you value assets at that. If the intention is to maximise the - you know, effectively impose a tax on industry and on consumers by means of energy infrastructure then the assets are valued at some higher number than that. But that's exactly what it is. I'm just saying

it really comes down to an allocation of value between the shareholders and the consumers and that's really at the heart of the issue.

MR BANKS: Yes, that's right. Can we just clarify on that while Prof Johnstone is here. Is the nub of the matter more to do with the practical application than a divergence conceptually, looking forward with a new asset between the two approaches?

MR JOHNSTONE: There's one school of thought undoubtedly in economics that supports DORC on principle, but the whole of the discipline of economics would not support DORC. The school that has been vocal has been, you know, the obviously politically relevant one at the time. The other schools of thought in economics would be for example the thought put by King that these assets are there, long-run marginal cost - that includes capital cost - is that appropriate asset valuation basis because that leads to optimal resource allocation overall. That is the standard theory in economics; long-run marginal cost including capital cost is the appropriate pricing basis.

But what has happened is that a small group of economists pushing replacement cost, I would say because that is politically a good thing to do at the moment - it has been quite remunerative for some years - has surfaced strongly and the other majority of economists have been quiet on the issue because they possibly don't even know what's going on. We're only hearing from one part of the economic school. I'm putting an argument from another part but I haven't had many academics rushing to support me and I put that down to the fact that there has not been motivation for them to take the issue on. Now, perhaps regulators, if they had been more genuine, would have sought a full spectrum of academic opinion rather than selectively taken opinions from the discipline.

MR HENSON: This is an issue which the European union has been wrestling with in terms of they are in the process of setting their open access regime, certainly in gas pipelines, and they've recently come out with their directive and I guess it's sort of come out with an answer which you'd think perhaps reflects a lot of the politics of it which is that government-owned assets are to be valued at DORC and privately owned assets are to be valued at DAC. So they've wrestled with the same issues but at the end of the day the shareholder interests have obviously played a large part of it.

MR JOHNSTONE: It's quite revealing that Stephen King, who's been the reputable economist who has been most influential over the ACCC, has had his opinion on DORC ignored and in fact in his recent submissions to the ACCC he says, "Well, look, I know I've said DORC is bad news elsewhere and I still believe that, but if I'm going to contribute I'll take DORC as given and then go on and assume that DORC will be it and talk about depreciation schemes and subsidiary issues." So, it's remarkable that the regulators have essentially suppressed very credible thought anti-DORC. In terms of the long-run economic prosperity of this country it's going to be seen in the long run to have been a dastardly deed I would

expect, because the flow-on ramifications are permanent and they will be a long while washing out. We set our energy tariffs on DORC, the United States sets them on DAC. Who's going to have the lower tariffs, who's going to have the more industry, et cetera? This is on a theological basis, on economic arguments that actually don't stand up to scrutiny and have not been scrutinised properly.

MR BANKS: Okay. Well, more food for thought. I guess I'm still getting on top of it myself and we have other participants take a different view. But I guess what I was sort of exploring before is the notion of opportunity cost. If you've got a major deviation between DAC and what the real value of the assets was, are you expecting a firm - just thinking in a private sense now without being regulated - that you surely would want to take into account the opportunity cost of those assets which would be higher than the DAC value. The shareholders would scream if they didn't do that.

MR JOHNSTONE: Yes, it's a hideously difficult position that regulators are in in a sense because the opportunity cost for sunk assets is basically zero. You can't take these pipes out of the ground and get anything for them other than scrap value. So, you see, that's why I think regulators are drawn to DORC because it sounds more plausible than the other extreme of this. That's one of the reasons why I think they're drawn to DORC. It sort of sound more plausible than the other end of the economic spectrum which is scrap value-based valuation. I don't think anyone is championing that. Not that it actually would cause any damage in theory anyway because, as I said before, if all of a sudden these asset owners were told in a different political environment, "Sorry, you're only going to earn 7.75 per cent real on the scrap value of your assets," what could they do? They won't sell them because they're getting 7.75 per cent on the scrap value as it is. They not motivated to sell them.

So, in a sense they are in no position to argue in regards to scrap value and therefore they had been treated very generously by regulators who have said, "We'll turn a blind eye to the fact that these things are already there and we'll treat them as if you've got to pay today's prices to build them." Now, that's a very generous thing to do. There is no theoretically uniquely correct point in the middle between those two and that I suppose causes ambiguity, but the response of regulators to ambiguity is an example of what's called in universities the misplaced desire for objectivity; that is, to jump to something that is a desirable benchmark like DORC and to champion that as if it is uniquely correct rather than to say, "Well, look, this is a very artistic process we're doing here and we should be employing all sorts of benchmarks and benchmarking and so on to set tariffs on existing assets to truly get the spirit of the Hilmer reforms, which is to encourage downstream development while at the same time not hamstringing continued investment in infrastructure. It may be that the regulators have just thrown up their hands and said, "This is just too hard. We need something that we can hang our hat on. DORC sounds pretty good. We could put a few paragraphs in support for DORC, let's go with DORC," and politically also it was very acceptable in Victoria where it was strongly pushed in all the ACCC joint inquiries when the assets were being sold in Victoria.

I think the PC in its own position paper just lately made this point. It said that the poor old regulators have had a problem, there's no doubt about that. They've got this difficult job of constructing market conditions where there are no markets and so the regulators have naturally opted for something that was safe; that is, DORC fitted those criteria. You could get a few economists to support you - although not Stephen King, who is your number one - you could find a few to support you and also it looked like it was objective when in fact it was just one of many different points that we could have taken as if it was the correct one. It was an arbitrary selection of that end of the scale but it actually could be put forward as if it was scientific, well-reasoned, deduced from theory - all those good things - and therefore from a regulator's point of view, wanting to appear to have done a thorough and rigorous job, it had a lot of attractions. Whereas scrap value also has attractions in a theory sense, very strong attractions, but practically it wouldn't have gone down; that's what you were saying a moment ago. All hell would have broken loose.

COMMISSIONER: So in a DAC-based world you wouldn't see any role for revaluations at all?

PROF JOHNSTONE: It is really a philosophical point: do we let the asset owners exploit their ownership by the fact that as soon as the reproduction costs of these assets that will generally never be reproduced goes up, should we let them push our prices up because of that? Should we let them have the benefits of that or should we actually pass those benefits on to the rest of the economy through downstream use and guarantee them only what you get when you go to the bank, where you deposit a fixed amount of money that you and the bank both agree on and you get a fixed rate of interest that you and the bank both agree on.

Now, should we apply that model, which is the American model, we tell them, "Okay, you spend $100, you will always get this very reasonable return that we're offering you, 7.75 per cent real but it will always be on the $100 you spent. Keep that in mind when you're deciding what you spend your money on." That's the American model, which is the model we all live by when we deposit money in the bank but these assets owners are saying, "No, that model is no good to us. We want to be able to push it to the limit all the time", exploit the fact that no-one will ever bypass these assets. They are unbypassable. Politically it just would not be possible to duplicate these infrastructures. So in a sense the sky is the limit on the asset values that the users can actually exploit.

It is really quite against the spirit of attempting to free up infrastructure, make infrastructure available at prices that industry can actually absorb and use and utilise and exploit. It's ironic that the spirit of the Hilmer reforms has actually been put in the reverse through the asset valuation basis of DORC. Now, to my, again as an unaffected independent observer, it's got all the characteristics of an Aesop's fable. I think it will be seen that way in 10, 20 years' time.

COMMISSIONER: Can I just ask for some clarification from Bill Henson. You

mentioned the two to five per cent of the capital costs of a possible new investment which, you know, goes into estimating possible asset value that might be involved. BHP's original submission, I've been reminded, had a figure in it estimating the total cash cost for service providers under Gas asset access regulation in New South Wales was around about $2.5 million per year. Now, those figures seem to be so far astray as to make one wonder whether a fair part of the two to five per cent of capital costs might be something that you have to incur anyway without regulation.

MR HENSON: I am sorry, I guess I am not too sure about the $2.5 million. What I said was actually three to five per cent.

COMMISSIONER: Three to five, okay.

MR HENSON: What I was saying there is that it's been BHP's experience if you want to estimate the capital cost of a new development with any level or reliability, you need to spend between three and five per cent of the capital cost of that development. In the case of New South Wales we've seen the - - -

COMMISSIONER: Sorry, Bill, that's a normal course of business number?

MR HENSON: Correct, yes.

COMMISSIONER: Whether or not the investment is likely to be regulated or not?

MR HENSON: Absolutely. If BHP is considering a new project, be it a new offshore platform or offshore field development or a new mine site or a new processing plant or part of a steelworks, then in developing the capital cost of that project before making an investment decision as to whether to go ahead with that project or not, it would typically spend somewhere between three and five per cent of the capital cost of that project to bring that estimate up to what we would refer to as an investment grade or sanction grade standard. So in the case of New South Wales I guess that replacement costs of the gas assets of New South Wales I think was around about $2 billion dollars, so I guess to have done the job properly it would have cost somewhere between three and five per cent of that $2 billion to have come up with a reliable estimate. In practice only a small fraction of that was done and you get what you pay for. You get gross assumptions being made in order to be able to simplify the task. As a consequence the quality of the estimate is correspondingly low.

Just as an example of that, we've looked at a few of these valuations. In every case an assumption is made that the current layout of the system is the optimal layout. So it is assumed that all of the pipes have been put in the right place when they were first built. The reason for that is because to assume anything different is just too big an exercise and would cost far too much. So that is the sort of simplifying assumption that is made. There is another classic case in Canberra where the normal way of reticulating houses is to lay one pipe down the street and

then run laterals off to each house on either side of the street but for some reason in Canberra it was laid with a pipe down each side of the street so there was twice as much pipe laid.

Now, when the optimum replacement cost was done, the consultants that were used didn't even comment on this practice. They laid twice as much pipe as was required, didn't even get mentioned in the optimisation. There was no assessment made as to was that the optimal way of doing it or not. As I say, these gross simplifying assumptions have to be made otherwise it really would cost three to five per cent of the capital cost and people would say, "It's absurd to be spending that amount of money on estimating asset values.

PROF JOHNSTONE: That expenditure of course is unnecessary in the US system where you actually observe through cheque butts what the thing cost to build and that is the figure that the return is paid on thereafter, and there is no need ever - at the start or in the future - to determine what the current replacement cost of these existing assets is. So avoiding that exercise is one of the advantages of DAC. Not only that, the point I failed to mention before, the DAC bank model is actually better than going to the bank for us because it is like putting $100 in the bank and us - the bank and the client both knowing that, except for the fact that the bank guarantees us a real rate of return so we know that if inflation goes up our interest rate will go up.

So it is quite generous in that regard. The DAC model is quite generous in that respect. The asset owner will always get a rate of return defined in real terms so they are insulated against inflation. To be insulated against inflation and to be able to rewrite the value of the asset from time to time in the future is a lovely thing to have. It is not really representative of companies in the real world. For example, a company like BHP cannot tell its clients that, "We're going to set our prices on what it would cost to rebuild the steelworks and we're going to charge you a real rate of return on that." You just can't go and tell your clients that. I think very few companies in the real world would have the ability to do that.

So to give that ability to asset owners who are at the foundation of the whole industrial development of the country is a very dangerous thing for an economy to do on basically illogical grounds.

COMMISSIONER: Just a final suggestion. Prof Johnstone, we have a submission from in fact our next participant, the Australian Rail Track Corporation. It is number DR64. There is some discussion of this DORC DAC debate in that submission. It is on pages 15 to 17. I think what you have said to us today pretty much provides your response to those arguments but if, on reflection, you had any further thoughts on that material, it would be - - -

PROF JOHNSTONE: Yes, I scanned those just before the session. They are the same thing as you see repeatedly in submissions and that is, "DORC gives market-like outcomes, DORC emulates competitive markets" - that kind of slogan which

actually has no support in the submission there and trusts for its support back to the ACCC argument, which is the new entrant logic. That new entrant logic I think just doesn't stand up. I know that King believes it doesn't stand up as well but the ACCC is hanging its hat on that logic and saying, "This is our rigorous economic derivation of our valuation methodology.

COMMISSIONER: Although on technical improvement grounds I think you agreed earlier that could be a basis on which DORC could show a lower value than DAC.

PROF JOHNSTONE: Yes, but my argument is that the new entrant logic is naive because a new entrant would not come in at DORC. A new entrant would not even come in at all. A new entrant wouldn't come in tariffs were double ORC. So if the ACCC was genuine in its application of that logic, if they had really good sense to it, then they would say, "Okay, in a real market the owner of these assets would push it to the heights of possible tariffs." It would take every dollar of tariffs out that it could without actually allowing a new entrant to come in, knowing a new entrant is never going to come in unless you get to these ridiculous levels of triple, quadruple or whatever. I think that is the economic reality.

So if you want a theory that actually coincides with reality, rather than just being one that, you know, is okay in a book then you have got to say that DORC is not the upper new entrant limit. It may be ORC if you're very generous but it's really some multiple of ORC. I have called it K times ORC where K is unknown.

MR HENSON: I think it's true, certainly in gas pipelines - it's probably also true in electricity - but the rate of change of technology is actually pretty low. So there have been some reductions in the real costs of laying pipe in the ground but if we look back over the last 50 years you can see a small reduction but there is no transformation or changes in that kind of technology. It might be very different in telecommunications. That is a very different kind of industry. I guess the comments we have been making today have been specific to energy infrastructure, not necessarily to other infrastructures.

COMMISSIONER: All right, gentlemen. Thank you very much for that. Thanks also to Mr Henson for making it, despite the fog. If there are no other questions we might close there and break for a few minutes before the next participant. Thank you.

MR COSGROVE: Our next participants are Australian Rail Track Corporation. Welcome to the hearing. Could I ask you please to give your names and positions.

MR MARCHANT: David Marchant, chief executive officer.

MR EDWARDS: Glenn Edwards, commercial research manager, non-economist.

MR COSGROVE: Thank you. Well, thank you very much for making the submission; in fact you've made three submissions in all to this inquiry which we appreciate. As discussed earlier, I'll give you the opportunity to provide an overview of the points that you've made and then we can come back for some discussion.

MR MARCHANT: Thanks, Mr Chairman. We propose to do a very quick overview and try and enable time for discussion on the points and raise some of the issues or at least enable some dialogue on the issues. ARTC's submissions have been really focused around the exercise of the structure of access regimes' regulatory framework and the structure of its administration.

Our key issues that we've raised and which have come up again in our report is that we strongly advocate a single adjudicator with regard to access regimes across the country, and that is that there shouldn't be two courses to gain an access regime, one through the ACCC if you happen to be privately owned and a private sector entity and then another through the NCC by a declaration if you happen to be owned or loved by a government, and that effectively that those two regimes then can produce in fact convoluted and distorted outcomes including within the one industry just depending on whether they happen to be under the government NCC regime or whether they happen to be private sector in a different state under an ACCC regime or vice versa.

The other point around that is that effectively the single regulatory framework or a single body adjudicating the regulatory framework would provide the level of consistency around what in fact is an economic regulatory model, and the duplicity of having different systems which are accessed by different players actually leads to a convoluted outcome.

The second major issue that we've raised is a differentiation of access regimes should be on the access provider's market and industry's position, and that is that the legislation and the regime around it should in fact enable the regulator - in fact encourage the regulator to provide for different types of regulatory thumbprints between hard and soft, not only depending on whether - the market domination position of the player but also the player's relationship with others in the market.

For example, an integrated player or a company related - a facility owner related to either upstream or downstream provision we're obviously suggesting should have a harder hand of regulation with regard to their input costs and their costing frameworks to enable this transparency in the market. But in fact a

single-purpose facility owner who is not related to upstream or downstream in the market and who proposes regimes which are in fact much more market-friendly and related, that they should be recognised in a different form of structural regime which the regulator deals with. What we'd call that is the third party regime versus an open access regime because it is the intent of the player and how they let the market become involved in pricing which can be differential and in which their conduct is difficult because of their circumstances in the market.

For example, using in fact maybe a gas example, given the last discussion, obviously gas pipelines that are major transmission lines which are in the ownership of maybe the gas supplier, the core production who are not open to competition although there is only a limited number of gas suppliers in this county, if they're a related entity or otherwise, they can be used in different forms to block out other persons getting into that market. Conversely, a gas pipeline with a proposal to actually have market influence on it which are not related to upstream or downstream can in fact put up a regime which is a lot more market-orientated and requires lesser handling. A good example of that may be the eastern gas pipeline where in fact the owner and operator of that is not related to either a distributor or in fact a gas supplier.

But the issue - only just using the gas one as an example because it's reasonably fresh after the last discussion - that the issue between the access provider or the facility owner is related also to the facility owner's position in that market and related entities and that there seems to be a concept of a one stock access framework should fit all, and that doesn't relate to the market framework. So our second thing is to advocate some differentiation or encouragement of differentiation of access regimes depending on the access provider's market and industry position.

Our third major framework is that there should be an encouragement that if there are going to industry codes and in fact a single regulator, which the commission itself has suggested somewhat similar to that, that the codes and the individual applications should be in convergence, which you've suggested. We're actually suggesting further than that, that in fact an industry code - a participant should be able to not have to comply with industry code and make a separate submission for an access undertaking because our view is that industry codes are at times created for the protection of the existing industry players, not necessarily for the protection of competition or in fact for new market entrants.

In fact I think, based on the last discussion, the gas industry code might be a fine example of where the persons who have perpetrated that together were - although bleeding at the heart when they were doing it - were more interested in protecting themselves than they were in fact open markets. I think the Duke Energy case is a good example of that where in fact they sought to an access undertaking under the ACCC, people attempted to block that by using the gas industry code and saying it must comply with both rather than letting the regulator actually assess it on its merits against the same principles of competition. The attempt to link - that, "If

there was a code in existence you must comply with that code," as distinct to, "You could actually put a separate application in and go through the same test based on the merits of your application and your marketplace," we're suggesting that that also be emphasised and that there be some clarity of enabling it to happen.

We obviously have also argued that there should not be specialist industry access regime regulators, that effectively what that encourages is a situation where the access regulator becomes close to that particular industry and starts to take in characteristics that aren't necessarily related to competition and open markets but start to become peculiar to particular commodities, of which a regulator can get advice on that but the discouragement of that process is really aimed - because the regulator actually becomes an active participant in the industry's desires and needs and starts to get contaminated with things such as safety and other things and its particular needs of that industry which are regulated by others. But they get converted into the access code framework and, in our view, tend to subvert the outcome of open access and tend to encourage frameworks that are actually regulated in other forms and actually distort the economic modelling framework that takes place.

Whether the commodity is gas or electrons or in fact H2O water molecules or in fact a railway pass, the economic concepts around dealing with the facility and framework are reasonably clear. The technical constraints the regulator can get advice on and I'm sure all the parties will in fact give him that advice in their submissions, including advice about whether they like a DORC or a DAC better or whether they think the valuation of a DORC was right or wrong or indifferent. The benefit of having regulators is that people can put their cases against all those very articulate positions. All we're encouraging in a structural sense is that the industry codes not be made absolute with regard to other alternatives of applications for access codes or access undertakings.

The third issue is the suggestions with regard to the objectives and coverages of Part III. We're obviously supporting and do support the amendments proposed by the commission with regard to incorporating services or service within the framework rather than just focus on the facility alone. We think that that will actually (a) potentially may broaden the coverage of the regimes but also will give greater clarity with regard to what in fact is at stake. It's a service that rates the facility rather than the facility per se and therefore opens up what we think are broader encouragement of a better focusing on those regimes. So we're obviously supporting those.

On the declaration and arbitration, in summary our position, as we've put in the papers - but our position is that we would prefer that there be a single arbiter with regard to that in the form of the ACCC. However, looking at those submissions we've had a chance to look at - our computer hasn't been able to get into yours; one of those ISPs that is not user-friendly at the moment to your system - those submissions we've read, although some actually still believe that maybe the NCC or

the Commonwealth treasurer or minister should still make the first decision and that is whether in fact the thing should be covered, we're not adverse to that per se except that if there is a decision it should be covered, then there should be the single regulator that goes through the terms and conditions of that coverage.

Although our primary position is that that case should be put to the same regulator anyway, the argument that has been pressed in some cases is that if, for example, it was the ACCC, that their consumer watchdog hat may be of conflict, I'm not sure whether Part IV and Part III are that much in conflict, and I actually haven't seen the consumer legislation which actually would give the ACCC this broad-ranging consumer advocacy right as distinct to actually protecting markets under Part IV. Although I read the papers and watch the news bulletins and see that sometimes people in the ACCC come across in public terms as a big consumer advocate, in looking at their decisions and looking at the processes they've gone through, I'm not sure that there is an absolute conflict there as distinct to maybe a perceived one rather than a real one. However, we're not adverse as a secondary position to an NCC-cum-minister determining whether a coverage declaration should take place. But in event of that, then it should go to the ACCC or a single body, in other words, ACCC or some concoction of that, to actually then go through the terms and conditions of coverage.

In the same vein, we're suggesting obviously, now that we've read your report, some response to it, that then if there is a declaration of coverage, then the person who's been declared should have an opportunity after that to then put a submission forward rather than move to arbitration or the rest; that is, if in the event of a declaration saying "it's now covered", then give them time to actually put an undertaking forward rather than just move into the arbitration certification process, and we're suggesting that that should go in line with that proposal.

The other part of that which goes along those lines is we strongly support the retention of every citizen's right to go to a court on appeal on a matter of fact or law; that if in fact a regulator, no matter how well intentioned, it does become God because of the vengeance of being an administrative appointing of some statute. But our view is that the only thing that protects all of us from anarchy is in the end that in an error of fact and law, we actually can go to the courts of the land. We noticed in your draft report that ability to appeal to the courts from a regulatory decision like that should not be necessarily open to appeal, and ARTC's view, given that we're probably likely to be appealed against more by our customers than anybody at different times, that even we strongly support that right, that it's the only difference between ourselves and the way this nation works. I actually think the evidence has shown that at least on one appeal that I've read recently, the actual appellant courts were actually probably smarter than the regulators were.

But just as a matter of principle, to give administrative bodies who actually have to weigh up a range of subjective exercises that aren't clear-cut and black and white, whether it be DORCs or DACs or otherwise, they are subjective issues could

be well articulated by all the parties and well justified that it is not some black-and-white art. But effectively if there has been an error of fact or law, then that should be tested in another forum by other objective people. So we would be concerned of a loss of those genuine rights of individual companies to test our legal system out.

The certification and undertaking path is a - I mean, we basically actually believe that certification is a redundant process. We think the NCC process of certification was only done as transitionary. We think it was a compromise made by politicians at the time because government entities couldn't comply with competition policy and they decided to create a vacuum, a vacuumous process to enable them to be protected for a little while, and we actually think the time has come to finish that. To actually suggest it should be continued actually perpetrates a bigger crime on the whole principles of the competition and Trade Practices Act and we strongly urge certification as a concept be got rid of, that in fact access undertakings be adjudicated by the ACCC or a body to replace that and that the only policy issue to be determined if in fact you don't go to the single body is in fact an application about whether there should be a coverage of regime at all, and we're not adverse to the NCC and the ministers doing that, but that then a regime in any form should actually be before the ACCC and a common regulator.

There shouldn't be a route for government-owned entity assets or government-friendly ones to actually come through the backdoor and get certification to do something they couldn't justify in another process. It was set up as a temporary arrangement, it's not economically efficient, it actually produces perverse results so we're strongly of the view that the commission should continue to pursue as a matter of logic and reason that the certification process be got rid of in the form that it presently takes. We're not suggesting - just aside, although it hasn't been an issue in your report - that the NCC be abolished. We actually think that there are strong reasons for a government adviser on national competition policy and reform. We're suggesting that the issues of adjudication regime should go to a single entity. The issue of policy formulation and keeping the country going with regard to those issues is an issue that we think was rightly the NCC's or for someone else to advise those governments.

But in summary form, the pricing principles - although I wish we had access to computers and seen Prof Johnstone's full paper, although catching the end of it, found it very interesting - the pricing principles proposed, we actually basically support. We support their inclusion in Part IIIA in an advisory form, which I think is really the proposal, to give some heads of advice in a formulation. We think it should obviously differentiate between open and third party regimes in that same framework. We don't think they should be inextricably linked to costs because you can get the first outcomes. It will differ industry by industry. I think an example of that has been the last hour. The gas pipeline industry could come out with DORCs hypothetically higher than their DACs.

In our industry, for example, it's highly likely - and we've actually run this through - that our DAC would come out higher than our DORC. In fact I think the water industry would be a fine example where in fact a DAC/DORC operation would get a different result and it does show that it should be looked at based on the industry market and technology frameworks, not some black-and-white framework. I mean, in our industry if we went to build a railway line between Melbourne and Albury or between Melbourne and Adelaide today, we wouldn't build it where it is and we wouldn't build it in this configuration and it would cost us less than it was built at the time in today's dollars. However, if thrown to the wall and had to choose a DAC over a DORC, I'd probably fall in the DAC if you really want me to. But I promise you, self-interest wouldn't be the reason. I'd probably justify it by getting some economist to help me.

So effectively, the pricing principles which were outlined that we think are reasonably important in declaring, we agree with some of the issues raised this morning, that in fact there is differential, depending on the type of infrastructure that's sunk and the technology around that infrastructure and the technology of how it's operated, but in support of your report, we actually think that the principles are worth outlining in the actual Part III. We think that would give the market comfort as well as the regulator some comfort over time.

On capital costs, we have supported DORC, but again, we've supported DORC from the perspective of our industry. I should qualify that by saying we don't get the benefit of charging at ceiling prices. The great bulk of our customers are inter-modal, and in fact they compete with rail - with road. We couldn't actually get to our ceiling even if we wanted to, without actually losing a hell of a lot of money. For us, whether it's DORC or DAC is really an artificial exercise about creating a ceiling. The protection of that, I think, for our customers, those that do bulk commodities and don't have as much market choice, except for shipping and the rest, is really the protection for that part of the market where that choice isn't there. But 70 to 80 per cent of our market is in fact intermodal freight. We're competing directly with the road industry, and quite frankly our market prices don't go anywhere near the DORC or DAC ceiling or in fact in many cases, we're much closer to the floor and in a couple of cases, we're probably underneath it. So for us, it's a bit of an artificial issue, but in other industries, it's not. So from our industry perspective, we wouldn't get home on either of the choices because we're actually in a different marketplace.

If I was trying to get access to a gas distribution pipeline in Sydney, I'd probably have a different argument, but fortunately, I'm not. In fact, our view over time is that we'd probably prefer to go to auctioning of paths in our market and let the market determine differentiations based on time, day, geography and the rest, but we haven't got to that mature process yet where the market is prepared to move down that path yet, and it's probably impossible for us to do when two of the major players are government-owned train operators competing against private operators which their ability to buy and auction paths in the market could in fact distort the market

itself, so there's a transition issue in our industry anyway to deal with, of which we see ourselves partly having to encourage that transition. Some of it is because of virtue, competition policy; the other is when you're exposed to government operators who have a majority of the thing, you'd actually like to spread your marketplace to have a few other people there because basically it protects your bum against those guys completely collapsing the market on you, so spreading the marketplace is good for us.

We are concerned with the current application of DORC; the narrow focus on future demand can promote a second-best capital investment. That again is more reflective of our industry than another, but I give you two examples. Firstly, I could probably give you an airport one to give it a bit of spice, given airports are colourful on access applications at the moment, at least in Sydney, for those of us who can get through the fog. Obviously choosing a price in a DORC model framework for a second or a third runway, you come out with a quite easy DORC arrangement on that for a ceiling, but if in fact the airport management was faced with a different alternative - that is, in their pocket they had newer technology for actually getting more paths into the existing runway at a greater frequency - and that capital cost was practically margin, under a DORC model, you'd be encouraged to go to the capital cost one because you can actually leverage that by actually moving your ceiling up, and if you're not charging all your services at the ceiling, you can actually start to distribute a higher revenue under a new ceiling. So the DORC can have a perverse exercise in those arrangements where in fact you artificially choose the least efficient option, but the most efficient capital of the options.

In the rail industry, there are very good examples of that which I won't go through without getting myself into trouble. I'll use ones from our area, rather than someone else's area. The rail infrastructure is in fact captive of its signalling systems which actually define the capacity constraint, and in general terms, even the most efficient signalling systems probably only give you 60 per cent of your physical capacity and ability. If you had a choice between building a second track because of capacity constraint, it's a very high-cost choice, very high cost, and traditionally that's exactly what the rail industry would do. By the way, they go to that choice immediately and in some states, they do it even before you need it. But effectively, if you actually looked at your train control signalling frameworks and moved away to new technology which didn't use signalling and used capacity where you could lower headways between trains rather than have 20 kilometres between them because that's where your signal distances are, you could actually increase your capacity by a multitude of 10 to a hundred, depending on how you did it, and do it at a much lower cost and actually get a much greater volumetric outcome.

But in a DORC environment, you would weigh up what your revenue gain from that is - given you can't charge the ceiling anyway, except for a few customers - whether you do that or you go for your capital option which you therefore can spread and go for a ceiling increase that gives you greater flexibility as management over time to move your pricing around and framework. So the perversity of that is that a

DORC can actually act perversely to stop proper investment because it actually takes a value around capital rather than technology issues and issues around that, where industry insiders will actually stick to the capital one because it's safer anyway, so you actually get a perverse outcome. You don't encourage innovation, you don't encourage creativity to get lower costs, optimal outcomes - that people play to the regulatory market. We're not saying that that actually is an issue for us at the moment, but it is a perverse outcome by using DORCs and it's one of the reasons why sanctioning a DORC model against other models should actually be looked at based on the market position and a whole range of other frameworks. We're saying we're not against DORC but we're just saying there are in fact suboptimal arrangements.

A good example of one in this state would be the Hunter Valley, the IPART decision on the Hunter Valley with DORC on a stand-alone basis. If you went to introduce two new passenger services on that line, given it's mainly coal lines, big bulk - and in fact been taxed the hell out of historically and therefore suspicious about pricing a cost - but in the IPART stand-alone decision, which at the time was probably correctly, you are now at practically close to capacity and you're at the ceiling of your revenue from the freight market. If you tried to put two new passenger services in there, under the ceiling revenue cap, you would lose money because you can't charge them - your overall take can't be higher than the revenue. Your safety system actually gets worse because of the passenger issues, and your bulk freight people would actually get a discount based on the increased revenue framework, even though they were not in fact the beneficiary of the framework. So you can get the first outcomes on DORC, but also perverse outcomes on stand alone, ones that are not market efficient, because effectively there are good reasons for why a passenger service would go there but they wouldn't be able to pay the price, given they're much smaller trains than a freight train, but then you have to give the freight trains a reduction for which you've not gained the revenue from in fact. You've got a perverse outcome where the revenue is lower, your take is lower than what it would have been if you'd refused access to those passenger services and said, "I'm going to hold that and try and get more freight trains through."

So we're not suggesting that those things be thrown aside. We're actually not suggesting that the Productivity Commission should come to a view on that. All we're saying is don't get allow the sort of advocacy of the last hour to actually get into a roll early in the piece of dictating economic models which in fact the regulator should be spending their time thoroughly going through to come to a balanced opinion on, and no simple model, DORC, DAC or other, actually suits all the frameworks all the time. The best thing about the regulatory model of the ACCC and the rest, everybody gets to argue their case rationally and gets to have a look at (indistinct) through. So we're just cautious of taking a DORC as a God-sent thing; we're cautious for probably the same reasons as an hour ago, that it can act perversely in more than one way.

In administrative and procedural matters, we support a situation where an

access undertaking at the instigation of the provider could be rolled over. We're saying there should be a cap on that though, that the access undertaking should be no greater than a 10-year one, so you don't get to year 9 and roll over for another 10 years. But in fact we support it, in fact encourage 10-year access regimes in some cases with maybe some reviews, but conversely, we support a fast-tracking exercise where they're shorter than that and where the provider seeks to have it fast tracked, but with the regulator actually checking the marketplace to see that that is satisfactory to the customers as well. I'm not suggesting some collusive arrangement but we are supporting a proposition that every five years, people don't have to recreate the earth if in fact they're fundamentally okay, that the thing is actually working reasonably effectively and go through the cost and framework of doing some of the things - going through DORCs and the rest - if in fact there's reasonable confidence by the provider and the marketplace about the fundamentals of it and you don't have to go through from scratch again five years later to come to something which genuinely there may be extraneous problems that can be solved which aren't fundamental to the overall regime, that's inefficient and ineffective just for the purpose of an administrative process. It's better to have a fast-tracking process which actually can relieve that tension, pressure and cost.

So in very simple summary terms that outlines the third paper which was a response to the report, we haven't tried to go through it in detail, given the time and trying to open it up for more discussion.

MR BANKS: Thank you very much. We're conscious that you have I think 15 minutes or so before you have to go and we probably both have a number of questions. Perhaps proceeding through in the order in which you've made your presentation, I think the first topic was in relation to a single adjudicator, and I think you there elaborated, which sort of clarified some of the questions I had. I think what's coming through in your presentation is that you're keen to have a single regulator in relation to the terms and conditions, rather than coverage per se, where I think you talk about the minister or on the advice of the NCC potentially having a role there. But in relation to rail, others have been raising concerns about the role that ministers have had, particularly in relation to rail in their response or non-response to NCC recommendations. I thought you might just like to comment on that.

MR MARCHANT: Yes, fundamentally, using rail as an example, it's probably a good example why a single regulator would be a better outcome. Effectively we've had different NCC approaches from different states, all motivated for different reasons. Western Australia definitely went hard on an NCC application prior to its sale, (a) to give comfort, I expect, to the purchasers, and giving comfort to the purchasers mainly directed to getting the best price, I expect, as distinct to the best public policy outcome. Effectively from that, that was in the very process when we were seeking to negotiate a structured arrangement in Western Australia for a national regime for interstate services. So you had a situation where a perverse range of outcomes were taking place based on quite different public policy objectives.

New South Wales has had an access regime for the Hunter Valley but has never really had an excess framework for the rest of the track. Partly, there's probably not a great need for it in some senses because their pricing in some places - you know, the subsidies are better than the revenue, but in other senses, it has been perverse, because the access to the system here has been very difficult for operators and yet haven't been able to come to a consensus about an access regime framework.

Now, Queensland has got a major task before the QCA at the moment, and Victoria, as you know, has a statutory one brought in after massive consultation - I think it took two weeks - and brought it in very quickly, partly out of the sale process. It was discussed obviously with the purchasers but actually wasn't discussed in the community until a couple of months ago. The result of that is that each of them have very different peculiarities and tastes and qualities. They actually each value the assets in different forms which in some senses is historical.

They actually treat access provision in quite different ways. Some of them treat capacity, for example, and actually try and define a capacity framework when capacity in railways is the heart of the beholder thing. You can actually thread more trains through if you look at the systems differently. What you've got from that is a system - ignoring the coal lines of Queensland and the coal lines of New South Wales and ignoring the urban passenger systems which are closed systems anyway, so take the coal line and leave the passenger systems out, they're closed systems - in the rest of the system, the goods and services that are travelling over it actually don't recognise state boundaries. They actually don't recognise if they have an access regime in Albury; it's actually slightly different to the one in Wodonga, even if they're going across the road. 1 kilometre is different; it can be quite dramatic.

So one of the problems has been that some of the motivations around those rail access regimes have been brought about by protecting either state interests or values or the rest, but not actually about compliance with some sort of competition policy or in fact competition legislation. I think a good example of that is Tarcoola, Alice Springs, the NCC application, and I think the NCC attempted to do a good job and keep its hands clean. But under any rigorous examination, it is impossible to understand how the line from Tarcoola to Alice Springs which is presently operating, which presently has an economic stream, how the price of that line should increase by 350 per cent because someone built a line from Alice Springs to Darwin. It's a sunken investment. It's got a revenue stream there. It's got net present value.

How that price would go up suddenly overnight by that amount if and when these people it over, based on them building something from Alice Springs to Darwin, now, that is a perverse outcome. I wouldn't know how you could do that anywhere else in the world. I know you couldn't have done it in an ACCC environment, and yet we would totally support a greenfield development where the put an actual undertaking in which had a 30-year life for that new development, and which in fact had some reflection of the risk of that development and a price which reflected that - no problem in the world. We would have supported that in an ACCC

application if we'd had the benefit of being able to make such an application and articulate it through. So you get perverse outcomes, outcomes which aren't related to the economics of the rail or access, and those people who go to try and get access on that line up to 2003, those very people who had access on it at 30 June 2002, may find their prices skyrocketed by 300 per cent, based on no investment whatsoever, except running the existing track. I think that's a perverse outcome.

Now, that comment could be taken as anti-Alice Springs to Darwin railway line. It's not. It's saying let's not distort access regimes and access systems and these policy frameworks by concocted cross-subsidies which are not transparent and which aren't tested and which aren't valued. Let's not concoct a system where you can go to the NCC and get approval under public pressure for something which you'd have to justify in another environment and they still get approval, but at least you have to justify it and actually do it in a way which is clear. That option there at the NCC is only available to those who have the (indistinct) of government. If in fact Bill Hanson Railway Pty Ltd came up with a proposal to build the Alice Springs to Darwin railway line of their own volition, getting their reasons et cetera, they couldn't have gone the NCC route. The only route they could have got the NCC is if David Marchant Pty Ltd decided to clear them after they'd built it - after they built it. But you can only do that if you've got the (indistinct) of government, so you get a perverse outcome.

So on the first matter of policy, it's been hard on the railways to have to bring it together. On the second matter of policy, we have had difficulty getting an agreement, if we do get it in place - and we have one in Western Australia, for example, where we have a contractual arrangement to sell interstate train paths, but we can't get it into an access regime because we don't control and own the facility. But our contractual arrangement for that service actually defines how the facility shall perform. It defines average speeds, it defines pathways, it defines how the pathways are developed by us et cetera. It defines in fact the pricing for the next 15 years or the base price. It has all the characteristics of the inputs to that facility being contracted. When we try and put it into an access regime nationally, because we don't own or operate the facility but we in fact contractually control the inputs, we can't get it into an access regime.

Now, that has been a difficulty. We haven't been able to achieve it. We haven't actually worked out a method of solving it either because there are perverse outcomes also. If you say, "If you contract your asset out to someone that knew the owner of the asset or the manager of the asset, can contract its facility capacity over someone else, and we can't get behind that contract because you can see some smart operator," the contracting capacity of a whole Telstra line, for example, or a digital one for television and say, "Well, as the contract actually contracts all the capacity out, you can't get behind it to get open access except through the contractor and he's protected and he's covered by his contract which says he can't buy it for any less than Y, even though it may have cost half Y" - so I mean, there are perverse ways of actually getting around a contracted framework which could actually undermine the

very policy. We aren't smart enough yet to work out how to break through that, but that is one of the outcomes.

MR BANKS: I think you've answered one of my other questions.

MR EDWARDS: Just getting back to that ministerial involvement in the sector, we do think there is some merit in your proposal to perhaps get rid of ministerial involvement. I think you had it down as one of your tier 1 proposals, but my understanding of tier 1 is that they're relatively easy to implement. I think promoting ministerial involvement might be a little bit harder than easy.

MR BANKS: I think there's economic and political degrees of difficulty.

MR EDWARDS: Yes. We do see some of the other measures you've got there, transparency and accountability of that decision-making process, as certainly removing a lot of the negative aspects that might exist in it now, probably almost to the point that, as I said, whilst we see merit in removal, I don't think the future of competition reform in the country is going to hinge on it. We think there are far more important things we can do, given those other measures that you proposed, the transparency and accountability measures.

MR BANKS: Yes. In any case, you see it the certification route being overtaken or absorbed into the undertaking route anyway.

MR MARCHANT: Yes, we see the ministerial involvement on a determination of coverage, unless someone goes and seeks some other framework, but a determination of coverage issue. That's really a principal policy issue then. We can see that's why maybe the NCC and the ministers could come to that view. Having come to that view, it then goes to the ACCC to actually deal with an undertaking or some framework around that. So it's only in the area of coverage that we saw that.

MR COSGROVE: That relates really only to declaration.

MR MARCHANT: Yes, that's right, because once you take it any further than that, you get the perverse outcomes which we're starting to see take place.

MR BANKS: I was a little confused about your second proposal in relation to differentation and access regimes according to market and the position. I understood the logic of what you were saying there, but I wasn't quite sure how you saw it working, these two regimes, whether you saw them having different declaration criteria or - - -

MR MARCHANT: No, I'm sorry, it comes to giving advice to the regulator in the charter that they can actually have discretion based on characteristics and they can go from a hard-pressed regime to a soft-pressed regime. We're not suggesting the legislation be prescriptive on that basis, but what we're suggesting is the legislation

and the concept of the legislation is really focused around forced third party access. Everybody talks about the third party access. The reality is, a large part the infrastructure was not third party access, it's in fact an attempting to put a floor or ceiling around first and second party access.

Effectively, the reason it gets commonly called third party access is because everybody sees it in the light of integrated or related company assets up or downstream, and then you get things such as very anal processes, such as the gas code, for example, which actually is reasonably prescriptive and deals very heavily with capital-plus frameworks et cetera, and was probably appropriate to deal with interrelated assets between up or downstream owners, but then acted perversely to deal with more creative access undertakings which may be taking huge market risk which may be new framework which is prepared to actually change pricing regimes which had a lot more transparency in them and gave a lot more bargaining power, rather than cost driven.

What we're saying is it seems to be seen in black and white; third party access regimes would have to be anal retentive to the nth degree or you have nothing, and the market is not like that. In fact there are players in different parts of the market that act differently, even though they have facilities which could fall within coverage. But they may put an access undertaking in which may not be as prescriptive as the other, but actually has a lot more customer interface and customer involvement in pricing; for example, a regime where you start off with a base price, it can only be escalated by a CPI ceiling of some framework, but if you post prices, those prices are available to everybody for similar terms or otherwise. That is, the market has some involvement on a floor and a cap of pricing, where there still is regulatory cap as well. There are a range of different types of access regimes that produce those outcomes which are actually a lot more market focused on facilities that would or should be covered.

I'll give you another example. It could be argued by some that our track, for example, should be covered under an access regime. There is another argument that it doesn't need to be, but we are actually putting one in voluntarily, although we can actually see a good argument for one to argue that we should be covered. 70 per cent of our market is in fact competitive with road. People go by road or sea and don't need to come near us at all. Train operators don't really need an access regime with us. Most of them have got contracts. Prices are dictated by the market. But more importantly, they don't (indistinct) trains - go and hire a boat if they want to move freight because it's just part of the transport market. So you can argue around that - we're not arguing that, but you could. Using this framework, we could some time in the future move, say, to a pricing regime within a regulatory framework where the market players were a lot more active in the pricing. What we seek from the regulator is a ceiling and a floor and then we say, "We can auction the rest," and when we auction, there's no ceiling. There's a floor. The market may not buy it at that price. They may buy at a whole range of prices but they actually dictate the price framework.

You can do that with airlines' landing slots, you could do it with us, you could do it with a whole range of different types of commodities, where the market players - subject to the terms and conditions of access being unacceptable - actually dictate a lot more about the pricing framework et cetera. What we're saying is that that's suitable for someone like us that's not upstream or downstream, but if in fact you're an entity which had high upstream or downstream involvement, it could be suggested that the process could be distorted. All we're suggesting is that there's no guidance on that framework. It's now time to move to the next stage of not seeing it as black and white, where the initial one was. Does that make sense?

MR BANKS: Yes, it does. Yes, that helps me.

MR MARCHANT: See, I'm reminded, for example - listening earlier to how the American regulators on gas pipelines regulated on a particular framework - that the gas mainline transmission pipelines in the United States of America were deregulated in 1973. There hasn't been an American regulated price on major gas transmission lines in the US since 1973. The reason for that is that there were a lot of competitive forces there that actually helped market it. They separated out; for example, gas producers could not sell as consortiums, so they opened that up. They secondly opened up the capacity - it could be sold separately to the commodity. Gas distribution is still regulated in some small (indistinct) but all I'm getting at is that you can evolve systems that actually open up (indistinct)

MR BANKS: Thank you. I think we've only got a few minutes. We're just having a quick look through here to see what the priorities are.

MR COSGROVE: Could I just raise one - you agreed with our suggested inclusion in the legislation of an objectives clause, but I got the impression from the way you then went on to spell out some views on that that whereas we had, if you like, put efficient use and incentives for investments on more or less even footing in our terminology, you have a phrase here which says that:

> Part IIIA must seek to promote efficient use of essential infrastructure, but in a way which does not discourage investment.

There's a slight difference of approach there. I just wanted to make sure whether you are really encouraging us to make that subtle distinction in the terminology of the objects clause.

MR EDWARDS: I don't think we were trying to give that impression.

MR COSGROVE: I see.

MR BANKS: I think what you relied upon was probably an expression that we used somewhere, embedded in the report, rather than an explicit objects clause itself.

But see, some have said to us that really, the overarching or most important objective really is getting efficient use, and a secondary consideration is - without compromising efficient investment, rather than using the access regime in a proactive way to get efficient investment. I think you've naturally sort of come to that kind of formulation there, but anyway, it's not something - - -

MR MARCHANT: It wasn't intended.

MR BANKS: All right.

MR MARCHANT: The only thing we had was the issue where someone in the report had related costs and revenue - in fact it's price and revenue.

MR BANKS: Yes, I picked up that. Thank you for that. There are a couple of corrections I think you made there.

MR COSGROVE: While you're looking, could I ask a question about what you have to say about the public interest test which you rightly say is cast in a negative way in the existing legislation. You would prefer it to be cast positively. I got the impression from your discussion there that your view was largely driven by the problems that cross-subsidisation can cause.

MR MARCHANT: Yes, we are concerned that competition can be impeded to some extent by certain parts of the community being impacted in a negative way, where our view is that where those parts of the community would be impacted in a negative way, that's generally the result of a cross-subsidisation situation where you have regional Australia versus the urban areas. There's clear cross-subsidisation in a number of industries there and - - -

MR COSGROVE: Does that cause a lot of inefficiency in your operations?

MR EDWARDS: In our operations?

MR COSGROVE: Yes, or the operations of your customers?

MR EDWARDS: We're basically more of a national entity so we can - - -

MR MARCHANT: For our operations it hasn't caused a problem but when we're looking at the policy principles here, to put the public interest test in a reverse, struck us as giving an out for people to cross-subsidise without being transparent. We took the principle of if in fact there is intrinsic in the access undertaking a cross-subsidy it should be exposed as transparent and should be done in the affirmative rather than be assumed in the negative. Effectively we thought that the test could be used - the way it was structured it could be used to kind of allow that to take place without any sort of transparency on it, and endorse it even, and effectively we thought that's a perverse outcome rather than demonstrating it.

MR COSGROVE: Would you favour an approach under which transparent cross-subsidies were part of the set of pricing principles?

MR EDWARDS: Absolutely. I mean, using a hypothetic example to give that some kind of neat framework, if in fact someone went to seek access into Australia's post system, let's hypothesise, it actually got the coverage clause and someone argued that it's not able to be duplicated and all that sort of stuff, let's use that, I mean, there's probably no doubt that the postage stamp prices, to get a national postage stamp price probably may have some cross-subsidies. Using that hypothetical example, if that cross-subsidy was in fact between the eastern seaboard and somewhere else was a difference of 7 cents, then that should be transparent, that 7 cents.

MR COSGROVE: Yes.

MR EDWARDS: That means that in the event that someone seeks access to that system and once its price is different from the 45 cents, say they want to do a service through that system from Melbourne, Sydney, Brisbane, then at least you get the understanding of the cross-subsidy. It's a public policy issue then, whether a government or governments say, "Look, they're going to give you access of 35 cents but the efficient cross-subsidy is 4 cents and we're going to levy a tax of 4 cents on you." Now, they still may operate a service at 39 cents and pay the subsidy but by just assuming the subsidy within it is not being transparent and clear about its value framework, you then get an argument about a whole range of intrinsic issues which are not part of the cross-subsidy.

MR COSGROVE: Yes.

MR EDWARDS: Now, I'm using that as an example. I am not actually suggesting that the Australian postage stamp one, you could get coverage anyway. Maybe you could but what I'm trying to get at is that by not being clear on it - now probably a better example of that one is telecommunications but I wasn't going to use that because I can't afford to get belted up by all Telco companies but one of the examples I have been listening in the Telco stuff against, say, one of the major providers with some sunken infrastructure and the rest of which, you know, five years of attempting to get access undertakings in place have never been acceptable to anybody, is the issue of losing this clarity of cross-subsidy framework and sunken investment that mix between the DORC and the DAC and there's a subsidy somewhere in there dealing with other things that need to be recognised. We'll make it transparent. What is it? And let the other parties to the access undertaking and the regulator test to see whether it's an efficient cross-subsidy. Then someone can come to a conclusion then about whether anybody running that business should actually contribute to that subsidy for some national good, but conversely you can't use it to hide getting to the access charge price on an official basis.

MR COSGROVE: Yes.

MR EDWARDS: That's why we think the test should be in the positive because it actually - by being in the negative you don't draw it out.

MR COSGROVE: Yes.

MR EDWARDS: By being in the positive you have to demonstrate it, then the access undertaking provider, be hypothetically the Australian Post example or the Telstra example, actually have to come up with it and demonstrate what it is; not leave it to discovery for everybody else to search for the next five years, and by that very process, frustrate the very undertaking framework that was being sought.

MR BANKS: I think with one eye on the clock, I have had a look through the other questions I was going to ask, I think one way or another you have probably addressed them, but perhaps you will allow us to get back to you if things haven't been all covered.

MR EDWARDS: Certainly.

MR BANKS: Thank you again for participating and making the submissions.

MR EDWARDS: Thanks very much.

MR BANKS: We'll break now if it please for a few minutes before the next participant.

MR BANKS: Our next participant is the Railway Technical Society of Australasia. Welcome to the hearings. Could I ask you please to give your name and the capacity in which you're appearing please.

MR LAIRD: Thank you. My name is Phillip Glencoe Laird. I'm currently chairman of the government relations committee of the Railway Technical Society of Australasia. The submission that you have before you has been circulated and proved by the national council between sessions.

MR BANKS: As we discussed, perhaps you might like to just make whatever overview remarks you like and we'll see what issues we can then discuss.

MR LAIRD: Thank you. The Railway Technical Society of Australasia, following its effective merger with the Adelaide based group, Rail 2000, now has over 850 members. Most of the 850 members are members of the Institution of Engineers Australia. The society's submission will focus on access to the interstate national rail network, the substandard condition of much of this network and the society will also, as the commission did in its inquiry into progress in rail reform, will also refer to competitive neutrality affecting road and rail.

It's now over three and a half years since an intergovernmental agreement was signed respecting access to national track between Perth and Brisbane. Inter-governmental agreement provided conditions for access, improving its condition to agreed Australian Transport Council standards over five years - and one of the things about five years is it can come very quickly, in fact it's coming at the end of next year - and transport ministers also agreed to address competitive neutrality "without delay".

In this time of over three and a half years, we have seen some progress on the east-west corridor and both access and conditions through the work of the Australian Rail Transport Corporation. We submit that we have seen little progress of significant dimensions on the north-south corridor between Melbourne, Sydney and Brisbane and we'd further submit that the competitive neutrality has gone backwards under the new tax system. But it's not just the Railway Technical Society of Australasia that is making these claims regarding access, substandard national track and competitive neutrality, it is three government inquiries that reported in 1998 and 1999, including the Productivity Commission in its inquiry into rail reform. Since then, the Federal Bureau of Transport Economics has confirmed changes in the new tax system; favoured heavy road transport over rail. The Australian Rail Track Corporation national track audit released last month has found that the national track is in need of an optimal investment of $507 million, and also last month, the Neville committee, the House of Reps' standing committee on communication, transport and (indistinct) in its report-back on track has recommended that more be done on access and track improvement for the national track.

It is hard, given the substantial body of informed advice, to try and understand

as a society - and we are, I think, laypeople in the matter of law regarding access - but it's hard for us in this capacity to understand why the commission's position paper for a national access regime could not say more about these issues. So I guess before proceeding, I'd be asking, look, is it possible that the commission could and would address these issues a little more in the final report?

MR BANKS: It is possible.

MR LAIRD: Right.

MR BANKS: Perhaps what I should say that we've had pretty extensive input, as you would have seen from the gas industry. We have had input from others in relation to airports, also telecommunications, and I suppose as a general proposition, we find all that input useful to inform a decision about the generic national access regime and how it should condition the industry regimes and so on, but it is hard for us to turn this into an inquiry into rail access. So what you're telling us will help us, but as to the extent to which we can be specific about rail, we'll think about that and see what can be done. But at this stage, I can't promise you more - you know, as I say, it is possible and we'll look at it some more.

MR LAIRD: The society is encouraged that you will take another look at it. I'd just like to table two things if we could, reflecting the society's concern about the state of the - I was going to say "asset", but the national track. The first one is a document called It's Time To Fix The Rails, Looking Across Australia, and summarising very briefly the findings of the Neville inquiry, the Smorgon inquiry and the Productivity Commission. That was issued late last year. This is a further brochure that looks specifically at the Sydney-Melbourne corridor, bringing the track up to speed, so if I can table those, I'd be grateful.

MR BANKS: Thank you.

MR LAIRD: The society suggests that in view of the access delays to date - and we've had three and a half years trying to reach an inter-government agreement, and the main sticking point seems to be the state of New South Wales - we suggest that it's now time for the Commonwealth to offer bigger carrots than the 250 million currently on the table and to use a larger stick, consistent with those of the earlier inter-governmental agreements re rail. We're suggesting at this inquiry that it's maybe time to go back to the 1991 inter-governmental agreement that set up National Rail, that allowed National Rail to take up large sections of interstate track. What was envisaged there in New South Wales included Albury to Goulburn and Maitland to Border Loop on the Queensland-New South Wales border. So what we're suggesting then in view of the fact that in the last three years - although studies have been undertaken and I've been involved in them personally myself, to quote Mark Carter's writing and Rail Express, we've reached a bit of a logjam. It needs a bit of leadership and pushing along, and we're asking of the commission, in looking at this national access regime, to look at an access regime that is not working the way it was

envisaged under an inter-governmental agreement. It is very clearly substandard in track condition, particularly in New South Wales. We have a bridge over the Murrumbidgee which was built circa 1880, that now has a 20-kilometre an hour speed restriction on it, and this is between Australia's two largest cities, 20 kilometres an hour. It needs replacement. I mean, the thing is over 120 years old.

We recognise that the New South Wales rail authorities do a potentially good job in moving people around Sydney and the wider metropolitan area and did an excellent job with Olympic transport, but when it comes to fixing up assets at the extremities, it's like the situation in 1970 with the state of the Hume Highway. South of Goulburn was atrocious and it took a government with the vision of the Whitlam government to say, "Look, instead of arguing about who should be paying to fix up the national highway system, the Commonwealth will take it upon itself, not pay 80 per cent fixing it up but a hundred per cent." 27 years after the national highway system was formed, you've got a half-decent highway, 86 per cent dual carriageway now, between Sydney and Melbourne. But if you look at the railway, it's appalling. As well as this bridge, you can go down between two locations, between Exeter and Midway Junction which is this side of Goulburn or Canberra, and Harden and Wollombi, the other side of Goulburn, where they have (indistinct) telegraph, advanced technology over a hundred years ago. We have blokes pulling levers to move the trains through in our two largest cities.

Up north in this state, we have a safe working system without the blokes to work it, so every big train, National Rail steel train, has to stop at these crossing loops. The driver's assistant gets out and does whatever he does with the safe working staff to move these trains on. It adds 40 minutes to the journey - Acacia Ridge is Brisbane's freight terminal and Casino in New South Wales adds 40 minutes to a journey. It was highlighted in the 7.30 Report on 6 November 1998, two and a half years. We're still waiting for it to be fixed up.

The society submits that we have to do better and we're looking for a bit of leadership from the Commonwealth and the Productivity Commission. The Productivity Commission won't make the final agreements, but at least it can highlight an access regime that is not working properly and the substandard track - - -

MR BANKS: Your question about a substandard track, how do you see the access regime resolving that, any access regime? Do you see it as substandard because of the lack of a regime of access?

MR LAIRD: Primarily lack of focused investment, but we also see examples; for example, the Neville committee in its 1998 report noticed a huge pile of concrete sleepers that have been sitting beside the track between Geelong and Ararat in Victoria, and they have been bought by the federal government and they were to be installed under the One Nation program with the gauge standardisation of 1995, but instead, they sat by the track for almost four years while various governments and rail authorities who was going to put them in. An integrated rail system would have

had them in that year, 95. Similarly, the delays in installing a triangle at Parkes, New South Wales, to allow trains coming from Sydney through Cootamundra, Parkes, going west to Perth, the trains had to reverse into Parkes and then come out again. To put in a triangle cost about $2 million. The various entities argued for two or three years who was going to bear the cost, what degrees of bells and whistles were required and again, it's an example of open access and vertical separation not working very well.

MR COSGROVE: Do you think it's possible that the fact that a lot of recommendations by the National Competition Council for declaration or certification of rail access regimes have been rejected by state government ministers, in particular, might have reduced the incentive for track quality to be improved because the demand from rail track users has somehow or other been deterred, if you like, whereas if there were these access regimes in place, then the operators of the track might have an increased incentive to improve the quality in order to satisfy their customers? Is that one way in which our inquiry might have relevance?

MR LAIRD: Could I take that one on notice please and confer with other officers of the society?

MR COSGROVE: Yes, sure.

MR LAIRD: My own personal view is that there's been a lot of attention given to these questions of access, but at the end of the day, you're left with substandard infrastructure which is not fit for the purpose and the net result is you put more and more freight on the roads which is a high-cost option. The interest and competitive neutrality of the society is we can see the 1.6 billion a year of federal money going to roads and so at least 700 million going to the national highway system which is making the national highway system ever more capable of supporting larger and heavier trucks, including B-doubles and now B-triples. That not only has the effect of deterring any private investment in bringing the existing interstate lines up to speed, but may also act as a deterrent on public investment in bringing this track up to speed.

MR BANKS: Okay. Did we interrupt you? No. Now, you wanted to talk with your own hat on. Have you done that or would you like to - - -

MR LAIRD: No, I think I've treated the society's submission, and my own one is again a plea for, if need be, the commission to take a broad view of the terms of reference. When we look at the broad policy guidelines, like improve the productivity and economic performance of the economy, right down to environment, here is part of an access regime that's not working properly; it's pushing costs up for rail shippers, it's pushing more freight onto the roads, the environmental impact, including more use of fuel. Secondly, I think it would be a very good question as to just what is the value of the national track? What is the value of the asset? How does it stack up against the 50 billion referred to in the position paper? This takes us

to what we heard this morning; if you wanted to rebuild it again, as Mr David Marchant said, you wouldn't build it the same way. In my book, you'd build something in New South Wales a lot straighter than what's there at the moment, and in so doing you'd cut off 160 kilometres between Albury and Border Loop because there's so much circuitous track alignment south of Sydney and also north of Sydney that you would build it shorter and straighter, more efficient to operate. If you say there's 8000 kilo

I think we're conducting in Australia a giant experiment with the access regimes with rail. It seems like a great idea in theory but in practice, is it helping the mode to get any more freight off road or at the margin, compete against sea at the longer distance? I think the jury is still out and I'll place in a written submission some comments I made three years ago to the Neville commission, and when you look at the examples of the Parkes triangle or the sleepers by the side of the track or the safe working system between Casino and Brisbane, it comes at a price. I think it's also interesting - as part of university study leave, I've been to Canada to see the rail access - there's a very vexed question there, and it seems that small operators would love to get hold of access to big operators' track, and big operators would prefer that they didn't. It's probably a very delicate juggling act for the industry association, the Railway Association of Canada, but it came out in a recent position paper in only March of this year, saying that in making access decisions, we should not take short-term political gains which will compromise investment which might compromise the medium and longer term.

MR BANKS: Although as you say, the investment deficit that we've got is inherited from the time when you had quite different governments and regulatory arrangements for rail.

MR LAIRD: Yes, I'd agree, but I think the way forward - when the former government's capital works program ceased in June 1995 - would have been with a further capital works program as identified by the national transport planning task force, whose report was released just before Easter 1995. It identified $3 billion of work that could usefully be done over 20 years. I think as a nation, with the exception of the good work done by the ARTC, who seemed very effective on a limited budget - just imagine what they could do with a reasonable budget - you know, since 1995 we've had six years of looking at rail access, and for the interstate mainlines, the necessary investment hasn't gone in and the net result is that we get more and heavier trucks on the interstate highways, so much so to the point that when the Pacific Highway is upgraded - the major $3 billion upgrade, and completed by, say, 2006 - a lot of its benefit will be negated if all it's done is to make smoother paths for B-doubles between Sydney and Brisbane, and virtually taken all Sydney and Brisbane rail freight off the rail and put it onto the road.

So certainly it's good in theory - you know, open up the tracks to third party access. I agree it has worked well between Melbourne and Perth, but only because of the optimal investment that went before that under the 450 million capital works program of the early 90s. At the moment we have three major operators between

Melbourne and Perth, National Rail, Toll and SCT, and between the three of them, they have improved service levels, they've got rates down to the benefit of the shippers, and they've got modal share up reportedly to 77 per cent in their recent ARTC press statement, but none of this would have happened if, firstly, the former Australian National Railway Commission had not invested over $500 million in the 25-metre concrete sleeper program along its interstate mainline track or secondly, if the Melbourne-Adelaide had not been converted from broad to standard gauge. There's no way in the world that Toll or SCT would have been fooling around with bogey exchanges in Adelaide. So I guess the message is, in order to make the competition effective, you have to have infrastructure fit for purpose. I think the central thrust is that, look, it's not fit for purpose, particularly between Australia's three largest cities. We've not only got infrastructure not fit for purpose but three and a half years later, after inter-governmental agreements respecting access were signed, it's still not there.

MR BANKS: Okay. You've done well in grabbing our attention on this issue and we'll certainly give it further thought. As you would appreciate, we have got some descriptive material in there and at the very least, we can elaborate that and draw on the recommendations that you've included in the submission here in the report. I don't have any further questions, other than to thank you again for participating.

MR LAIRD: If I could extend my thanks to the commission for this hearing and in closing, just commend to the commission the three pertinent recommendations of the House of Reps committee in its report back last week. It's very similar. Thank you.

MR BANKS: Okay, thank you very much. We'll now break and we're resuming at 2.30 with the next participant. Thank you.

(Luncheon adjournment)

MR BANKS: We will resume our hearings into the commission's position paper on the national access regime. Our next participant is the Australian Pipelines Industry Association. Welcome to the hearings. Could I ask you please to give your names and position.

MR BEASLEY: Yes, my name is Allen Beasley, executive director of the association.

MR LAUER: And Mike Lauer. I'm president of the association.

MR BANKS: Good, thank you. Thank you very much for attending the hearings and thank you for this submission and also the one that helped us with our position paper initially. As we discussed, why don't you go ahead and present the main points that you want to talk about and we can pick up some of the issues.

MR BEASLEY: Thank you very much. I think the first point I wanted to make in relation to this association is the fact that we represent owners, developers of pipeline assets, engineering companies, contractors and suppliers of pipeline products and services, so we're a very broad-ranging association, not simply an owners' lobby. In that context, our main focus is gas transmission, and I draw that distinction because I think there's a lot of confusion sometimes in talking about pipelines in general, without recognising some important differences between gas transmission and distribution. So in that context, I thought I'd have a very quick run-through of the key points we make in our submission. Mike wanted to make some specific comments after that, and then we'll get into questions and answers.

Quite clearly, APIA strongly supported the overall conclusion of the draft report. We believe it's very important to avoid promoting competition and lower prices at the expense of necessary infrastructure investment, otherwise we contend, as we believe the commission did, that customers could become far worse off over time. We strongly support the direction to give greater emphasis on incentives to invest. For our industry, that means certainty ahead of investment decisions, outcomes that recognise the nature of foundation contracts and the negotiated nature of those foundation contracts in determining tariffs, an appropriate balance between risk and reward, which we don't see in our view in the current gas-specific regulatory regime, and also adequate recognition of the views of investors where, in this private sector industry, where governments have sold assets and the private sector is expected to develop future assets, clearly the views of the investment community is very important if we are to have the infrastructure in this area without direct involvement of government and the downside that brings.

An overall principle in our submission is an effective two-stage process, a process that first assesses whether it is essential to regulate a particular piece of infrastructure in the first place. We say that because our view is that regulation should always be seen as the second-best option, and in that context, declaration - in the context of Part IIIA which to us, in our industry-specific regime, means coverage

- should be based on a demonstrated market failure, rather than a perception that regulation will always be the best possible outcome. Our submission goes into that particular aspect in a little more depth.

That is why APIA in its submission reiterates as its primary point the importance of a fair, objective, evenly applied coverage test, declaration test, including full merit appeal, and in that context, the commission came to a different initial conclusion, and again in our submission we set out arguments why we would think that position needs to be reconsidered because to this industry, the decision to regulate is a primary one when you look at gas transmission in terms of its overall market behaviour. That becomes a very important decision in its own right, and then how you regulate an asset that passes a test is also important, but you've got to answer the first question first. Again, we take the view in relation to the gas code that where regulation can be justified, the tariff arrangements developed on behalf of a range of customers by the regulator should also be subject to full merit review. In that sense, we take the view that it is not sufficient to say the process should be expeditious, it should also be seen to be fair. Again, we elaborate on that particular point in our submission.

More fundamentally for this industry, however, is the fact that we are living under an industry-specific regime in the gas code, and our view is that as a matter of urgency, those principles must be realigned with any principles developed as part of the revised Part IIIA regime. In a practical sense, to see improvements and incentives to invest in Part IIIA without a realignment of the code itself would certainly be very counterproductive to this industry. Again, in the submission we go through in some detail our views on that particular point.

More generally, the ACCC in our view should not be given powers to determine declaration coverage as well as the detailed regulatory role. We think that is a recipe for regulatory creep. Notwithstanding any attempts to improve the tests of coverage or declaration if that path were adopted, again we think it would be counterproductive to efficiency and fairness in terms of regulatory directions. We have in our submission made some points about the specifics of the gas transmission industry which we believe time and time again have been not ignored but glossed over in considering industry-specific regimes. Mike, you're going to make a few points about that in a couple of minutes, so I won't get into that detail.

The position paper itself was seeking certain information. In our submission we focused on costs related to regulation and also evidence of disincentives to investment that have occurred to date. On the first issue relating to cost of regulation, prima facie, if you look at that cost in terms of cents per gigajoule, it's not a large amount. More significant to this industry are the costs and the uncertainty that creates in terms of how you develop new infrastructure. So the uncertainty to us isn't so much the cost in terms of cents per gigajoule - although that's always an issue - the more fundamental one is the fact that it actually creates uncertainties which have not been able to be addressed in the current gas code, and which are of

substantive interest and concern to quite a few private sector asset developers today.

In relation to the second point on disincentives to invest, it is early days, and I think we discuss that in our submission. There's certainly evidence of deferrals and we would highlight the Central Ranges pipeline as one such example, but we don't think you can attribute that solely to the issue of regulatory risk. There are other market factors at work, and of course it's those very market factors that create the risk in the first place. So they are interrelated, but nevertheless, it is an example of a development that we believe could have gone ahead in a different environment.

More specifically, if you look at existing pipelines that are fully compressed, over recent times the decisions taken to incrementally increase spare capacity have been very incremental in nature and I'd certainly highlight the Moomba-Adelaide pipeline where I think they looped a section of a round - I'd have to take this on notice, I think it was 13 kilometres, which is very short, relative to the length of that pipeline, simply because that was the most effective way of meeting the needs of the incremental contractual volume, but it's not necessarily the most efficient way of looping pipelines to create spare capacity for the future.

The third issue is more generally as boards consider pipeline development proposals - and there are quite a few on the table and we might come to that in discussion - the fact is, boards increasingly are saying, "The best way we can manage regulatory risk is to ensure that that pipeline is sized to today's markets, not future markets in 10, 20 years." That's an issue that's still on the agenda in many company's minds. Evidence will emerge over time, but it's certainly a threat created directly by the code in its application and the response taken by the industry is clearly heading in that direction.

I just wanted to comment a little on the market because I think there's a tendency to divide the market and think of producers, transmission companies, distributors, and we can all understand the position of producers in this market as customers. Of course as we heard this morning, they will be driven towards the lowest possible tariff, and if a regulator can assist them in achieving that goal, that's fine. There's another aspect to consider in terms of producers in Australia, particularly on the east coast, that that market is very thin and there are incumbent producers in our view who have little to gain from bringing new supply sources into those existing markets. As a result, they are not likely to see investment in new major infrastructure development in the same light as other producers who are seeking to bring their gas into those markets, and there's certainly evidence of those differentiated attitudes between producers. Those were my introductory comments on the submission.

MR LAUER: Let me say that in making my comments, I make it representing an industry that's grossly undercapitalised. It's an industry that's trying to answer the call of a burgeoning gas market. We're driven by the fact that gas is increasingly seen as a premium fuel. It's seen as a way of relieving greenhouse problems. It is a

premium and desired fuel in the market and the industry that we represent is responsible for delivering gas to markets, not to the front door, but to what we call the city gate, at the end of the transmission pipeline.

We are undercapitalised and there's a desperate need for investment and our concern is that the regulatory model that we're currently confronted with is destroying that incentive to invest. In the paper, we go through some pretty interesting economics, in the sense that there is a perception and almost a rigidity in the Stephen King v ACCC - even at the Productivity Commission view of the world - that we adopt a single period, marginal cost equals marginal revenue, perfect mobility of resources, frictionless transition between scale. All of those things that we pick up in Economics 101 is in fact seen to be the basis of regulation. The bottom line is I've never worked on a pipeline project where we worried about marginal cost equals marginal revenue. In fact, we're in multi-period analysis. We have uncertainty about each of those periods. The decisions we make in any one period in that time series influence our options subsequently, so we don't have frictionless transfer between scale, and we don't have costless transition along the way. We use discounted cash flow analysis, not a single period, marginal revenue equals marginal cost analysis, to try and resolve an outcome which delivers us a position in the market, and we compete ferociously for the right to do that.

I don't believe that you can sum that up by saying we operate where marginal cost equals marginal revenue or even average cost equals average revenue because in a DCF multi-period uncertain environment, I don't think those concepts translate perfectly. But I do believe as an industry, investment in pipeline infrastructure is far closer to average cost equals average revenue and allocated efficiency than the simple models that are presented as the basis of regulation credit. I think our first request is that the Productivity Commission move from the model represented in figure 1.3 in their report and look at a real world investment environment where people are trying to balance multi-period decisions with uncertainty in every single period and with the need to lock in a path the first time a decision is made.

I think what we're saying is the model you're using is fundamentally wrong. It is a very insightful model and as an economist, I understand why we use marginal cost equals marginal revenue as a guide, but to do so and to continue to do so and to apply it to real investments without questioning the assumptions that are being made in it is flawed and it's fundamentally flawed.

MR BANKS: But you're not accusing us of advocating marginal cost pricing - - -

MR LAUER: No, I'm not, but I am accusing the Productivity Commission of regularly referencing figure 1.3 throughout its report as a basis for an argument and what I'm suggesting is that model is not a valid model of what you're trying to do - sorry, figure 3.1. I stand corrected.

Where that gets us is to try and understand pipeline decisions and how

pipelines are developed. The pipeline industry is highly competitive. It is not, as some people would suggest, a secure monopoly. There are no limits on investment in pipelines in Australia. Anybody in the industry can submit a pipeline licence application, and as long as they can demonstrate they can bring the requisite skills to bear, they will get a pipeline licence. There is not one jurisdiction in Australia where the Pipeline Act will legislate for exclusive rights to transport gas to any market. Any pipeline is contestable, any pipeline is bypassable. There are gross examples in Australia where people with no pipeline skills whatsoever have been granted pipeline licences by entering into service agreements with skilled operators to deliver services that they themselves needed to secure a pipeline licence. It is a highly competitive industry. If you need examples of that level of competition, look at what's going out of Timor Sea, look at what's gone on in the last four years out of PNG, look at what went on in Western Australia during the sale of the Dampier-Bunbury pipeline and the work that was being done by a number of people to take commercial positions or competitive positions.

Our industry is a very aggressive industry. Everybody is out to maintain market share. That is the key to our business. So for every pipeline that's possible, there are at least two or three developers that are exploring how they can get the market edge and deliver to the market and be the successful builder. The problem is that pipeline infrastructure by its very nature is capital intensive, and where, as I say, I've never worked on a pipeline where we've looked at marginal cost equals marginal revenue as a decision rule, I can tell you that the things we look at are, "Is this pipeline bankable? What are my debt cover ratios?" and various other tests which the market applies to real projects. Those tests are about bankability. They're about how secure cash flows are and they are about whether banks will come in at reasonable bank debt rates and whether equity can take a residual risk position on the cash flows. Those sorts of decisions are made in the context of contractual structures. They are made in the context of commercial arrangements that underwrite the whole system and indeed, historically one of the methods used by government to underwrite pipeline development was to franchise the distribution network, often to themselves. But even without that, there is a fundamental question: how do you ensure the bankability of a pipeline project?

One of the problems we have at the moment is that nobody is in the market to take risk any longer. So who in Queensland, competing in a competitive electricity industry, is going to write a take-or-pay contract for gas out of PNG or Timor Sea? Who can afford to lock themselves into a 20-year deal to underwrite a pipeline when their competitors over that 20 years can take the edge with any other energy source available to them? So we've got a situation now where the end users - some of them - some are still in markets; for example, mining companies that are competing in gold markets et cetera, they may be able to write those contracts, but having said that, large chunks of this marketplace are not in a position to write bankable 20-year deals any more to underwrite pipelines. Pipeliners could do it, but then they don't have a bankable project. They don't meet the debt cover ratios and they don't meet their board's requirements and the gas producers at the end of the line aren't doing it

either. So we've got competition and we now have a market where risk has to be borne by someone and we haven't resolved where it will lay.

Increasingly, the arrangements that historically pipeline companies have put in place to manage that risk are being denied as anticompetitive. We have three rulings now from the ACCC where the parties that underwrote the development of infrastructure and the market for gas are paying more for gas than their competitors who arrive in the next month or so. It doesn't matter how you look at it, it's preposterous; the idea that those parties that can vigorously contest a commercial outcome and then underwrite the development of infrastructure and the market at the end of it should face competition from competitors in that same marketplace who have access to that infrastructure more cheaply than they do. What you've got is a situation again where nobody can write the contracts that will bank the pipeline.

The model is wrong. The code model is not wrong. The industry does not object to regulation. The industry accepts the intent and the purpose of Hilmer. The object of putting an end - if it existed - to uncompetitive behaviour, to the abuse of monopoly power, is something that the industry is not concerned about. What we are concerned about is we have moved from attempts to stop the abuse of monopoly power to outright price control. What we are dealing with at the moment in the pipeline industry is price fixing, and if the regulator doesn't get the price right, then a loss of investment is the outcome. We even have access to pipelines used in Victoria as a means for regulating the gas market in total through the contract carriage model which is interesting, that we start off with access to infrastructure and finish up with price fixing in a whole marketplace, but that's the abuse that's taken place with the adoption of the code.

We as an industry are asking ourselves repeatedly: are we better off leaving bypass as a way of capping the abuse of monopoly power or are we better off fixing prices and putting at risk the investment in the future? If we had an enormous infrastructure base, as in some parts of southern USA, that might be okay, but in our marketplace, where we're infrastructure poor, that's a major problem.

I was just going to pick up on a couple of questions that were asked this morning that the answers were pretty interesting on, and I thought you might like a contrary view. Firstly, I believe it's demonstrable that gas pipelines in the USA are regulated, not as was described this morning. I think somebody suggested they were totally unregulated; that's not true. Pipelines are regulated in the US. They're heavily regulated, far more so than here in some ways. The regulation that was removed in 1973 - and I haven't checked the date but I'm pretty sure it will be correct - was the regulation of wellhead gas prices because in North America from 1950-odd - I think 53 - they actually regulated the price of gas at the wellhead. They withdrew that in the 1970s when the market - because they set the price too low, nobody invested in gas production infrastructure, and everybody started developing synthetic gas technologies and paying - the regulated price I think was $1.50 and the gas price for these synthetic sources of gas and for imported LNG was in the several dollar

range. They ultimately withdrew regulation of wellhead gas prices because the got the price wrong and they had to withdraw it. Now, having done that, it didn't solve the problem because everybody had invested on the basis of the fact that it was there, so it was regulation which was a mistake in 1953 and the removal of it was not a satisfactory outcome either in 1973.

The other comment that was made in reply to a question this morning was the question about why does the USA use DAC and not DORC? The simple answer is - and it doesn't take as long as the answer this morning - that those pipelines have been regulated since the 30s and 40s. There are no pipelines in the US that have not been built under the existing regulatory regime, and if they were, they were brought in in the 1930s and 40s. When they were brought in, there was a debate about the value that they should be brought in, in the same way we have that debate here now over DORC and DAC. But the reason DAC is used in the States is that all of the assets that are currently being tariffed according to DAC are being tariffed within their own life. They have all been brought in at their actual cost and there is no adjustment. The fact is that you don't invest in the US without the approval of the regulator. One of my US colleagues has told me that they don't change a bolt or a nut without going through a public review process and getting the regulator's approval. That's why DAC applies. DORC was only ever a vehicle for introducing assets to the regulatory model which were not previously regulated. It was a way of bringing them in, those assets, and bringing them into regulation is tantamount to a confiscation of private assets. It is an appropriation by the government de facto of private assets. They're not being valued at market value, as would be their normal and legitimate legal right in this country, they are being valued at something significantly less than market value through DORC.

The rest of the discussion on DORC and DAC this morning was rather obscure because the code very specifically says DORC is only transitional, only applies to assets that exist before regulation and are brought into the regulatory model. Every piece of investment so far - new investment - included in the regulatory outcomes that we've seen have come in at historical cost. They have come in at actual cost. So DORC is nothing more than transitional. If the ACCC is interpreting the code as was represented this morning - and personally, I don't believe they are, but that was a view expressed - then it's the ACCC that's misinterpreting the code and the intentions of the code. The code is very clear. Existing assets when regulation is introduced come in on a valuation method determined by the regulator and the regulator has generally chosen DORC. New assets after regulation is introduced come in at DAC. That is exactly the same as the US model, contrary to what was said this morning, which suggested there was a fundamental mismatch between the US model and Australia.

I'll try and be quick. A statement was made this morning that bypass will never happen. I think the suggestion was made that bypass will never happen at three times DORC. Well, bypass does happen. The Darwin pipeline over its southern reach bypasses the TNT pipeline to Palm Valley and does so after

protracted negotiations for access which broke down not primarily because of price but because of risk, because the Northern Territory or NT Gas was asked to indemnify some people for some tax warranties and was not prepared to take the risk. The goldfields pipeline is a bypass pipeline to the goldfields transmission line, the actual electricity transmission line owned by SEQA. The midwest pipeline in Western Australia to Murrin Murrin is a bypass of the goldfields pipeline. Dare I say the Eastern Gas pipeline is a bypass of the existing system, and again contrary to what was said this morning, BHP has been involved in at least two of those bypass pipelines. BHP was an investor in the goldfields and BHP was the promoter and the developer of the Eastern Gas pipeline. So to suggest that BHP would not resort to bypass if they weren't happy with their offering is perhaps slightly flawed. BHP also owned the pipeline to Port Hedland.

We will respond more formally to the discussions this morning which we found most interesting. I should say also in that regard, I am an economist. I am here today because I believe that great damage is being done to the industry and that concerns me. I'm not being paid and I haven't been bought. I found that a most interesting comment also from the quarters that it came from.

I suppose our final point is - and it comes down to the timing issue - there are several references in the commission's report that suggest that timing is not of the essence. We are sitting on $5 billion worth of pipeline investment. We've got companies beating each other to death virtually in the market to build them and to offer the best deal. Those projects could all come to fruition in every respect, but they could fail because the regulatory model is fundamentally flawed. I don't believe the time that the commission believes it has is available and I do believe - and so does the association believe - that those major new investments are at risk at the moment if something is not done about it. I suppose we can all fiddle while Rome burns, but we may not have the gas to get the fire going. Thank you.

MR BANKS: Okay. Thanks very much for that. What are you reacting to there where you say that you think we don't think timing is important?

MR LAUER: I will apologise and say I can't draw you specifically to specific points, but there were a number of references in the report to the fact that a preferred solution may be to allow the ACCC processes et cetera to work their way through and monitor the outcome, rather than to take action to reform the process. We can draw your attention to specific references if you wish. We'll do that.

MR BANKS: In fact I think a number of the things we've recommended have been in the interests of achieving expedition and you've criticised us for that, so clearly we have a common goal in terms of trying to make the process work well, effectively and in a timely way, but perhaps we need to look at the emphasis we put on different ways of achieving that.

MR BEASLEY: Or perhaps we should just violently agree that timeliness is

essential in this case. Certainly for the pipeline industry, we have been promised a review of the code, albeit that was an in-principle agreement announced by the treasurer and minister for industry, science and resources, but various apparatuses have begun in terms of the core issues which we believe have been on the table now for some time. There's been no real action. We get a sense that this code review will be delayed until the Productivity Commission reports, and we look at the timings involved possibly in the Productivity Commission's processes and subsequent consideration by ministers and we find it difficult to reconcile those time frames with the investment time frame now in train.

MR BANKS: Okay. Yes, I think the logic - we have obviously no control over the timing of reviews - and our concern, if any, has been - and we've done it in relation to the four inquiries - to make sure that we don't get ahead of ourselves in terms of thinking about the specific before the generic, so I think probably the minister thought that that was a good idea, that we dealt with the generic issues first. To the extent that you find things that you agree with in our report, then maybe that has been a good thing.

MR BEASLEY: I think that's true. The fact that we're here and contributing shows that we certainly see merit in that approach.

MR BANKS: What do you say - perhaps this is a Dorothy Dix for you - to the proposition that we've heard from other participants, that they don't know what you're being concerned about? They see pipeline investment as relatively low risk. They see it as being essentially demand driven. Demand is increasing at some pretty predictable percentage. You've got a fair sense of what the competition is like, at least intermodal and so on, and that therefore this is not a high-risk business.

MR LAUER: Why aren't they in it? Seriously, I mean - - -

MR BANKS: You mentioned BHP. They invested and then sold on.

MR LAUER: And took their profits. I can show you in Western Australia, the goldfields at the moment is hurting because of the situation with Centaur; in the Northern Territory, NT Gas - and not just NT Gas, in both cases, groups of people are suffering because of the situation with Pegasus goldmine. I mean, for a secure industry, there's a whole lot of bad debts out there that are a problem. It's very easy to say that, but those same people have taken positions in the industry and sold out with their profits, so I'm not sure that they're being entirely honest. The fact is, when somebody goes to build a pipeline, cost overruns on pipeline construction are unfortunately problematic, but they happen. Those are borne by pipeliners. The reality is that you lose market because your customers get into trouble. It's no different to any other business. If you look at just the pipeline ownership asset side, if you write take-or-pay contracts that are absolutely watertight, with very high-quality clients and get guarantees, there is an element of the package which is secure but that's not the whole package and it's not the business. The business is far

more complex than just the ownership of an asset.

MR BEASLEY: If I could just add to that, in terms of the major growth markets - and I think forecasts don't see it in the traditional distribution retail sector - those market opportunities relate primarily to value added minerals processing, electricity generation, and I think in both those areas, it could be contended that there are a lot of very significant uncertainties, including the vagaries of world commodity markets, as well as issues relating to our very low cost base of coal for base load power and intermediate load power generation. So we would certainly argue that if you look at the major growth opportunities for transmission as opposed to other pipeline areas, those risks, as Mike alluded to, can be far more significant in a whole range of ways than is contemplated in our assessment of regulatory decision-making over recent years.

MR BANKS: Okay. I told you it was a Dorothy Dix question.

MR BEASLEY: That's all right.

MR BANKS: The issue of foundation contracts has come up and if you have a look at the transcript of the discussion we had with BHP in Melbourne or perhaps their submission, you will see some of that, where they see essentially foundation contracts doing a lot of the work in terms of bringing some certainty to the proposal. You've partly answered that. But typically, what's involved with the foundation contract in terms of the proportion of the investment or the proportion of the capacity in the pipeline?

MR LAUER: That's an interesting question because there's no hard and fast rule. Essentially it boils down to tweaking numbers in a DCF analysis until you get the right outcome. The fundamental issue is however the third party access, and again I'm not sure I understood the logic this morning. The reason we talk about third party access is because the first party is the service provider, the second party is the foundation shipper, and they're deemed to be capable of entering into a commercial arrangement satisfactory to both of them. Third party access is about giving Johnny-come-latelys access to an existing asset and not allowing access to that asset to be used as a means for controlling markets or for monopoly of use. The balance that goes into writing foundation shipper contracts and what proportion is needed, there is no simple answer to that, and foundation shippers, when they are key players in a project, will close their eyes and sign a document that's at the limit or beyond their capability really to commercially deliver, in the hope that when the pipeline is there, the world will be better. There is a lot of that in gas pipeline investment. There's usually somebody in the investment process that has to bite the bullet hard and sign and do it with a bit of faith. The foundation shippers do that, as do the pipeline investors, the equity owner. Probably the answer to your question is that the foundation shipper delivers a bankable cash flow that will meet the equity participant's preparedness to take exposure and what the banks need for debt cover ratios and interest cover ratios. So as long as you can get enough foundation

shippers of a high enough quality to satisfy the banks and satisfy the equity participants, then that's the right proportion. What that is is a function of how you decide to build the pipeline. If you talk to Americans, we built all our pipelines in Australia too small, because their view is that because they have a much bigger expanding market, they build more room for market growth, whereas in Australia, bankable cash flows are much harder to deliver. So there's a measure of conservatism in the funding structures which dictate a smaller project with a different growth path over time. It's a question of pre-investing rather than expansion at a later date.

MR COSGROVE: Why does that difference of approach in the US and Australia exist, Mike? I think you mentioned in your earlier remarks that regulation was in fact, if anything, tighter in the US.

MR LAUER: It's totally different, and that's why you've got to be careful. It exists because their market is 20 times bigger than ours.

MR COSGROVE: Yes, but that's always been the case. What matters, I would have thought, in this context is the growth of the market rather than its size.

MR LAUER: Okay.

MR COSGROVE: Is their market growing any faster than ours?

MR LAUER: The North American model for regulation has accelerated depreciation. They amortise the asset - it's not really depreciation. They amortise the assets for tariff purposes much faster, so any pipeline company with an existing asset base has a substantially over-depreciated asset base and actually can build future - it's got more headroom under its tariffs because it's recovering cash flow up much earlier from a pipeline. By the time they get out to 20 years, the pipeline has been fully depreciated. It's still got a whole bunch of years' life left, and then any asset you're adding to it is part of the rate base. So in fact because of that structure, because you've accelerated the depreciation of your existing asset, you can actually build more spare capacity into the new capital and still stay within the market.

MR COSGROVE: I guess your members had accelerated depreciation until relatively recently?

MR LAUER: Not in regulation.

MR COSGROVE: No, through the tax system.

MR LAUER: And for the moment, we still have a bit of that.

MR COSGROVE: You still have a bit of that.

MR BEASLEY: I mean, for new developments, the move towards an effective life regime of course changes all of that because the current thinking is a 50-year life for taxation depreciation purposes if that goes ahead. Look, there's been some discussion about the US situation. I just wanted to make a point: irrespective of the nature of the regulatory parameters that are applied - because we've always said the US market is far more mature - they have the luxury when they build a new pipeline of saying, "We'll build it when we get 70 per cent" - I think that's the figure - "70 per cent of that pipeline full, then we'll build it," and it becomes incremental. We don't have those sorts of luxuries.

MR LAUER: And the other part of your question is, you don't build a pipeline in the US without a certificate of necessity. So if I own pipeline infrastructure and it's not fully utilised, we have a public hearing before my competitors can build a pipeline and I get to go along to the public hearing and argue it's not needed because I still have spare capacity. So it's very hard in Australia, where your spare capacity is subject to bypass, compared to a US model where you're protected to a large extent by a legislated monopoly. Once you have a licence, you've got a licence to be fully utilised before you get a competitor. It's fundamentally different. Actually, drawing comparisons with the US and Australia without understanding those differences is very, very dangerous.

MR BEASLEY: Even on the basis of that dangerous comparison, because there is a point I want to make here, the national energy policy development group in the US has just put out a national energy policy, "Reliable, affordable and environmentally sound energy for America's future," and this was released by the vice-president. I'll just read from this particular report:

> The second challenge is to repair and expand our energy infrastructure. Our current outdated network of electricity generators, transmission lines, pipelines and refineries that convert raw materials into usable fuels has been allowed to deteriorate. To match supply and demand, we will require some 38,000 miles of new gas pipelines, along with 255,000 miles of distribution lines.

I don't say that to draw a comparison between regulatory practice in Australia and the US, but merely to say, irrespective of the nature of regulation, that new development imperative is going to be as important to the US as it is in this country, more so here because our markets are more immature in terms of gas as a share of primary energy; our basis transmission infrastructure is not mature and as we discussed, our producer competition is very immature by any standards.

MR BANKS: Just on the question of excess capacity and so on, again it's been put to us that the chances of having capacity reduced as a response to the risk of an access regime and so on are not high because the incremental cost or the additional cost for producing a wider pipe, larger diameter pipe, are not great and most of the cost is in digging the hole and so on, rather than the additional cost of the capacity in

the pipe. How do you respond to that?

MR LAUER: Well, I'd suggest it hasn't come from anyone that's been associated with pipelines. Pipelines by their very nature have two fundamental cost elements that are size related. One is yes, there is a rule I think in economics - they call it the point 6 rule - that says that the cost of a pipeline is about one-third the cost of steel, and the cost of steel is a function of the surface area of the steel, not the volume of the pipe. So if you increase the volume of the pipe, the surface area goes up by about point 6 - some wonderful mathematical relationship between radius and diameter that gets you there or - - -

MR BANKS: I didn't learn that in Economics 101.

MR LAUER: Yes. So that is true, but pipelines also move in steps. As you go up into a size range somewhere around about six inches, you move into a totally different quality of technology to lay the pipe. As you hit 10 to 12 inches, you transition again. So again, within some ranges, you can use similar equipment and yes, there are some savings in volume. I go back to the way we make decisions; if we base our analysis on DCF, if we base our decisions to invest on DCF and we're looking for a threshold rate of return set by the board as a viable investment, then the size of the pipe, it's not infinite. You run out of money to pay for it. My experience is that anybody that pre-invests in capacity for more than four to five years has done their dough cold. They will never see it again. So when you talk about pre-investing in capacity that's unsold, it's very dangerous. You've got to be confident of using it within a four to five-year window from the day you make the investment or else you will probably never get it back. So again, for those people that don't invest in pipelines, there are some very simple rules of thumb.

MR BANKS: This issue has come up. I'm just trying to think if we've given any concrete examples of that or that's become a threat. Are there ones that you - - -

MR LAUER: Sorry, which is that?

MR BANKS: The question of restricting the capacity of the pipeline as a response to the uncertainty.

MR LAUER: No, basically pipelines will be built to meet the needs of markets. That's the nature. Now, there will be some functionality built into your discounted cash flow analysis for low growth, and equity takes a substantial risk on that forecast low growth. If it's not contracted, then it's an equity risk, and it has to get the balance right in terms of what risk it's prepared to take. To do that, they look at their downside outcomes and their upsides. The reality is though that expansion of pipeline capacity is relatively easy, so the decision on the initial sizing is not - I mean, if you built a pipeline today, you can build it without doing anything special. You can double its capacity within the next five years with pretty standard decisions. So if you can double the capacity, there's a fair bit of room for market growth at

marginal costings.

MR BANKS: Could you explain how you do that?

MR LAUER: Yes, there are basically three ways to expand the size of a pipeline. The first is to add compression, and compression is very effective in the first instance and becomes less so as you add more compressors. You then - as Allen referred to before - loop the pipeline, and what that means is you go usually to the compressor stations, although there's a little black magic in the computer models, and you go to the points of the pipeline that are highly compressed and you duplicate short sections of that pipe. That way you get maximum expansion. A way to think of it is just as a debottlenecking, because it's a bit more sophisticated than that when they run. It's basically a computer modelling exercise, so they select those segments of the pipe, the duplication of which will result in the greatest increase in output. Sometimes you get things that look silly. You get a 1500-kilometre pipeline and they had 13 kilometres of looping here and 20 there and 12 somewhere else, and that delivers the most optimum solution or the optimum solution.

MR BEASLEY: But ultimately as that process continues, the final result of course is a fully duplicated pipeline and then you can start that process again. I think there are European pipelines duplicated three and a bit times, some of the major pipelines.

MR LAUER: That's correct.

MR BEASLEY: So it is an ongoing process, but the cost is very significant relative to bringing on new compression in the first place.

MR LAUER: The oldest pipeline in Australia is now into that final stage; that is, it's the Roma to Brisbane pipeline. It was built 35 years ago or so. It has been looped over the last 35 years, it's been compressed, and the last round of looping that's taking place will see its full duplication. When they have done the looping though, they have looped it in a higher grade pipe which can run at a higher pressure, so the moment they complete the full looping and duplicate it, they will separate them and run them as two separate pipelines, one at a higher pressure, because that gives us a bit more capacity. So there are lots of things. There are minor things with compressors; we can put on after-coolers, and an after-cooler will increase capacity by 2 or 3 per cent sometimes.

MR BEASLEY: There is a point about foundation contracts I'd like to revisit, if I could, just to make it totally clear. There are those who say foundation contracts support your new development, therefore that supports the investment. You have no problems in terms of the economic viability of your project. But consider a situation where you create, as part of that pipeline development, significant spare capacity and that is subject to regulatory caveat in terms of the tariff that will ultimately apply. Under the pipeline access code, there is absolutely no guideline to regulators in terms of how that spare capacity should be treated. We've seen on outcomes, in relation to

existing assets, the tendency is to assume that those foundation contracts are over their going rate in terms of what they would expect as regulators to apply and the end result is when you smear that across the entire investment, you end up with lower third party tariffs then for foundation customers.

Regulators and others are quite correct in saying that doesn't impact directly on foundation contracts, but you consider any prudent foundation customer in his country, they would all be saying, "Well, if someone gets a better deal, so do I," and of course that erodes the whole basis on the financials for the project in the first place. That is the nature of the risk in creating spare capacity in a new greenfields project, even with foundation contracts.

MR BANKS: Okay.

MR LAUER: Can I just rejoin another issue. I have no doubt that those of our members who are pipeline developers would gladly build any spare capacity in any pipeline that somebody is prepared to sign a bankable contract for. These people that are telling you that this spare capacity should be built are the same people that aren't prepared to contract for it and deliver a bankable outcome for the investors and the pipeline industry. Why does that risk belong to the pipeline? If these people want spare capacity built, there are no limits on what they can do with capacity. Look at the code; they can trade it, they can use it for whatever they want. If these people want spare capacity built, why don't they sign a contract and ensure that it is built? I think the answer is, the rate of return on the contract is a lot less than the number they get from a regulated tariff in the model we're currently running through the ACCC and that's not sustainable. That is the problem.

MR BANKS: I guess while we're on this general area of impacts on investment, on page 19 of your submission, you talk about this debate and I must say to some extent, we've asked for more information but it's still very hard to get a handle on. The same examples are quoted and they're often from what somebody said at a conference and so on. Maybe it's in the nature of it, but it's hard to get more firm examples. But you say there on that page 19 that:

> Some assert that a considerable number of competing pipeline proposals now under development provides evidence that the industry is willing to invest under the environment created by the code.

That seems like a reasonable proposition. Then you go on to say - and this is what I just want you to explain:

> The pipeline industry on the other hand has pointed out that no transmission pipelines have actually been constructed under the code -

and this is the point -

and the majority of development proposals are contingent on the regulatory arrangements that will apply.

Could you just elaborate on that point please, that the majority of the proposals are contingent. So are you saying that while these are proposals, whether they will be realised or not depends on the regulatory - - -

MR BEASLEY: That's certainly very much the case. That is very much the case in terms of most of those competing proposals. I'm aware in relation to the Timor Sea development, for example, both parties have indicated - and there are competing proposals from Epic and APT - very clearly that their ability to go ahead with those developments is contingent on settling this whole issue of regulatory risk to the satisfaction of investors.

MR LAUER: And in regard to PNG, there is a purported regulatory outcome which has not been fully ratified at this point. If that was to unwind, that would seriously affect that project. Further, that regulatory outcome does not cover the full length of that pipeline and there is a grave uncertainty as to treatment of the Gladstone to Brisbane leg of that pipeline. Again, I suspect that the same comment applies, that an adverse regulatory outcome on that addition to the pipeline would create a major problem.

MR BEASLEY: The point we were seeking to make in that particular section was parties are seizing on the fact that competition, albeit with a relatively small number of players, is leading to the development of market-driven outcomes where customers will determine which particular pipeline proposals will or will not go ahead, and at the same time they are saying, "Well, that is evidence that everyone is willing to invest in a regulated environment." Those two points are mutually exclusive. There's no nexus between development proposals on the table and a desire or a willingness to put those projects under the code.

MR LAUER: I think the comment was this morning that BHP spends 3 to 5 per cent on a project before they know what it's going to cost. In the 3 to 5 per cent range on all of those projects, we're still spending enough money to know whether they will go ahead and on what terms, and the regulatory outcome will be a final hurdle. The reality is, those projects demonstrate that the members of our association do not yield market share to each other readily. They will fight tooth and nail for a role in those projects and that works well for the end user.

MR BANKS: Perhaps just going on a bit further, over the page there, you say that you're not aware of any major developments actually constructed under the code. Again, BHP I think has put the proposition that the code has facilitated investment and I think they use their own - the Eastern Gas pipeline - as an example of that which may have anticipated the code. You might just want to have a look at their submission.

MR BEASLEY: I'm aware of the principles they have put forward through APIA and elsewhere on that particular issue. They have gone as far as to say, "Well, of course EGP will covered under the code," which it isn't. Their argument rests primarily on the issue of access to distribution systems and we've had that discussion with BHP and others in the past. There are clearly issues of difference in relation to regulation of transmission and distribution. I believe in this process we're going to see some of those differentiations in pretty sharp contrast. I'd prefer to take that on notice and perhaps we can respond to any specific points in writing.

MR LAUER: And the answer is not black and white and unfortunately we will not deliver you that choice. In 1994 at the Perth conference, I delivered a paper and listed a whole number of pipelines and I think PNG is the only one that isn't - PNG and Timor - and suggested that by the end of the decade, regulators would be claiming that those pipelines had gone ahead because of regulation. Those pipelines were all well in train at the time and would have been built once commercial outcomes were right anyway. Regulation just adds another level of complexity. It doesn't solve any problems. The reality is that the Eastern Gap pipeline was well advanced before regulation came in. Clearly Duke have a view that it wasn't going to be regulated. If that was Duke's view, you've got to form a view that it went ahead on the basis that it wouldn't be regulated, not that it would be. All the other investments have been well in train long before regulation came in. The problem is, we haven't had a project or an investment committed since we've had the code.

MR BANKS: Consummated - do you mean in the sense of - - -

MR LAUER: With the exception of Tassie.

MR BEASLEY: Sorry, since the advent of the code, correct.

MR BANKS: With the exception of?

MR LAUER: Tasmania.

MR BANKS: Which could be potentially covered by the code.

MR LAUER: It could be, and Duke has clearly taken a view on that and that's for (indistinct) companies to take views on. It's just another equity risk.

MR COSGROVE: And it could also be the subject of an application for declaration under Part IIIA.

MR LAUER: Yes, it could, because Tasmania doesn't - hang on, no. Does Tasmania have an access regime?

MR BEASLEY: Yes, they have.

MR LAUER: They do. Yes, I'm not sure of that actually.

MR COSGROVE: Nevertheless, it does seem to be one example at least that's gone ahead despite the regulatory risks.

MR BEASLEY: Sorry, yes, but I think draw a distinction; it has gone ahead under a framework that might include coverage under the code, but it has not gone ahead on the basis that it is covered under the code. Our point quite distinctly is looking at the framework of the code. When we compare new investment to old investment, there's a sharp delineation and that occurs simply on the basis of when that asset is put in the ground, if I make myself clear.

MR COSGROVE: I'm not sure. From the point of view of the investor, isn't what matters - the risk of regulation - whether the pipes are already in the ground or not?

MR BEASLEY: I think you have to look very carefully on a case-by-case basis as to who the investor actually is; you know, there's more than one investor. I think that is an exception rather than the rule in that sense.

MR LAUER: One thing of concern with Tasmania and any new investment is this view within ACCC that new investments ultimately become old, and in fact in the Productivity Commission's review, the idea that there could be a holiday and then a regulatory recapture. The fact is when you make a decision to invest, you build into that decision a WACC - not a WACC, you build into it your threshold rate of return. If you've got to contend with the fact that somebody is going to knock 2 or 3 per cent off that rate of return after five or six years, then the rate of return that you've built in is wrong and you go back and you do it again. To argue that the threat of that regulatory intervention at a later date at a lower rate of return does not distort investment is flawed. The fact is - and I think in Prof Johnson's paper this morning - probably one of the things that I could agree with of what he said was that once you've locked a project in at a rate of return, it is locked in. You can't change it halfway through the game and decide that it's now an old asset and can be regulated at a different rate of return.

MR BANKS: Yes, I think we acknowledge that point. If we raised that question, it might have been in the context of how long you would have the holiday. But certainly if the holiday was too brief, it would come at just the wrong time, when the project is starting to make profits to compensate for the losses in the first period.

MR LAUER: That's right.

MR BANKS: I'm just trying to find what you said on access holidays. I assume you like the idea.

MR BEASLEY: We made the point on access holidays that it really missed the point, that the uncertainty you face is really towards the end of that period. We look

at it in terms of access arrangements under the code, where we're seeing increasingly a regulator saying, "Look, 10 years is a long period for us," but for a significant transmission pipeline, that's the very period in which you've developed your threshold volumes, you're out of the red and beginning to get into the black, and that's the point at which regulators, on their own admission, want to step in and review, from first principles, the arrangements that would apply. Central West was a 10-year access arrangement. We believe it should be matched far more closely to the normal investment horizon over which you would expect to recover efficient costs over a project, and - we've been saying this I think for four or five years - that needs to be in the order of 20 years for a significant project.

MR LAUER: 20 years, depending on what sort of amortisation you can - - -

MR BEASLEY: Yes.

MR LAUER: If you're amortising capital over 80 years, it's 80 years. The issue is, if you give a regulatory holiday and then bring an asset into a regulatory regime after the holiday, you've raised all of the issues with entry into the regime that we currently have with all existing assets, so what value are you putting it in? Is it a DORC or a DAC or any of the others we created this morning? You've got the problem that if that is a risk, that will be built into the decision to invest in the first place and will discourage investment at the margin. There's no question that it will do that - and further, a regulatory holiday from what? A regulatory holiday from price fixing? Is that what access is about? Is it about key interest groups in the marketplace using the ACCC to go and skitch their dog onto the pipeliners? Is that what it's about, to bring the tariffs down as low as they can conceivably go without regard for the dynamic impact? Is that the game, or is it going to stop the abuse of monopoly power? There should be no regulatory holiday from using monopoly power in a way that damages the market. We don't have a problem with that proposition. We have a problem with saying that there's a regulatory holiday from price fixing because we don't think Hilmer is about price fixing and until we got into the specific amendments to Part IIIA et cetera, we didn't think the reform process on access was about price fixing, and the longer it goes on, the more it becomes simply a matter of price fixing.

MR COSGROVE: How do you separate the two? You could exercise monopoly power by saying, "I'll give you access," but at a price that's clearly unacceptable to the customer.

MR LAUER: I've got to say, in Australia it was never illegal - and I still don't believe it is - to exercise monopoly power. In fact, monopolies, using their position in the market to set prices was a way the market communicated to potential investors what opportunities were out there to invest in new infrastructure.

MR COSGROVE: Yes.

MR LAUER: We deny the market that information now because the ACCC is dictating to the investor how much pipeline we need.

MR COSGROVE: But then we have to go back one stage and think about the nature of the facilities or services that we're talking about. We're essentially looking here at natural monopoly.

MR LAUER: Are we? Everybody says that, but that's not necessarily true at all. What we've got is a monopoly caused by contracting; because we live in an uncertain world, we write contracts. Anybody that signs a contract with the major gas users in Victoria can build a pipeline to take out GPU. I can tell you, people have looked at doing just that. This is not about a monopoly based on average cost, this is about the fact that people enter into commercial arrangements which underwrite investments which then limit entry. But as contracts expire, new opportunities are open, and new pipelines will be built when pipeliners don't understand their market. That's already happened and we have had bypass for that reason in this country.

MR BANKS: Yes. That's clearly possible and presumably reflects a fault of the regulatory system, as you could argue was found in the Eastern Gas pipeline case, but in essence, this access regime is meant to relate, we think, to circumstances of what you'd call natural monopoly power where it's uneconomic from the community's point of view to have a second transmission line built, even if somebody was prepared to build one.

MR LAUER: Again, you've moved into a world of politics because in this country, the idea that investors that want to invest in a pipeline to meet the needs of a market has always been a part of the way our economic system has prevailed. If what we've got is a system whereby a government bureaucracy will determine which pipelines are built, we've gone to the US certificate of necessity model and we've got monopoly. You've forgotten competition; you've gone somewhere else altogether. The perfectly competitive model works. Now, the theory of perfect competition works simply because entry is free and there's always excess capacity in the marketplace. You get competition when there is excess capacity. There will be competition in the Sydney market for gas because there's a bit too much capacity in the system at the moment and the owners of that capacity will hit each other to capture what market they can. I thought that's what Hilmer was about and that's what the role reform process and competition policy was about.

MR BANKS: I think that's what we're about too. In terms of what we've said about the declaration criteria, if anything, we're trying to strengthen that to ensure that you don't get coverage where coverage is not warranted because of the market circumstances, so I think we do agree there. What you're describing really is a pretty competitive industry where the provision of pipeline is pretty highly contestable.

MR BEASLEY: We just say look at the situation now in Australia with two basins competing with each other into a similar market with two proposals from Timor Sea

competing into that Adelaide region, and two, possibly three - I'm not sure of the status of one of those - competing from Victoria into South Australia. They are competitive head to head along a common route and also competitive in respect of each other in the markets they seek to serve. That is the nature of the beast. The problem is, under this regulatory system, the industry goes through that market test and then has applied, superimposed, a regulator test which will always apply very different value on those judgments and that is a concern.

MR BANKS: I guess in pushing the idea of the access holiday, you can think a bit more about it. What we had in mind was more that there'd be a holiday before the question of declaration came up, so it would be a holiday and then bang, you're into a price control situation, but rather there'd be a holiday over some period - it might be 20 years - and at that point, the holiday would end, but then the declaration criteria would apply and that whole process would be gone through to determine whether the excess regime should apply, and it may not. You've been quite helpful, I guess, in suggesting that the period should be longer rather than shorter, and I agree with you, theoretically, wherever you chop a chunk off the distribution curve, you're going to affect some marginal investments for sure.

MR BEASLEY: The point I wanted to make is that the very term "access holiday" is one most of our members would find offensive because one thing we would have thought in this unbundled environment we operate on, the market would recognise that we're in the business of providing all its services. We're not upstream, we're not downstream, we don't sell gas, we haul gas. There seems to be a fundamental understanding or a glossing over of some of the structures put in place as part of the sale processes and as part of the gas law. That has been conveniently - "glossed over" I think is the best term, in the interests of applying consumer-oriented price regulation.

MR BANKS: All right. If you can think of a better one, come up with it and we'll - - -

MR BEASLEY: Put the creative hats on and come up with a term. The principle we understand, but I think within the marketplace, the term "access holiday" has created the wrong perception. It sounds anticompetitive.

MR BANKS: Okay. In terms of whatever we want to call it, "holiday" or "exemption" or "safe harbour - - -"

MR BEASLEY: We could call it an undertaking, but that would offend some people.

MR BANKS: Okay, what it would apply to; clearly a situation in which you had contestable investments, I think, would be a situation in which you would see it as applying. I don't know whether you might care to just think a bit more about other situations in which it might not apply, where you're getting new investments - I

mean, where there would be inherent potential for market power. One that you could think about, for example, might be the replication or superseding of an existing network by an incumbent, an incumbent that already has that position, then undertaking a new investment that either supersedes or replicates the existing framework. It's harder to see that being contestable. You might just have a think about that. I guess another area - just further thinking in response to what people have been saying to us - might be a situation where you might get augmentation to infrastructure that's already got such a holiday, where that augmentation is undertaken by the incumbent; again, a situation where the contestability would not be necessarily driving the returns down. So at this stage, we're trying to find a way that you could apply such a thing, where there would be some certainty and some clarity and as the ACCC has said apparently at a conference, you know, they don't want to be in the business of picking winners, so trying to find some rules of thumb that would apply. But any thoughts you had there in relation to your own industry, I guess, would be helpful.

MR BEASLEY: Yes, I think we would have to take that on notice. We certainly haven't got any views we can express today. We've got some ideas, but we'll develop those further and respond.

MR LAUER: I think although we didn't dwell on it in our submission, the issue of the regulatory holiday was considered and we felt it brought with it many problems. Again, it leads us to ask what are we giving a holiday from?

MR BANKS: See, you could argue that if you had the declaration criteria right, that there'd be no need for such a thing.

MR LAUER: Exactly.

MR BANKS: And I guess we have tried to make changes in that direction, but some would still see that as being rather uncertain. You can't eliminate scope for discretion, and so there is an issue there, I think.

MR BEASLEY: We certainly think it would create more uncertainty if you didn't have an ability to appeal on merits that decision, which we certainly made very strongly.

MR BANKS: The other thing is that you can't necessarily find a rule that includes everybody, and where would you allow discretion? You could argue that for an investment that wasn't contestable, you wouldn't want to rule out the possibility of being outside this regulatory regime but perhaps in a situation like that, you might put the onus on the investor or the service provider to make a case as to why the returns would be marginal and why therefore it shouldn't be captured by the regime. But anyway, have a think about that, and any thoughts you have about how it would work.

MR LAUER: Perhaps we can help focus your views on that last comment; if there were supramarginal projects out there, I can assure you they would be done.

MR BANKS: Yes, that's our feeling too.

MR LAUER: All of the transactions we look at are borderline by definition. We have to tweak every button we can to make them work. "Marginal," it's an interesting word, but it does summarise most of what we do most of the time. We're operating at the boundary.

MR BANKS: Okay, thanks.

MR COSGROVE: I wanted to ask you about the point you make at the top of page 8 of your submission which relates to the risk associated with possible coverage as a result of an undertaking under Part IIIA and then subsequent coverage under the code, the sort of dual regulatory jeopardy point. I can understand the concern you have. Let me just ask a question, a sort of devil's advocate type of question: wouldn't the likely regulation of pricing that would come out under those two routes be the same, in the sense that you've got the ACCC as the regulator for both of them or each of them?

MR BEASLEY: That's a very interesting question, and of course the ACCC's view is - and they've stated this - that their view in respect of an undertaking would be to apply the code. The point is, under Part IIIA, depending on the circumstances, they need not necessarily apply the code in that judgment in its extreme form. See, there's another way of putting this question. If you look at the gas law, it says, "Well, an access arrangement is very much like an undertaking under Part IIIA." We don't think it is at all. So it is clearly a different mechanism. I saw APIA's comments about forum shopping; that's a convenient term but at the end of the day, this industry will be looking for ways to create certainty. If the code were so certain and so viable, why don't we volunteer coverage under the code? Why is it that there are major players saying, "Well, if we could resolve the conflicts between Part IIIA and the code, we'd be neutral"? They're clearly looking for a mechanism not to extract monopoly rents but to create some certainty ahead of investment in terms of their decision-making.

MR COSGROVE: Are you saying that ACCC has to operate under different principles?

MR BEASLEY: The ACCC has issued a guidelines document, I understand, in respect of how it would judge applications under Part IIIA, but I'm aware that it's a guideline document. I'm not aware that it's binding. It becomes somewhat academic because we've tried this process as an industry through the code change group, the custodians of the code, and we were simply trying to get clarification that if an undertaking were accepted, and the players would have to take that risk, then those price elements, agreed, could not be unwound if that pipeline were to subsequently

become covered under the code. The response from the policymakers in a recommendation to ministers was, "Okay, we'll give you that certainty, but we'll give you another type of certainty in that process, in that if you adopt that route, you will be automatically covered under the code," and we rejected that approach as an industry on principle because - as you can see our comments on the primacy of the coverage test - we saw that as having precedence in this process.

So if these industry codes were so good and so consistent with Part IIIA, if we are forum shopping, why is that so? It is basically because the application of this code, in terms of the way the regulator has applied their discretion - their considerable discretion - is to replicate what you would expect from pure price regulation. We believe that was never the intent of competition reform in this country, and if it was, it should have been presented as that and we would have had that debate.

MR LAUER: Just a bit more to add, that Part IIIA is not prescriptive about the measures that have to be put in place, therefore we can't rely on it; secondly, the appeal measures are different too, so the process does not match exactly and there may be issues with the different appeal processes.

MR COSGROVE: Have there been any transmission lines which have been subjected to both of these coverages?

MR BEASLEY: No, we've had situations where an undertaking was submitted, we understand in parallel processes. That was rejected around the same time as a recommendation was made to cover the pipeline, as I recall.

MR BANKS: I guess another area where you've expressed strong views - and it overlaps with, I guess, our common concern about timeliness and consistency - is in relation to the number of regulators and the role of ministers. For reasons you're aware of, we saw perhaps some scope there for rationalisation, partly due I think to the existing sort of fudging of roles, or where we saw the criteria already perhaps removing some scope for discretion and reducing therefore the policymaking role of the NCC and the minister with ultimately, anyway, the tribunal being there as an appeal beyond the minister's decision anyway. But I give you the opportunity to respond to those points. In relation to ministers, you make a particular point about - on page 16, going over to 17 - the removal of ministerial involvement increased the influence of regulators in the code change process. I might give you the opportunity to comment on that as well.

MR BEASLEY: Delighted to comment on that. The process that led to the development of the code always envisaged a two-stage process in recommending changes to the code, with step 1 a group of government officials, the NCC, two regulators, two customer representatives and two service provider representatives basically providing advice to ministers, but only jurisdictions had a voting role on that particular group. The stated intent at that time was, "Well,

industry, we know you're not fully represented on this group, but if you have concerns, you can always talk directly to ministers." In other words, it was presented to us as a fail-safe mechanism to ensure that changes to the code were not simply affected by jurisdictional caveat representation. My only observation in this process is that some regulatory bodies on that code change group have undue influence in terms of the outcomes that are ultimately put forward. So we see it as an important means of - and I understand the point you're trying to make in terms of efficiency and the like. Certainly as the code has developed, it's probably the only protection we have as industry against inappropriate code changes brought forward, such as the one I discussed relating to automatic coverage if an undertaking is accepted. But I take your point; ultimately, I think for this industry it depends on the balance of proposals that are finally brought forward. We would consider that position in light of the final balance of recommendations.

MR LAUER: One of the sort of things that concerns us is the situation we've had in recent access rulings where some years ago, the federal government decided that it wanted to encourage the development of infrastructure and provide a tax treatment for all infrastructure through the legislative process, so Australia adopted a policy that the infrastructure would receive a particular tax treatment because the development of that infrastructure was in the public good and the value of that wasn't being fully appropriated, I presume, by the developers. In recent access arrangements, we have had those decisions undone, so we've got the decisions of the legislature being entirely unwound at the bureaucratic level by the ACCC. That's not even going through a code change group or anything else.

We think it's essential that issues like that have a proper political forum. Maybe pipelines are different and maybe the government never meant that pipeline infrastructure should be promoted like other infrastructure, but we don't quite think that was the case, and we simply have a case now where we've got the bureaucracy overturning the legislature. We see a very strong need for the minister to stay involved in this process.

MR BANKS: Okay. There may be some particular features in relation to pipelines. This overlaps with your concern also about giving one regulator the responsibility for all aspects of Part IIIA. You strongly disagree with that. I guess we went through a number of reasons why that might facilitate things. We also raised some questions about concentration of power and so on. On that point, to what extent do you see this as an issue to do with the ACCC or an issue to do with the question of having one or two or separate regulators? Is your concern more where we came out in terms of the ACCC being the most likely candidate if there was a separate regulator?

MR BEASLEY: No, I think this is an issue of principle, in that if you accept our view that this is a two-step process deciding what should be covered and then the nature of that regulation, then there is a lot of merit in our view in having the entities responsible for those determinations separate, otherwise we believe there's a very strong risk of very rapid regulatory creep, in terms of coverage, which is a core

decision and - - -

MR BANKS: What would be the sort of regulatory logic? Why do you say there would be regulatory creep if you had both of those steps compressed under the one regulator?

MR BEASLEY: Because you would be taking a decision on what pipeline would be covered by the very body that also adjudicates the nature of the regulatory arrangements. We believe that is an inherent conflict on the part of a body such as the ACCC.

MR BANKS: Are you saying that there would be a predisposition to coverage?

MR BEASLEY: Absolutely - sorry, not that we've seen anything else otherwise, but as a matter of principle, if those two bodies are genuinely independent in their approach, we see that as a very useful fail-safe mechanism. In terms of the decision-making process, we don't even see how that could be more expedient to take that approach, when the core issue is one of effective separation to ensure those two processes are followed fully and fairly and independently.

MR COSGROVE: But if you had the single body working under fairly tightly prescribed declaration criteria, would you still see the same degree of disposition to declare codes?

MR LAUER: The code is fairly tightly prescribed and we're not very happy with that, so I think that becomes the difficulty, relying on the application of the tightly prescribed package of rules. By way of example, in the development of the code, the process was hijacked by a number of jurisdictions who sent their regulators along. The catchcry in the development of the code was that everything was to be covered, including "the barbecue line in the backyard". That was the position that was pushed. The only reason there's a coverage process in the code is because some people fought life and death in the trenches to try and hold on to that single aspect of the Hilmer package. But I can assure you that the regulators that hijacked that process were keen to cover every single thing and that's still reflected in the nature of the code, where laterals that are of no third party access interest were lumped in, because that was the intent of the regulatory group. So I think we have a problem because relying on tightly prescribed language means that ultimately we will fight tightly prescribed semantic arguments in courts if we're afforded an opportunity to go to court.

MR BANKS: Again I think another area where we saw some scope for expedition I guess was in relation to appeals and we felt that in relation to undertakings, there needed to be an appeal right. But we thought in relation to declarations, there may be scope to remove that, given that there's another opportunity at the time of a determination, having gone through the arbitration process, to appeal at that point. Again, I give you the opportunity to - - -

MR BEASLEY: I'll certainly comment on that. That takes a very narrow view of Part IIIA and again, we need to relate those principles through to the gas code, where declaration is equivalent to coverage under the code, and I suppose an arbitrated outcome in effect is an access arrangement. So what you're saying is under the code, you would be suggesting in policy terms that we have no ability to appeal coverage and yet have an ability to appeal on full merits an access arrangement. Our view is - and I think recent history has shown this - that regulatory bodies don't always get it right in terms of their views on coverage. That appeal right, we think, is very important in the context of avoiding competitive infrastructure from being caught in the regulatory trap.

MR BANKS: Are you talking about the Eastern Gas - - -

MR BEASLEY: That's correct. We believe there are other examples that will come forward of a very similar nature.

MR BANKS: Although I could say there that it wasn't the ACCC who made that - - -

MR BEASLEY: No, I said "regulatory bodies" because the NCC of course is a regulatory body and at the end of the day, it was the minister acting on the advice of the NCC, so there are steps involved. Our whole submission is premised on the primacy of that coverage test as an effective means of deciding what should be in and what should not be in. The most effective first step to avoid inappropriate regulation is to ensure that only essential infrastructure is caught. We support the way you propose to change the declaration criterion; perhaps we don't have, because of experience, the same confidence that it would be applied without fear or favour in the way that no doubt you would envisage.

MR LAUER: Just one thing to contemplate when you consider that is the damage that is done to a competitive pipeline that should have never been covered if the only way of exiting the process is to go through the revelation of an access arrangement process. So the only way you can get to contest whether you should be covered is to contest the determination and if that pipeline should never have been covered, then the competitive damage done to that pipeline in the process of revelation during the access arrangement or in the undertaking process would be enormous and it would be inappropriate.

MR COSGROVE: What is the appeal structure under the gas code? You can appeal against a coverage decision?

MR BEASLEY: You can have a full merit appeal against coverage, a very limited appeal in respect of an access arrangement, but it's a very truncated process. It's not a full merit appeal and it's only on the basis of if there is a strong disagreement in the final regulatory - - -

MR COSGROVE: So under the code, it's the first stage that matters.

MR BEASLEY: The first stage is absolutely critical - so is the second stage, I might add, but that's another point.

MR BANKS: We've kept you here long enough, I think. I just had a very quick look to see if there was another question.

MR COSGROVE: I have one on what you had to say on pricing principles. You say that you agree with the intent behind what we set down but that you think the principles will need to be extended to address the whole issue of investment risk and regulatory uncertainty. Now, I think we took the view that the mere fact that there were no pricing principles in Part IIIA meant that our suggested inclusion of some would go some way at least towards removing uncertainty at the regulatory point. You may still feel they haven't gone far enough in that direction and I'd be interested to know why. Secondly, as regards the issue of investment risk, again we thought we'd tried to cover that by - I beg your pardon, I'm looking at the wrong page, but without being able to pick it up quickly now, there is a part of our pricing principles that talks about returns commensurate with risk, but I've forgotten the precise formulation. So what is it that we're missing there, do you think, in those two respects?

MR LAUER: I think our concerns are more so with the code. Contemporaneously with your report coming out, we issued - we have a quarterly magazine called The Pipeliner and in that, we have a president's page where we talked specifically - not knowing what was in your report - about the use of WACC as a tool for deciding the investment criteria for businesses, pointing out that any system of regulation that ensures that the best possible outcome a business can ever achieve is its WACC has got its wrong. It's got to be wrong, because on average, the outcome has to be less than WACC and the business is out of business. That wasn't addressed to this audience, it was addressed to our membership who, I've got to say, have difficulty coming to grips with a whole lot of the BS that they think we talk. But in a slightly different format, that same language is in your report, I hope and trust, as a view of the Productivity Commission. It may have just been testing the waters and it may not be a view, but there was a recognition of some of the things that are concerning us. I think the fundamental issue was whether pricing principles should be included in Part IIIA, and if there have to be pricing principles, then I suspect that we would go along with them being in Part IIIA. The question is, what are they and when are they used? Are they used to set prices or are they used to stop abuse of power? They're the issues that for us are absolutely fundamental, which come back to the coverage test. We're not simply commenting on your report, we are commenting on the world in which we find ourselves and so we have some very substantial problems with the pricing principles under the code.

MR BEASLEY: That's right, which have already extended far beyond what you

would intend to put in place under Part IIIA. It's an interpretive issue. We certainly support your direction and I think there were some suggestions from other submissions that we've signed onto about how that might be extended a little further, but I would rather leave that for another forum.

MR BANKS: All right. It's been a very valuable discussion. Thanks very much for that and we'll reflect further on the points that you have made. We've got, as you say, some more discussion tomorrow on some of the same topics; I think NCG is giving their submission first thing in the morning. So if there are no further comments, we would like to thank you for participating. We will adjourn now and resume tomorrow at 9 o'clock. Thank you.

AT 4.16 PM THE INQUIRY WAS ADJOURNED UNTIL
THURSDAY, 7 JUNE 2001

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