

NGC

1 introduction and then in the order of proceedings, also by
2 way of introduction of people, we'll present some material
3 representing NGC's position. That will be led by Mr Michael
4 Cummings, who's the gentleman second on my right, he's our
5 General Manager of Gas Processing and Transportation, and by
6 Dr Paul Hodgson who's on my immediate right, and his
7 position is Manager of Regulatory Affairs at NGC. Down the
8 end of the table on my right as well, we have Mr Ian Wilson
9 who is our Manager of Gas Transportation Services, and he
10 won't be presenting but he's available to assist the
11 Commission on any matter. On my left is Mr Forrie Miller
12 who's known to the Commission and is a partner of Chapman
13 Tripp. He will also be making some comments on legal issues
14 as we go through the presentation, so just at different
15 points in the presentation.

16 Also present today, and seated behind me, Professor Lew
17 Evans, who's from Charles Rivers Associates and
18 Victoria University. Mr Greg Houston, who's a Director of
19 the National Economic Research Associates of Sydney, and
20 Professor Glen Boyle from LECG and Otago University, and I
21 note each of those gentleman have provided reports in
22 support of NGC's written submission.

23 Noting the Chair's point earlier, yes, we were aware
24 that Dr Lally is available, I think later this morning;
25 we're in your hands on that so what I propose to do is move
26 through the submission and as it's appropriate or convenient
27 to you we're happy to adjust what we're doing to fit in with
28 him.

29 **CHAIR:** Thank you.

30 **MR BIELBY:** Just kicking off, we derive just a few general
31 themes which each will be amplified as we work through the

1 material we have for you today, so they're just broad wider
2 themes that they'd offer up as an introductory contribution.

3 The first is that we suggest, in terms of the
4 Commission's approach to things, that there is a need to
5 focus on the particular features of the New Zealand gas
6 market, and in particular, for example, we have features of
7 the markets in New Zealand which make us quite different to
8 overseas markets. If we think back to the first day of this
9 Conference, we talked a little about what's happening in
10 Australia, and we can learn some things there. For example,
11 when you heard about an experience that they have so much
12 gas that they're building a pipeline across to Tasmania to
13 build a new market, we immediately glean we're in a
14 different situation.

15 Similarly with New Zealand electricity markets, which I
16 know has been at the forefront of the Commission's minds at
17 recent times, there are again some things to learn but also
18 some significant differences. In that regard, I think some
19 of the comments yesterday from Wanganui Gas were very
20 apposite and I would support what they were saying there;
21 that particularly in comparison with the experience of
22 electricity in recent years, there have been some
23 difficulties as well as some learnings, and I think it's
24 fair to say that the gas market contributors see themselves
25 as being quite discreet in many ways, as having got their
26 act together in many ways, a smaller market under the
27 umbrella of the electricity market, if you like, and we
28 would like to see some of those features well recognised as
29 we go through this process.

30 The second broader theme I wanted to touch on was to
31 emphasise that in a whole range of ways we do have a context

1 for gas of significant change. The first point, of course,
2 to touch on is that we're moving towards a post-Maui world.
3 The link I would make there is that each of the Commission
4 has heard a great deal about what's happening around Maui
5 and with new field development in the course of the Pohokura
6 hearing; we very much see the story we're going to develop
7 here as flowing from that but broadening it out of course to
8 say, you heard a lot about Pohokura, we'll now talk a little
9 bit more about the other fields and develop a picture that
10 says, if you're going to have multiple fields post-Maui,
11 then how does the pipeline system have to develop to reflect
12 that?

13 We then say that that picture leads to fundamental
14 changes to markets and competition dynamics and I'm not
15 talking there about a fundamental change to market
16 definition, but it will affect the way that gas markets
17 operate. It in turn means that we need to think about the
18 way we've looked at gas markets before and the Commission,
19 for example, has looked at them before in earlier decisions.
20 And an example that I think has already clearly arisen is
21 the references we've had to inter-fuel competition, and we
22 will be developing that theme and suggesting to you that
23 there is a lot more inter-fuel competition now than perhaps
24 there has been in previous years.

25 The final point which has been touched also on by
26 previous submitters is that there is a context of developing
27 policy changes, and we'll talk a little bit about that.

28 The third broad theme I wanted to touch on was, again,
29 the investment theme, the need for investment in these
30 markets, and that's in two areas, firstly that we have
31 important value in the existing systems that we need to

1 think about the investment that's required to maintain
2 those; but then secondly again in this context of new field
3 developments there's a need to look at investment in new
4 pipes as well as the new instream field development.

5 My final general theme is to say, particularly from an
6 NGC point of view, we would hope that the material we're
7 going to put in front of you is largely not a surprise to
8 the Commission. My own personal reflection is that we've
9 regularly come to see the Commission on various matters,
10 whether it's mergers and acquisitions or whatever, and I
11 think a number of the themes and areas for discussion are
12 ones that we have talked to the Commission about over the
13 years; consistency is important to us, we don't -- we've
14 made a conscious effort over the years to deliver messages
15 that will be consistent over a period.

16 Finally, I note that apart from what has been required
17 by central regulation in terms of disclosure or whatever,
18 there are a number of areas where information has been
19 forthcoming over the years due to our own self-regulation of
20 the industry, which we'll talk to you about but which needs
21 I think a clear emphasis.

22 Turning now to just a quick overview of what we're going
23 to tell you today, the key messages or points we're wanting
24 to deliver. Firstly, that yes, we are in a context of a
25 dynamic market post-Maui or developing into a post-Maui
26 market. Secondly, that gas does face greater risk than
27 electricity and in particular because of the increasing
28 inter-fuel competition.

29 Thirdly, we do face a changing regulatory environment.
30 Fourthly, that we're looking to -- or we're going to suggest
31 that ODV is the appropriate asset valuation approach.

1 Fifthly, that in terms of WACC, that we believe there are
2 significant risks that we need to talk to the Commission
3 about in terms of its view in the draft report to date. And
4 finally, in terms of where we're overall heading, and I
5 appreciate this is an early stage to be talking about a
6 final view, that as we see things at the moment our case is
7 likely to be that the costs of price control would outweigh
8 the benefits.

9 I turn now to the NGC presentation, which as I say my
10 two colleagues, Mr Cummings and Dr Hodgson will present
11 between them. The key points we're going to cover here are
12 the ones up there. So again I emphasise the dynamic state
13 of the gas markets, talking to you about the investment
14 decisions that we see as operators of the networks coming up
15 over the coming period, key reflections then from an NGC
16 perspective on the scope of the Inquiry, the regulatory
17 regime and finally some comments on asset base and
18 valuation.

19 **CHAIR:** Thank you for that, Mr Bielby. I'll just check and see
20 if anyone has a question for you before we proceed.

21 **MS BATES QC:** Not at this stage.

22 **MR BIELBY:** Okay, in that case I'll pass over to Mr Cummings to
23 commence the introduction to his section.

24 **MR CUMMINGS:** Good morning, thanks Steve. I'd like to firstly
25 start with a simple schematic that gives a good overview of
26 the gas market. If we look at the first part, I'll talk
27 firstly about the physical assets and then secondly about
28 the commodity side, the gas flow.

29 The first physical asset, of course, is the reservoir,
30 the field reservoir with the gas gathering pipeline that
31 takes gas from the reservoir to a treatment facility. Gas

1 is then moved from a treatment facility through the
2 transmission system, that's a high pressure bulk
3 transmission system. Again, the gas is moved with the
4 assistance of compressor stations. On the transmission
5 system there are a number of direct supply, particularly
6 petrochem and power generation.

7 Then moving on to a city gate, which is the normal
8 transfer point from the transmission system to the
9 distribution system. Moving then from the city gate to the
10 regulator line, that's what we call intermediate pressure;
11 again, normally these pipelines are steel. The pressure is
12 then broken down again by the distributing line into the
13 lower pressure element of the pipeline system, and that's
14 normally plastic pipeline. That gets distributed around the
15 communities to some small businesses and then eventually on
16 to the residential consumers through the meter.

17 NGC's position in this is that we have of course
18 interest in the Kapuni Treatment Facility. We transport
19 through transmission systems around about 45% of the volume.
20 In terms of ownership of networks of distribution systems,
21 we've got about 25% of the market.

22 From a commodity side, again we sell to the above 10 TJ
23 customers, that's normally the larger customers directly
24 supplied from the transmission system and some large
25 customers on the network. In fact, the only company that
26 really is in all the various sectors would be Todds with
27 their MDL and Nova subsidiaries.

28 Moving then to looking at the supply position. As has
29 been referred to earlier by other presenters and Mr Bielby,
30 we're transitioning from a Maui dominance, which
31 historically has been cheap and plentiful in terms of

1 demand, to a new equilibrium of supply/demand. There will,
2 of course, be more reliance on a number of smaller fields,
3 and in fact one of the issues being faced is that there's
4 been a more than doubling of the commodity price in the
5 short-term as a result of this transition.

6 In terms of how this is impacting on the gas market,
7 again evolving to a post-Maui supply era. Now, this has
8 been reflected in constrained deliverability, both annually
9 and daily; annually in terms of how much commodity is
10 available throughout the year, but also within the day in
11 terms of the within the day managing of the demand swings.

12 **CHAIR:** Can you just hold on just one second, sorry, I'm just
13 not sure that one of the --

14 **MS BATES QC:** I haven't got some of the pictures.

15 **CHAIR:** Commissioner Bates' papers are missing some pages.
16 Sorry.

17 **MR CUMMINGS:** If I just go back to that slide again. The
18 constrained deliverability, both annually and daily, and
19 what we mean by that is that, not only are there constraints
20 from annual supply but also within the day. The Maui Field
21 had the ability to ramp up quickly and ramp down. Now, with
22 the post-Maui environment, we've been able to manage that
23 within day demand swing and will become more difficult. In
24 fact, that ability to do that will create a value
25 proposition for some of the upstream producers.

26 The physical shortages is also leading to unsatisfied
27 demand for some of the larger users, particularly we see
28 evidence by Methanex and generators at the moment looking at
29 alternative fuels.

30 **MS BATES QC:** I'll just ask a question just to clarify the
31 position about the post-Maui supply era. When do you see

1 that starting?

2 **MR CUMMINGS:** Well, that's starting at the moment, of course,
3 with the decision still being ongoing about the MDQs.

4 **MS BATES QC:** So, the constraints you're talking about are
5 physical ones?

6 **MR CUMMINGS:** From a supply point of view, not transportation.

7 **MS BATES QC:** Okay.

8 **MR CUMMINGS:** And the final point, major customers who a number
9 are coming up for contract renewal at the moment are facing
10 significant increases in the energy component of their
11 prices, and also they're finding it difficult to find long-
12 term commitments for supply.

13 In terms of NGC's gas position. With the transition
14 through to a smaller supply, we're seeing increased
15 competition for purchasing gas from the different segments;
16 petroleum equals power gen industrials and so forth.

17 NGC will not be in a position to replicate its
18 historical position particularly around the ownership of the
19 Kapuni Fields, Kapuni reserves that we've had.

20 From our own supply/demand point of view we're facing a
21 fairly tight supply situation, and again to resolve that NGC
22 has made several press announcements about getting involved
23 with some of the juniors, Westech and IndoPacific, to try
24 and resolve that position.

25 **MR STEVENS:** Can I ask you a question back on, NGC will not
26 replicate its historic position: Is that because you don't
27 believe the fuels are available, or you've made a strategic
28 decision to lessen your interest in owning fuels?

29 **MR BIELBY:** This is something we've talked to the market about.
30 NGC acquired about 28% of the Maui Field. It sort of self-
31 evidently follows from the fact that we're not going to be

1 able to replace the Maui Field; that NGC similarly won't
2 have that level of position going into the post-Maui world.

3 I guess the picture we're painting here is one which
4 flows from what you've heard from Pohokura, that there will
5 be a series of fields including the small fields which the
6 junior explorers are bringing on which will replace Maui,
7 but again on any view New Zealand and NGC will not be able
8 to replace the size, flexibility that we've had from Maui
9 absent an unexpected find.

10 **MR STEVENS:** So, if there was an unexpected find, then NGC
11 obviously would have an interest in taking a strategic
12 position?

13 **MR BIELBY:** Very much so.

14 **MR STEVENS:** Thank you.

15 **MR CUMMINGS:** Finally, the last point; arguably NGC would have
16 one of the strongest incentives to facilitate gas getting to
17 market given the interests in the downstream investments
18 that we've got.

19 If we now move on to consider how the generators are
20 responding to the changes in the market dynamics. Maui gas
21 has been the swing fuel and we're now seeing that coal at
22 Huntly and oil at New Plymouth and Whirinaki to be built,
23 power stations, really driven by certainty around fuel
24 supply becoming more important. Again, we're seeing
25 evidence of this with the 10 year coal contract at Genesis,
26 and Contact looking to put Otahuhu C and the second TCC
27 Power Station plants on hold.

28 Both major gas retailers are also the generators and so
29 have choices about -- regarding consumer energy supply,
30 obviously to balance the -- meeting their own generation
31 demands with direct gas sales to the different market

1 segments within the gas market.

2 A final note there about the Government's direct use of
3 modelling; shows increased consumer benefits at the expense
4 of electricity producer supplies, and this is evidenced by
5 the EECA report of June 2003.

6 **CHAIR:** What are you referring to there when you say "the
7 Government's direct use of gas modelling"?

8 **DR HODGSON:** As an outcome of the national energy efficiency and
9 conservation strategy, EECA and the Ministry for the
10 Environment have conducted a project that was undertaken to
11 study the benefits both economic and environmental of
12 encouraging for direct use of gas. This is quite an
13 extensive modelling exercise.

14 The final reports have been on limited circulation,
15 however the findings are that there are obvious
16 environmental benefits in terms of decreased emissions.
17 There are consumer benefits, increased consumer surplus in
18 the economic jargon. That's offset to some extent by the
19 fact that there's significantly decreased electricity
20 producer benefits, and then there's increased gas producer
21 benefits.

22 However, overall there is a net social benefit, was the
23 finding under a variety of the scenarios, and I guess this
24 points to the fact that generators, if you like, would lose
25 out if there was more direct use of gas, and so, there's a
26 mixed incentive for generators, and that's really the point
27 we're trying to make with that modelling -- or referring
28 that modelling, it wasn't ours, it was done by the
29 Government.

30 **CHAIR:** I'm not sure we can equate EECA with the Government in
31 this case, but I suspect that's here nor there really. But,

1 please proceed, thank you.

2 **MR CUMMINGS:** If we now move to consider how some of the
3 industrial consumers are responding to the changes. The
4 fuel one, availability is now a driver particularly in the
5 short-to-medium term constraints. For them, of course, the
6 need for steam for their processes is a driver, and they're
7 seeing not only energy costs increase but also price
8 uncertainty in the medium-to-longer term, which is, of
9 course, again a key driver for energy intensive industries.

10 The trigger to consider other fuels isn't necessarily an
11 end of plant decision. In fact what we're seeing at the
12 moment with a number of major contract renewals, that tends
13 to be one of the major triggers. If we look at some of the
14 real examples that NGC are faced with for the moment. We've
15 listed four here. One an asphalt plant where the existing
16 fuel is gas, that are looking to use alternative waste fuel,
17 waste oil from their own processes.

18 Secondly, a sawmill wood dryer; existing plant using
19 wood waste is looking to expand, but again coal or gas are
20 going to be some options for them to consider.

21 A third, a similar type of customer with two plants; one
22 on wood waste, one on gas, is threatening to convert both to
23 wood waste. Finally, a wood processing customer, again is
24 using fuel -- is using gas as their fuel, has retained a
25 coal fired boiler even though it did convert to gas and is
26 looking again to reconvert.

27 **MS BATES QC:** Do those examples -- in those examples, do the
28 companies actually need to get consent under the Resource
29 Management Act or whatever regime it is to deal with
30 emissions, to actually make the change?

31 **MR BIELBY:** Typically we're talking about people who have got

1 emissions already and they're changing the fuel source, but
2 for example, if changing to coal from gas had a different
3 emissions profile, they may well.

4 **MS BATES QC:** So, there may be some uncertainty in some cases as
5 to whether they can do this easily, bearing in mind the
6 regulatory regime around emissions?

7 **MR BIELBY:** That's correct. However, I'd be surprised if
8 generally for somebody of this scale who was able to do it
9 in a reasonably efficient fashion, that they would face a no
10 consent situation; it would more likely be a matter for
11 conditions of consent.

12 The other key thing that's arisen actually out of our
13 own consenting of the TCC2 plant a couple of years ago is
14 the clear recognition by the courts and Government that
15 issues of global warming or climate change gases are not
16 matters within the province of the RMA, so the RMA decision-
17 makers will look at immediate effects issues, like whether
18 you're going to drop sulphur dioxide on surrounding
19 kiwifruit orchards, but if there's a wider issues as to
20 global warming, that's a matter for Government policy and
21 that's been clearly determined by the Environment Court.

22 **MS BATES QC:** Do you know in any of these cases whether they've
23 got their consent process underway?

24 **MR BIELBY:** I wouldn't know.

25 **MS BATES QC:** As you probably know, these things can take a long
26 time because quite often you have objectors who take you
27 through the appeal process.

28 **MR BIELBY:** Look, they do, so it is a barrier. At the same time
29 there's probably a good analogy we can talk about, and that
30 is, we're doing an expansion ourselves at the Kapuni Gas
31 Treatment Plant, we're spending about \$15 million bringing a

1 third train back on. In that case we had an envelope for
2 our consents with which we went to the council to talk about
3 and said we want to bring this third train on, can we look
4 at how it will change the emissions profile, and we've been
5 pretty successful in quite quickly getting to a solution
6 with council.

7 So, unless you're doing something, say, at the level of
8 the power station, my own broad feeling is that the consents
9 processes -- they would be an issue for a small producer
10 like this to manage, but they would not be insurmountable.

11 **MS BATES QC:** But they're insurmountable, but with the objection
12 process, it can actually make the timing quite difficult.

13 **MR BIELBY:** Yes, unless --

14 **MS BATES QC:** I mean, yes, you can negotiate with the council,
15 but where there are affected parties who have a right to be
16 heard, that's where problems often come in in these things,
17 as you probably know.

18 I'm only putting this to you because it doesn't -- it's
19 not saying that people won't switch, but it's not something
20 they can necessarily do all that quickly.

21 **MR BIELBY:** You are correct, there are other barriers out there
22 and the RMA is real one. I'm tempted to cheekily to say
23 that, unless one's got the ear of the Minister for the
24 Environment who would call in the matter, as she's done this
25 morning with Project Aqua, yes, you've got a road to hoe
26 there.

27 **MS BATES QC:** Okay, thank you.

28 **DR HODGSON:** If I could just comment too; these are actual
29 examples where the retailer came to us with a proposition of
30 what the alternative would be, and as a result got a
31 substantial transmission services agreement to deal with the

1 case. So it was the threat of the switch that resulted in a
2 special TSA rather than actually the person processing
3 through it.

4 **CHAIR:** I think it would be very useful for us to see the actual
5 calculations and the comparisons of the costs of using
6 different fuel. It would be very helpful to us if you could
7 provide that information.

8 **DR HODGSON:** We can. We can give you the details of these
9 particular examples under confidentiality because they are
10 retailer information.

11 **CHAIR:** I understand that completely, but it shouldn't be -- it
12 won't be difficult for us to grant confidentiality over
13 numbers like that, but it would be actually quite helpful
14 for us to see the actual numbers.

15 **MS BATES QC:** So, in these examples that you've given us, and
16 they are helpful, I'm not saying they're not; but you're
17 able to overcome the situation, or you've indicated that you
18 have by special deals?

19 **DR HODGSON:** The point is, yes, we respond where there is a
20 credible threat.

21 **MS BATES QC:** So, you are in a position at the moment where you
22 are able -- the supply is secure enough for you to be able
23 to do that?

24 **DR HODGSON:** NGC is not the retailer in all these examples.

25 **MS BATES QC:** So how does that work if they're worried about the
26 security of supply? Then that seems to be a real worry,
27 isn't it?

28 **DR HODGSON:** Well, in a number of these examples Nova Gas, and
29 they would not appear to have any problem with actual gas
30 supply.

31 **MS BATES QC:** The reason I'm asking you this is actually to

1 probe a bit more around the issue of security of supply,
2 because it's one of your overarching themes that Mr Bielby
3 referred to.

4 **MR BIELBY:** Just to add; that's the point I'm putting these to
5 you, those are threats, those are inter-fuel threats, and in
6 some cases we may be able to hold the customer. In others
7 we may not, either because they go to other fuel, or because
8 they're not sufficiently convinced that there is security of
9 supply to stay with gas full stop, let alone us.

10 **MS BATES QC:** Okay, thanks.

11 **CHAIR:** Can I just ask you: The pricing model that you use when
12 you negotiate a contract with one of these companies that
13 you believe has a credible threat of switching; what's that
14 pricing model based on? What's the methodology that you
15 use? How far will you price down in order to retain a
16 customer?

17 **MR BIELBY:** We're going to come to a section later that talks
18 about the special deals that we do, there's a slide on that.
19 So, we'd be pleased to answer that, but can we come back to
20 that one?

21 **CHAIR:** Maybe just for now, if you can tell me, you still feel
22 with those customers that with the cases that you've just
23 given us, that you're earning economic return on once you've
24 done the deal?

25 **MR I WILSON:** Yes, I can answer that. The model we actually
26 use depends on the particular circumstance that we're
27 looking at. For example, if the customer is a major
28 customer directly off the transmission pipeline it's a
29 fairly simple analysis. We'll look at the alternative and
30 the alternative -- we talk about bypass, but when we talk
31 about bypass it may be physical bypass, it may be an

1 alternative fuel. The result ultimately would be the same,
2 with the potential to lose that customer.

3 So, in the analysis what we will do is look at the
4 economics from the customer's point of view, consider their
5 alternative, and see if we can contribute to a proposal that
6 would match that alternative. I say "contribute" because as
7 has been pointed out, we are one link in the supply chain.
8 In the normal course of events it's actually the retailer
9 that is negotiating directly with the customer and the
10 retailer will come to us and see if we're willing to strike
11 a special price in that circumstance.

12 **CHAIR:** So, in terms of what you're willing to do, how do you
13 decide the degree of what you can contribute?

14 **MR I WILSON:** Yes. Obviously, we want to keep the price as
15 high as possible, accepting that there will be some
16 discount, and as long as we can make sure that we're
17 recovering at least the variable costs of supplying that
18 customer, it would be economic for us to strike a price.

19 **CHAIR:** What sort of ranges are we talking about here? Are we
20 talking about 5%, 10%, 15%, 20% price change when you -- can
21 you tell me roughly what it is?

22 **MR I WILSON:** It's very much dependent on the circumstance and
23 I think that will come out in some of the examples we
24 provide you, but it can be considerably important that,
25 substantially more.

26 **CHAIR:** Considerably more than 20% price difference?

27 **MR I WILSON:** Yes.

28 **CHAIR:** So where you have a threat of bypass, the price can fall
29 as much as 20% or more?

30 **MR I WILSON:** It can, particularly if the alternative is a very
31 low cost alternative fuel, such as wood waste. Can I just

1 go on to say that the example that I use there was a
2 significant customer off the transmission pipeline. As I
3 say, there are a range of bypass possibilities, for example
4 often the customer will be embedded in a distribution
5 network, and in that circumstance generally we have to look
6 at a set of customers in that general area and the pricing
7 model in that circumstance is a bit more involved.

8 **CHAIR:** Right. But it would tend to be more likely that bypass
9 is a credible threat for your larger users, wouldn't it be?

10 **MR MILLER:** Correct.

11 **CHAIR:** In terms of incurring the costs of switching?

12 **MR MILLER:** Yes, that's true.

13 **CHAIR:** Okay. Thank you for that.

14 **MR STEVENS:** Just picking up on your first bullet point there.
15 Excluding your generators, do you have an idea on average
16 what percentage of costs are energy related in most of your
17 client base?

18 **MR CUMMINGS:** Sorry; you mean energy costs as an overall cost
19 input to their process?

20 **MR STEVENS:** Yes, because you've got energy as a significant
21 cost in your bullet point there; I was wondering what
22 percentage of that.

23 **MR CUMMINGS:** I think it would depend on what type of process
24 it would be, obviously different sectors are more energy
25 intensive than others.

26 **MR STEVENS:** Do you have an idea of a range? I mean, in
27 determining what was significant costs, you must have had a
28 look at something and decided that there was a range.

29 **MR CUMMINGS:** Can we get back to you on that one?

30 **MR STEVENS:** Thank you.

31 **MR CUMMINGS:** The point here in expanding is, I guess, the

1 perception that capital cost alone is not a significant
2 barrier, or may not be a significant barrier to some larger
3 industries where energy is a major cost input. I think we
4 referred to the previous slide where the contract renewal
5 itself is tending to be a trigger at the moment for
6 customers looking to switch.

7 Looking now at the other end of the supply, from the
8 residential point of view. We've talked about inter-fuel
9 competition again, and electricity being the default, and I
10 think it's useful to consider the application when we talk
11 about the residential end of the market and really in the
12 broad three categories they are for cooking, space heating
13 and hot water, and obviously various consumers have a
14 mixture of one or all three.

15 NGC is involved in the LPG side of the business and has
16 seen growth in the cylinder market over the last 18 months
17 particularly, but also wood and coal are alternative fuels
18 that are being used.

19 We are also seeing evidence of new technologies, heat
20 pumps, gaining market share, and the final bullet point I
21 think was alluded to by Powerco earlier; again, NGC networks
22 saw a similar response when it was predominantly Genesis
23 increased or introduced a fixed charge element to their gas
24 residential market customers.

25 The fixed price ranged from 31 to 55 cents per day.
26 That was announced back in February, implemented in April,
27 and actually went on the bills at the start of -- at the end
28 of autumn, start of winter, when for many customers this
29 would have been the first bill, particularly if they were
30 only space heating customers.

31 **CHAIR:** That Y axis there, I just can't read what it says.

1 **MR CUMMINGS:** I'm sorry, that's customer disconnections, so
2 it's been trucking at between 10 and 20 a month, and you can
3 see the spike raising to 350 in the month of May.

4 **CHAIR:** So, the scale goes from -- I'm just trying to see what
5 the scale is.

6 **MR CUMMINGS:** 50, 100, 150, 200, so on and so forth, in grades
7 of 50.

8 **CHAIR:** Okay, thank you. This period where it's dropped back
9 down on that graph, it spiked up but it came virtually all
10 the way back down again by August. Is that right?

11 **DR HODGSON:** It's, if you like, the people that are
12 disconnecting have done so over the winter months and it's
13 sort of heading back down towards the base sort of
14 underlying disconnection rate.

15 **MS BATES QC:** So, do they reconnect?

16 **DR HODGSON:** No, these are actual disconnections and the people
17 have stayed off and this is a disconnection figure.

18 **MS BATES QC:** I can see that from the graph, sorry, but do you
19 get reconnection?

20 **DR HODGSON:** We're getting new connections, but it's unlikely
21 that it would be the same people. So on average we get
22 about 2,500 new connections a year on the networks.

23 **MR CUMMINGS:** We are working with Genesis to try and win some
24 of these customers back and to get some programmes around
25 doing that.

26 **MS BATES QC:** Just in terms of physically being able to do that,
27 that wouldn't be a major problem, would it?

28 **MR CUMMINGS:** No. The service is actually left in the ground
29 and the meter can be isolated and taken away, that's right.

30 In fact, if we look back, demand variability in itself
31 has been a feature of the industry even in an unconstrained

1 supply market. Looking at source data from the energy data
2 file, we've plotted here annual percentage change in the Y
3 axis for the direct sales and reticulated sales market. The
4 impact on the direct sales market predominantly are by the
5 demand of the power generators and the petrochem industry,
6 and the impacts on the demand variability and the
7 reticulated sales are more to do with the general economic
8 conditions and weather for the smaller business and
9 residential markets.

10 **CHAIR:** I wonder if that graph really does demonstrate anything
11 about uncertainty in the post-Maui period. It doesn't seem
12 to suggest that it's had a major impact on demand, the graph
13 that you just put up.

14 **DR HODGSON:** This is historic data, just showing, if you like,
15 the underlying volatility.

16 **CHAIR:** So it doesn't go beyond 2001. What's happened since
17 that period?

18 **DR HODGSON:** We've seen a fall-off, obviously Methanex have
19 dropped a lot of production in the recent times once the
20 redetermination came out. These are the latest available
21 official statistics, if you like. We would be able to
22 provide some, if you like, NGC stats if that would be
23 helpful?

24 **CHAIR:** It would be helpful I think to have it brought up-to-
25 date. Sorry, I hadn't noticed actually that it went just to
26 2001.

27 **MR BIELBY:** The way I put that is to say that, even before we've
28 hit the current period of Maui shake-up and change, this was
29 the degree of variability up to that point.

30 **CHAIR:** Sure.

31 **MR CUMMINGS:** If I now can move on to consider the derived

1 demand nature of the gas transportation services. If we
2 look at the history of the transmission investment: Changes
3 on the upstream and downstream gas markets have certainly
4 had their impact on the value of the transportation assets.
5 Some examples include the Kapuni to Huntly pipeline that was
6 built in 1969, and some 10 or so years later was bypassed by
7 the much larger Maui pipeline. Now, under our ODV
8 methodology that pipeline had been completely optimised.

9 If we look at the Kapuni to Wellington pipeline, again
10 built in 1968, substantially reinforced as demand in
11 Wellington and the Hutt Valley grew through the 1980s. Many
12 industries in the Hutt Valley closed or moved in the 90s,
13 and again now the pipeline, before the demand that we've got
14 down in Wellington, is oversized and so optimised down under
15 the ODV methodology.

16 The map just illustrates the two pipelines. The darker
17 blue, I hope you can see it on your copy, running up to
18 Huntly being the Maui pipeline, and the lighter blue being
19 the extent of NGC's Kapuni pipelines.

20 Again, continuing the theme; the Gisborne pipeline built
21 in 1984 on the prospect of continued support by the "Big 4"
22 in Gisborne, the hospital, Watties, Refrigeration and
23 Advanced Meats. Again, the latter two have closed with
24 Watties moving to Hastings. Other industries have emerged
25 but only half the pipeline capacity is used and again
26 substantial economic write-down under the ODV methodology on
27 that pipeline asset.

28 Finally, the Northland pipeline, built in 1985, has
29 again had substantial economic write-down predominantly as a
30 result of the dairy factories closed due to the Fonterra...

31 **CHAIR:** These economic value write-downs, if you look at it

1 overall, how much impact did it actually have on your asset
2 valuations, in a percentage sense?

3 **MR I WILSON:** [Pause]. Considering the transmission pipeline,
4 total economic value write-downs were of the order of
5 \$26 million in our latest ODV valuation, and the final ODV
6 valuation of the pipeline is of the order of \$400 million
7 odd, so the economic value write-downs are a significant
8 component.

9 I should say, though, that they are specific to a number
10 of pipelines. For example, the largest of the write-downs
11 took place on the Gisborne pipeline, which is at the end of
12 the Bay of Plenty system, and the ODV of that system is
13 about \$100 million, and the write-down there is around
14 \$25 million.

15 **CHAIR:** So, 25 of the 26 was from the Gisborne?

16 **MR I WILSON:** That's right, and most of the rest in the
17 Northland pipeline.

18 **CHAIR:** The situation in Wellington, how much of it was -- drop
19 in demand was about Nova? Was it because of the competition
20 from Nova or was it just the shutting down of a large number
21 of businesses?

22 **MR CUMMINGS:** The Nova pipeline takes gas from the end of the
23 transmission pipeline into Wellington, so...

24 **CHAIR:** So, that doesn't account for any of it, no. Okay.
25 Thank you.

26 **MR STEVENS:** In terms of your Gisborne write-down, have you made
27 any assessments of what would happen if the Wairoa fields
28 came on-line? And, would you connect via that way?

29 **MR CUMMINGS:** Yes, we've got a map showing that.

30 **MR STEVENS:** So, there's a possibility of a write-up again of
31 the line?

1 **MR CUMMINGS:** Well, in fact I think if Wairoa came on, the
2 pipeline capacity in the Hawkes Bay Network would be larger.
3 The Gisborne pipeline is actually quite a small pipeline, it
4 probably wouldn't be viable. I've got a map showing that
5 coming up in a couple of slides.

6 **MR STEVENS:** Thank you.

7 **MR CUMMINGS:** Moving then on to NGC's transportation position.
8 The system operator role becomes more difficult; that point
9 is really talking about, again, the within day
10 deliverability issues of a post-Maui environment with
11 reduced MDQ flexibility, and how we're coping with that is
12 upgrading our control and monitoring systems, but also it
13 will result in additional compressor usage, of being able to
14 configure the network and manage the within day swings of
15 demand.

16 The long stringy nature of the transmission system, as
17 has been evidenced in the last couple of slides, does leave
18 it to risk of stranded assets depending on demand shift and
19 demand variability.

20 Another element we're seeing from the major downstream
21 sectors, as well as inter-fuel competition, is international
22 competition in some of the sectors. For example, forestry
23 and petrochemicals where alternatives in terms of where they
24 locate their industries have been raised.

25 **MR STEVENS:** Do you have any examples of some of those that you
26 are able to share?

27 **MR CUMMINGS:** I guess Methanex being one in itself. Some of
28 the forestry ones again, I can provide some details on that
29 to you later.

30 **MR STEVENS:** Thank you.

31 **MR CUMMINGS:** In terms of the terms and conditions, we have

1 seven standard TSAs, that's Transmission Services
2 Agreements, and in addition to that, 28 special TSAs, now
3 these are the special terms and conditions that we've put in
4 place to retain load. These are again to deal with some of
5 the bypass and inter-fuel issues to ensure that there is
6 contribution to fixed costs to retain the customer on the
7 transmission network. And you can see the wide range of
8 sectors that are involved. The one in particular where
9 we're seeing an increase is in wood processing.

10 **CHAIR:** In these special TSAs, is it just the price that tends
11 to vary, or is it a range of terms and conditions?

12 **MR I WILSON:** It's a range of terms and conditions. Frequently
13 there is a fixed term associated with them and generally the
14 price is fixed over that term.

15 **CHAIR:** And are there any other conditions that tend to vary?

16 **MR I WILSON:** Yes, one of the consequences of having a special
17 price is that the capacity trading arrangements that are
18 available under our standard transportation arrangements are
19 no longer available. Under a standard TSA customers can
20 transfer spare capacity they have around the pipeline
21 system, but under special TSAs they're always site specific,
22 so there's no longer that available to that -- sorry, that
23 ability to transfer capacity around; that's lost.

24 **CHAIR:** And are there any other variations in contract terms?

25 **MR I WILSON:** Yes, on occasion there are. Sometimes, for
26 example, there might be specific issues around force majeure
27 liabilities, those kinds of things specific to the site, yet
28 generally it is -- it's a negotiation, so I guess everything
29 is on the table.

30 **CHAIR:** And the reason you limit the on-sell of the capacity is
31 why? Why do you do that?

1 **MR MILLER:** The special arrangements are site specific, so in a
2 sense it wouldn't really have any meaning under that
3 contract. The general transmission TSAs are, they have a
4 schedule attached to them that lists all the driver points
5 off the transmission system and typically retailers will
6 reserve capacity at a set of those, and the ability to
7 transfer capacity around is quite valuable to the retailer.
8 They can transfer capacity both between those delivery
9 points and from one retailer to another retailer. So, it's
10 quite a tradable commodity once they've signed on to a
11 standard TSA. It's part of the value in that contract.

12 **MR CUMMINGS:** The penultimate bullet point, six term TSAs;
13 again, they're a type of special arrangement. The previous
14 bullet point, the 28 special terms are within the standard
15 TSAs; they're a supplementary agreement. In addition to
16 that there are six different unique TSAs that were put in
17 place to match longer term investments, particularly around
18 power stations.

19 We also have in the NSAs, a Network Service Agreement,
20 which is what we use for the lower pressure part of our
21 networks. Again, six standard NSAs, and 42 special NSAs.

22 **MS BATES QC:** I just have a question for you at this point.
23 When you're looking at the industrial examples you've given
24 us, clearly no-one's chosen electricity as an option? No-
25 one's chosen electricity as an option, is that --

26 **MR CUMMINGS:** Again it's back to the sector and the
27 application, what alternative fuels are interchangeable.
28 For most of those are steam raising processes, of which
29 electricity isn't a substitute fuel.

30 **MS BATES QC:** Okay, that's interesting. Then if you get down to
31 commercial as opposed to industrial, does electricity come

1 in there as a competitive source of energy?

2 **MR CUMMINGS:** For space heating, cooking and hot water, it
3 would be, yes.

4 **MS BATES QC:** So, it would be true to say it's in the commercial
5 and residential areas that you're talking about electricity?

6 **MR CUMMINGS:** Correct.

7 **MS BATES QC:** Okay, thanks.

8 **MR CUMMINGS:** Go to the next slide. This slide sets out the
9 efforts that NGC's network business goes to to keep growth
10 stimulated. In terms of increasing utilisation, we offer
11 free connections for the first 25 meters. This is aimed
12 predominantly at existing houses where there is a main in
13 front of them, to try and get over some of the capital cost
14 barriers to switching.

15 In terms of specialised utilisation, we've got a team
16 that work with some of the specific heating and process
17 applications, and an area where we've been very successful
18 is in the horticultural sector where we've been working with
19 some of the end-users around using gas appliances that not
20 only provide heat to, for example, tomato horticulturists
21 but also provide carbon dioxide as a by-product that help
22 facilities there. So we have a team helping to work with
23 some specific sectors to help stimulate growth.

24 Thirdly, around our overall marketing plan the first
25 sub-point there is refocussing targets. We've had roughly
26 an 80 to 20 ratio of new connections from the new homes as
27 opposed to the existing homes market, and that's been driven
28 mainly by the growth in new houses in New Zealand at the
29 moment, so we're looking to try and increase our strike rate
30 of existing homes.

31 **CHAIR:** So, the penetration rate is 80% on the new homes?

1 **MR CUMMINGS:** No, sorry what I'm saying is, of the 2 and a half
2 to 3,000 connections that we get in a year, 80% of those are
3 from new homes.

4 **CHAIR:** Okay.

5 **MR CUMMINGS:** In the areas where we generally reticulate, new
6 sub-divisions, we obviously get a higher strike rate; that
7 can be anything from 70 up to 80% ultimately when the houses
8 are built.

9 The second sub-bullet point; awareness of raising
10 generic gas marketing. Again, it's working trying to put a
11 gas choice out that's not retailer specific, and that's
12 working with appliance suppliers and plumbers. In terms of
13 the new homes connections, how we're facilitating it and
14 working with our partners there; it's targeting developers
15 and trades people with loyalty schemes, and subdivision
16 barbeques. I see that can be misleading, that's actually an
17 event where we get trades people in and hold a barbeque
18 rather than selling gas to barbeques itself.

19 **MS BATES QC:** Yes, or if they were sharing barbeque facilities
20 or something.

21 **MR CUMMINGS:** So again, that's just raising awareness and
22 interacting with the key people involved in new home
23 connections. In terms of the new home connections, again
24 we've got a marketing plan there, training for gas channel
25 partners, and what we mean by those are the appliances
26 retailers. Promotions with gas partners and home shows,
27 mall displays and again street parties. Probably use the
28 same barbeques that we used in the subdivisions.

29 In terms of our overall marketing spend, it's in excess
30 of \$2 million. That's made up of both internal costs of
31 personnel and external costs in terms of advertising and so

1 forth.

2 **CHAIR:** What is your overall growth rate in terms of connections
3 and also just generally in terms of system utilisation? Do
4 you know what it is?

5 **MR CUMMINGS:** In terms of our new connection -- in terms of --
6 we've got 55,000 connections; this year we got 2,700 new
7 connections. We also had a 4% increase in volume.

8 **CHAIR:** 4% increase in volume. And, how does that compare with
9 the recent past?

10 **MR CUMMINGS:** In terms of net connections, it's down because of
11 the effect of the nearly 1,000 disconnections that we've
12 had. In terms of the overall connections level, it's been
13 fairly flat in the last few years.

14 **CHAIR:** And the volume side though is?

15 **MR CUMMINGS:** Again, it's been fairly flat; around single
16 figure digits.

17 **CHAIR:** But around the 4% mark?

18 **MR CUMMINGS:** Yes.

19 Then in summary of that section, we're seeing a
20 declining supply resulting in a new equilibrium for supply
21 and demand. We're certainly evidencing greater inter-fuel
22 competition. We've covered transportation demand driven by
23 other markets, upstream and downstream and the effect that
24 that has on stranding some of our assets. We've covered how
25 NGC, in actively encouraging the use of gas and its system,
26 they're having to do that, and we've talked about the
27 requirement for marketing is different when compared with
28 the electricity industry.

29 I'd like now to move to investment decisions.

30 **CHAIR:** Can I just stop you for a second and see if there are
31 any further questions on that section before we move on.

1 **MS BATES QC:** I'm not sure I got the point about the requirement
2 for marketing being different from electricity? Which slide
3 was that? I've got your --

4 **MR CUMMINGS:** Sorry, it's summarising the previous slide on the
5 marketing, again linking to the fact that the gas is a
6 discretionary fuel and having to make a conscious effort to
7 go out and market.

8 **MS BATES QC:** So what you're saying is that there's more
9 marketing required than for electricity? Is that what it
10 boils down to?

11 **MR CUMMINGS:** That's correct, yes.

12 **MR STEVENS:** I'm just wanting to follow up on the issue of gas
13 prices increasing. Do you see the alternative switching
14 fuel prices also increasing at a commensurate level? For
15 example will we see coal prices increasing as a result of
16 the Government's response to the Kyoto issues, or how do you
17 actually see those matching?

18 **MR I WILSON:** I think the -- I think the relativities will
19 change, no doubt about it. We would expect the electricity
20 price to increase because marginal electricity is from gas
21 generation. But, there's no link, for example with waste
22 wood, which is one of our main alternatives for major
23 industrial users, particularly in the timber processing
24 sector.

25 For coal, a lot does depend on Genesis' strategy in the
26 market. We would expect coal now to be on a rising supply
27 curve, but I don't think there's any doubt that the gap
28 between coal and gas prices is increasing.

29 **MR STEVENS:** So, in terms of the waste, what example, would you
30 see gas being used as a feeder fuel?

31 **MR I WILSON:** That's right. What we typically see is that

1 customers now, particularly with a view to the uncertainty
2 about future supplies, are trying to position themselves
3 where they have alternatives for the future. So, it's very
4 likely that if they go to waste wood, they would try and
5 retain a gas supply even although they might only be using a
6 fraction of what they previously used but they would, for
7 example, sometimes use coal-fire, and on occasion where
8 waste wood is not available, they might fire entirely on
9 gas. That's the kind of behaviour we're seeing.

10 **MR STEVENS:** Has NGC done an assessment on the impact of the
11 alternative fuels by Kyoto?

12 **DR HODGSON:** Only to the extent of looking at the relative
13 impacts of a carbon tax which are obviously proportional to
14 the carbon content of different fuels.

15 **MR STEVENS:** And what was the result of that assessment?

16 **DR HODGSON:** Partly, and this is going to be a strange one --
17 partly depends where the Government applies the carbon tax
18 and they're currently designing the carbon tax regime.
19 Clearly if it's applied upstream you have a flow-through
20 effect. However, if they eventually implement a scheme
21 where a number of people get rebates because they can make a
22 case for being competitive in the at risk industries, or for
23 example the farmers are able to cause enough of a stink
24 about paying their share, we may see a regime that has a lot
25 of exemptions, if you like, in who actually bears a cost and
26 whether or not they do bear a cost.

27 **MR STEVENS:** So do you see NGC as being a competitive at risk
28 industry?

29 **DR HODGSON:** We're a gas supplier, an energy supplier, if you
30 like. The definition of competitiveness at risk is one of
31 where you are actually either exporting or you are competing

1 against imports. So, in terms of LPG production, where we
2 do that, yes, we would be, because obviously that can be
3 imported from other countries which don't face a carbon tax.

4 **MR STEVENS:** And LPG I presume?

5 **DR HODGSON:** The LPG question I guess is a much wider one for
6 the industry.

7 **MR STEVENS:** Thank you.

8 **MS BEGG:** I had a question on the inter-fuel competition, and
9 you've given us examples of where there is competition
10 between gas and alternative fuels. Now, you know, 10 years
11 ago you could have given another four examples presumably of
12 situations where there was competition.

13 The question I have is, have you got information, or
14 evidence which would indicate to us that that inter-fuel
15 competition has increased substantially? I know anecdotally
16 that's what everyone is saying, but is there evidence that
17 you can give to us that illustrates that and the extent to
18 which -- or the proportion of the market that is subject to
19 reasonably strong inter-fuel competition?

20 **MR I WILSON:** Yes, we'll certainly provide you with what
21 information we can to back up that, but I think just
22 stepping back from it and considering that the commodity
23 price of gas has effectively doubled. Now, if you look at a
24 major industrial customer, typically they might have a
25 delivered -- total bundle delivered price of gas of maybe \$6
26 to \$7 of which previously around \$3 might have been the gas
27 component. That gas component, when these contracts are
28 coming up for re-negotiation, is typically doubling. It's
29 impossible to have that kind of shift in relativities
30 without customers looking for alternatives.

31 **MS BEGG:** I guess you'll have the information, the relative

1 prices -- I mean, other fuel costs have gone up, but to what
2 extent has that relativity changed over time?

3 **MR I WILSON:** Because of the overhang of the Maui Field I think
4 it's fair to say that prices have been very very stable in
5 the market, the commodity price in the New Zealand market,
6 until very recently -- in fact, I think it's fair to say too
7 that the rapidity of the change has taken most participants
8 in the gas industry by surprise, it's certainly taken
9 customers by surprise.

10 **MS BEGG:** And prices in electricity and coal have not increased
11 to the same extent, I guess, but they will have increased to
12 some extent?

13 **MR I WILSON:** We haven't seen significant shifts in the coal
14 price yet, but we believe that they will drift up over time
15 because as I mentioned, we think there is pressure on the
16 costs of production there.

17 **MS BEGG:** Thanks. I had another question just on your 300
18 customers that had switched or disconnected. The question
19 there was, out of those 300 out of how many? What's the
20 base?

21 **MR I WILSON:** Yeah, sorry; that graph was showing the number of
22 disconnections per month. So, in total since the Genesis
23 price change there have been over 1,000 disconnections, and
24 the point of it wasn't really to say, well, -- well, here is
25 a result -- sorry, the point of it was to say that,
26 customers do have an alternative, and their alternative in
27 the residential situation really is to stop taking gas, and
28 we saw there a situation where the price changed, Genesis
29 changed the price, and there was a demand reaction, and it
30 was a demand reaction that was quite severe. Most of those
31 1,000 customers were lost around the Waikato region, and I

1 suppose it would have been -- I'm just thinking of the
2 percentage -- certainly, it's probably in that region of the
3 area of a 5 to 10% response, so that was really a
4 significant response.

5 **MS BEGG:** For those customers, presumably the fixed charge would
6 have been equivalent to a price increase for them. Do you
7 have any feel for what the relative price increase for those
8 that shifted was?

9 **MR I WILSON:** We can give you the full analysis of that, but
10 certainly, previous there was no fixed charge and the major
11 effect of the tariff, I think, was the introduction of that
12 fixed charge. I think customers are likely to be a lot more
13 sensitive to that than the average percentage increase.

14 **MS BEGG:** Thanks. And just a final question; I just wondered
15 whether you had a view on whether the competition and the
16 constraints, inter-fuel constraints are greater where gas
17 distribution and electricity distribution are in different
18 ownership? For example, are you more motivated to push in
19 market gas because you separately own the gas distribution
20 and transmission, than a company that owned both networks in
21 the distribution?

22 **MR I WILSON:** We believe that is the case, and we believe that
23 the owners of the gas networks in the current market
24 structure are the participants in the supply chain that are
25 most motivated to generate additional demand for gas, hence
26 our position on marketing.

27 **DR HODGSON:** If I could just add, with your first question with
28 regards to evidence of increased special conditions, I have
29 the figures for the last 3 years. In 2001 there were 21
30 special TSAs, 2002, 25 and in 2003 there's 28. I don't have
31 data further back, but we could access that if that would be

1 helpful.

2 **MR ADAMS:** Those 28 special TSAs, is there any way that the
3 special prices that are associated with those TSAs would be
4 reflected in -- well, would other users of gas get any
5 benefit from the special prices that are negotiated under
6 these TSAs?

7 **MR I WILSON:** Yes.

8 **MR ADAMS:** I mean, is there a clear distinction between those
9 customers who have bypass potential or alternative fuel
10 possibilities and other customers? So, you can put them in
11 quite two different categories; one of them face strong
12 competition, others don't face strong competition and that
13 would be reflected in your prices?

14 **MR I WILSON:** Yes, there's no doubt in my mind that other
15 customers do benefit because, if we weren't to strike those
16 special prices, we would lose those customers, and if we
17 lost those special price customers it would mean that they
18 wouldn't be contributing to our fixed costs.

19 **MR ADAMS:** No, and I can understand that, but as far as the
20 customers who aren't at risk; is there any sense that they
21 would be able to benefit from the fact that some customers
22 do face -- do have bypass potential?

23 **MR CUMMINGS:** Well, I guess from the point of view of, the
24 retailer would strike that deal, it would look to similar
25 types of industries, I guess, to make similar types of
26 arguments, particularly around inter-fuel. So, wood
27 processing; if a particular wood processing plant got an
28 inter-fuel price, then it would be in the interest of the
29 retailer to go and take that deal to other similar types of
30 facilities where the economics would be the same.

31 **MR ADAMS:** But would you see, from the Commission's point of

1 view trying to assess what the competitive features are of
2 this industry, to place in one group those customers who
3 have bypass potential, and in a quite different group with
4 quite different pricing features and so on, those who don't
5 face -- who aren't susceptible to bypass?

6 **MR CUMMINGS:** Well, we were talking inter-fuel. When you talk
7 about physical bypass of pipeline, that's quite a difficult
8 one.

9 **MR ADAMS:** Yes, sure, bypass in the sense that Ian was talking
10 about it before, but either inter-fuel competition or from
11 bypass pipeline?

12 **MR BIELBY:** Maybe if I can assist here. I think our friends at
13 Wanganui Gas yesterday I think suggested that they had a
14 protocol, or a fairly clear set of criteria that they
15 applied across a period of years to try and determine where
16 a bypass situation might exist, and I think I could foresee
17 how they might do that from a marketing point of view, say
18 in the centre of Wanganui, being quite clear about which
19 property's in the centre of Wanganui.

20 Without undertaking a discussion here, I think what
21 we've talked about is that, I don't think we have a similar
22 set of criteria operating right across the North Island. We
23 have to look at a situation as it arises. There's -- across
24 a period of years there's some planning, but there are a
25 range of circumstances, for example depending whether you're
26 close to a transmission line, what industry you're in and so
27 on, and what retailer propositions come at you. So, I don't
28 think we have a single piece of paper saying these are the
29 criteria we apply? Would I be correct, guys?

30 **MR I WILSON:** That's right, Steve. As I mentioned earlier, for
31 bypass prospects off the transmission system the analysis is

1 generally unique, specific to that customer. It's much more
2 involved off a distribution network. What we do have are
3 models that look at various clusters of customers within a
4 network, where we believe that there's a bypass prospect
5 there. And NGC has done that since the fairly early days of
6 regulation, so we've tried to adjust our prices ahead of the
7 threat of bypass, if you like. I'm talking more about
8 physical bypass in this situation.

9 **MR G WILSON:** In relation to the special discounts for customers
10 at risk of bypass. To what extent can you, or do you seek
11 to recover the lost revenue, if you like, from other
12 customers who are on the standard contracts?

13 **MR I WILSON:** I don't think you can look at it in that way
14 exactly, because what we're doing at the time that we're
15 considering what prices should be for the period ahead -- I
16 mean, posted prices, we're considering a whole range of
17 things. One of those things obviously is the prospective
18 demand in the period ahead.

19 The prospective demand, of course, will be less if we're
20 not successful in retaining those potential bypass
21 prospects, but there are many other factors that will affect
22 that, such as NGC's costs, in the current -- the pricing
23 year coming up, for example, we have some major increases of
24 costs that have been unavoidable, things such as Local
25 Authority rates that are a new impost in the pipelines, we
26 have to factor that into prices.

27 So, I don't think you can say that here is one factor
28 that's changing and, therefore, there will be a price
29 consequence. There are a whole range of factors that will
30 all have price consequences, and we consider them all
31 together. But, as I said before, the one thing that is

1 sure, if we didn't strike special prices and we did lose
2 those customers, we would lose significant contributions to
3 our fixed costs.

4 **MR BIELBY:** If I can just add: We broadly look at things on an
5 annual basis, so to put it simply, if we do a special price
6 with customer A, and the next month we don't send a bill to
7 his mate down the road and say, you know, you popped up this
8 way. So, the process we're describing there would be, you
9 look at the end of the year and say this is what we thought
10 was going to happen, this is all those factors coming into
11 play, special deals might have been done here, costs may
12 have hit us, revenue might have gone up, might have gone
13 down, and it's at the end of the year after a period of
14 months that you have to make an assessment.

15 **CHAIR:** Can I just come back to the comment about the
16 contribution to fixed costs. In cases where you've lost
17 substantial customers, had a big impact on contribution to
18 fixed costs, what do you do in a situation like that? Is
19 it, as you seem to indicate, which is that you then pass
20 that cost -- goes to the -- passed back on to the customers
21 that are not contestable?

22 **MR I WILSON:** It really depends very much on the circumstance,
23 but a lot of it is taken care of through the ODV process,
24 because the first step there is the optimisation of the
25 pipelines, and we talked before about the economic value
26 write-down, but in fact a much more significant effect on
27 value is the optimisation of the pipelines.

28 So, for example, for the Kapuni south pipeline we have a
29 pipeline that, over the years through the 1980s, was
30 substantially reinforced -- we built loops along the
31 pipeline to allow us to get more gas down to Wellington and

1 the Hutt Valley, because there was big industrial base
2 building up there. Later on, that industry was lost to
3 Auckland, and as a result of that we have a lot of spare
4 capacity in the south pipeline now, and that capacity is
5 optimised out, and similarly if we lose customers as a
6 result of alternative fuels, there can be situations where,
7 for example, we've got a number of dedicated laterals that
8 go to what are now disused dairy factories, we can have
9 similar situations where we have laterals going to customers
10 that are now on an alternative fuel.

11 The CNG market is another example where we had a rapid
12 rise of demand in a particular sector that was just as
13 rapidly lost, and there was an optimisation as a result of
14 that. So, it's certainly not a case necessarily that our
15 fixed costs are the same after the event. The fixed costs
16 may adjust because the valuations have adjusted.

17 **CHAIR:** Let's say it's not a situation where you necessarily --
18 it affects one particular bit of your line, and you do your
19 economic value test and you optimise it out, it's spread
20 across a number. Is there anything to stop you from passing
21 on the cost contribution that you lost to the uncontested
22 parts of your market?

23 **MR I WILSON:** We consider that there are all kinds of pressures
24 on prices. We certainly don't feel that we've got an
25 unconstrained situation in any part of our market. The
26 constraints are different in each sector, I think you'd have
27 to say that.

28 **CHAIR:** So it's not really the case that, if I understand you
29 right, it's not really the case that the customers who are
30 not contestable in terms of bypass to other fuels or
31 whatever, that they benefit necessarily from having part of

1 your fixed costs met by these companies that you provide
2 special arrangements to?

3 **MR I WILSON:** It will depend on the particular circumstance,
4 but -- perhaps if I can give you a particular example, that
5 might help, and maybe this isn't that typical an example,
6 but it does illustrate what happens, and that's the
7 situation where we reinforce the pipeline to Auckland to
8 provide supply to the Otahuhu B power station.

9 Now, when we first approached that project, we believed
10 that we would be able to apply our posted prices to that new
11 demand, the same as to all the other demand in the Auckland
12 area. In the event Contact Energy, who were to build the
13 power station, got together with some other large demand
14 users in the area and they suggested that they had an
15 alternative which was to build their own pipeline, and in
16 New Zealand there are no constraints against anyone choosing
17 to build a pipeline, so that was quite a viable alternative,
18 and we spent quite a long time looking at the economics of
19 that alternative and negotiating with Contact and their
20 partners, and in the end as a result of that we did strike a
21 special price.

22 Now, actually in anticipation of Contact coming on, and
23 in anticipation that they would pay our posted prices, we
24 had actually already reduced our posted prices into the
25 market, quite significantly, but we had to back off that
26 reduction to some extent when we eventually had to come to a
27 negotiated settlement with Contact.

28 So, the circumstances of each case are different and
29 that is an extreme case in that it was a very large demand.
30 For example, the whole of the reticulated demand in the
31 Auckland area is -- the annual demand is about 10

1 petajoules. That one power station, Otahuhu, is about 22
2 petajoules a year. So, that's an extreme situation, but
3 probably illustrates the approach.

4 **CHAIR:** If I understand you, in this case you basically
5 maintained the amount of revenue you got from that line,
6 just it was distributed differently across the players once
7 you had negotiated with Contact?

8 **MR I WILSON:** That's right, initially everyone would have
9 benefitted substantially by this additional demand coming
10 on. As it turned out, because we had to negotiate a lower
11 price for Contact, there was still a huge benefit to the
12 other customers in the area, but it wasn't quite so
13 significant.

14 **CHAIR:** Okay. Thank you.

15 **MS BATES QC:** Just looking at the figures for gas use for the
16 year ended September 2002, petrochemicals account for 42%,
17 electricity generation 40%, reticulated gas 18%. Looking at
18 the first two, petrochemicals and electricity generation, I
19 have the impression that inter-fuel competition is not
20 really an option in those two sectors. Would that be right?

21 **MR CUMMINGS:** Yes, the -- I think we did allude to the fact
22 that only 45% of the overall volume, though, goes through
23 the NGC transmission system. So, most of the volume you're
24 talking about there is Maui volume.

25 **DR HODGSON:** I think it's also fair to say that Huntly now can
26 fire both coal and gas. Similarly, the New Plymouth Power
27 Station, although it's basically a reserve station, has been
28 reconfigured to fire fuel oil or gas; and so while there may
29 be a, you know, a bit more stickiness, if you like, they
30 certainly have options.

31 **MS BATES QC:** That was, which ones? Huntly and?

1 **DR HODGSON:** Huntly is coal. New Plymouth Power Station;
2 Contact have re-instigated the option of using fuel oil
3 there, and the new Whirinaki Power Station will be fuel oil.

4 **MR BIELBY:** If I can add, stepping back from that again, looking
5 at the news this morning, Government's calling in Project
6 Aqua. If we look towards new generation capacity coming on,
7 and the decision-making behind that, there are a range of
8 options there, whether it's hydro, wind or whatever, back at
9 that level as well.

10 **MS BATES QC:** Yeah, but that probably will be -- you're looking
11 a few years out for that to be realistic, aren't you?

12 **MR BIELBY:** Look, all the generation options involve a long lead
13 time; again, a reminder, there have been a couple of gas
14 proposals consented through the RMA that are sitting on the
15 blocks waiting to go but face these real issues of
16 uncertainty about supply.

17 **MS BATES QC:** Thank you.

18 **MR CUMMINGS:** Okay, thank you. I'd like to move on to the next
19 section on investment decisions. Even recognising that the
20 market is transitioning to a smaller supply/demand
21 equilibrium, we believe there's a key number of investment
22 decisions that will be required to be made. They fall into
23 categories of maintaining the existing asset value; for
24 example, when the original polyethylene pipes that were put
25 in the ground were a forerunner to the new plastic high
26 density polyethylene, the medium density polyethylene has a
27 shorter technical life, so there's ongoing CapEx
28 requirements to replace assets that come to the end of their
29 technical life.

30 Moving from a pipeline network, transmission network
31 that is orientated to Maui supply; again going forward,

1 post-Maui there's going to be new fields coming on-line,
2 they will need to be brought into the system and that will
3 effect how the system is configured, and also ongoing demand
4 shifts have an impact.

5 The three main impacts from an upstream point of view,
6 of course, are Pohokura, and there are most prospective
7 opportunities in the Wairarapa and the East Coast.

8 Some of the major themes then from a demand shift point
9 of view; we've talked about the move of some commercial and
10 smaller industrial customers north. Again, where power
11 stations are going to be situated, getting the choice of
12 situating in Taranaki and transporting electricity north and
13 vice versa yet to be decided, and in residential growth.
14 And in fact, from that point of view, NGC has put in 80
15 kilometres of pipeline last year in its networks.

16 Again, a view of the lower North Island, as it is today.
17 We've superimposed here then where the Wairarapa prospective
18 for Westech have, and looking at a couple of options for
19 extra investment that would be required to bring a field on-
20 line. The dotted line around the bottom would be an option
21 where there would be a sub-sea pipeline around Wellington.
22 Another option to take gas up through the Tararuas across to
23 Palmerston. Again, an interesting definition of what a
24 field development pipeline would be, and to link that into
25 and reinforce the transmission system back up to Taranaki
26 through Wanganui. So, just to give an example.

27 Again, looking at the East Coast field, Commissioner
28 Stevens asked about that earlier in terms of where that
29 would link in. Realistically, given the proximity and the
30 capacities in the Gisborne pipeline, although ideally you'd
31 like to put it in there to get it up to the Auckland market,

1 the realities are that it would be better to tie that into
2 the Hawkes Bay Network and back feed, again requiring extra
3 reinforcement in the transmission pipelines on the West
4 Coast.

5 Okay, another point to stress here, that NGC wouldn't
6 have any specific rights to build these pipelines, they
7 would be a contestable activity.

8 Again really in conclusion on the investment section,
9 that market requirements upstream and downstream have an
10 impact upon where the future investments are going to be.

11 History indeed confirms the key investment risks that
12 we've got. As an investor, it's important that we have a
13 clear context for decision-making going forward in terms of
14 returns. And again reinforcing the point that, for many of
15 these investments they are in fact contestable.

16 **CHAIR:** On the new investments, say for either one of these
17 fields should they be developed, how do those negotiations
18 tend to go when you negotiate to provide the lines? Is the
19 price at which gas will be transported agreed at that point?

20 **MR I WILSON:** There is a negotiation. I think that that's all I
21 can say, that the circumstances would be different in every
22 situation, and the attitude of the developer is probably
23 going to be different. Some developers would be content to
24 remain in the upstream business and don't particularly want
25 to become pipeline owners. Others would be happy as long as
26 they see a contestable market to just contract that out to
27 the cheapest supplier. So, yeah, I think it is specific to
28 the circumstance.

29 **CHAIR:** Who would you be competing against if the owner of the
30 field themselves didn't want to own the pipes? Who would be
31 contesting the provision?

1 **MR I WILSON:** In the case of a situation like this, I don't
2 think there's any doubt that it would raise international
3 interest, so we'd certainly have a number of bidders from
4 Australia, possibly even though from the US for this kind of
5 investment, the kind that we were looking at if gas is
6 developed off the Wairarapa Coast.

7 **CHAIR:** So, the business is such that it would -- people would
8 come in just to provide pipeline services for those links?

9 **MR I WILSON:** Yes, it would be strongly contested.

10 **CHAIR:** Is that right?

11 **MR I WILSON:** Yes.

12 **CHAIR:** Thank you.

13 **MR CUMMINGS:** Thank you. I'll hand over to Dr Hodgson to
14 continue with the presentation.

15 **CHAIR:** I just want to ask you whether we are working roughly to
16 the time you thought we would be, or are we behind in terms
17 of the presentation? Because I'm going to make a decision
18 on whether to break now or after this part of the
19 presentation?

20 **MR BIELBY:** Chair, I think we are, so on the basis we've got
21 three hours from the end of the break, I'd be hopeful that
22 we'd get through.

23 **CHAIR:** Okay, if you're agreeable then I'd like to suggest that
24 we break for morning tea. Would that be all right with you?

25 **MR BIELBY:** Yes, that would be fine, thank you.

26 **CHAIR:** And we'll reconvene at 10.30, thank you.

27

28 **Adjournment taken from 10.15 am to 10.30 am**

29

30 **CHAIR:** Okay, I'd like to reconvene this session, if I may.

31 Just before we start again with NGC, I just want to clarify,

1 there was a document left on our chairs. Is that from --

2 **DR HODGSON:** That's for my presentation, it's a bit further on,
3 but it was left out of the presentation pack.

4 **CHAIR:** This is the one entitled "key documents enabling
5 competition"?

6 **DR HODGSON:** Yes, correct.

7 **CHAIR:** I think that we were up to the part 3 on the scope of
8 the Inquiry, if I'm correct, in terms of where we left off.
9 So, please proceed when you're ready, thank. Again, of
10 course, again for the record, state your name.

11 **DR HODGSON:** Thank you. Paul Hodgson, NGC, sorry.

12 In this session myself and Forrie Miller will speak with
13 respect to the scope of this inquiry. I'll be speaking on
14 practical matters, if you like, and Forrie will be speaking
15 on the legal issues.

16 Simply, we're going to look at the gas supply chain and
17 then some examples of activities, and also some discussion
18 of the services involved.

19 You saw this diagram earlier. All we've simply added is
20 a couple of labels, and I'll handover to Forrie now to talk
21 in some more detail.

22 **MR MILLER:** Just by way of introducing these slides that follow,
23 making a couple of points here. One is simply to clarify
24 what assets are captured by the concepts of transmission in
25 particular, and that obviously is a point as we'll see, of
26 some complexity, and that will be relevant to the Commission
27 at the next phase of the inquiry if you get to the position
28 of trying to demarcate what assets ought or ought not be
29 controlled.

30 The other point which I want to come back to in a couple
31 of minutes is what is meant by "connected with" what

1 services are connected with transmission. So, if we can
2 begin with the question of upstream assets and the pipeline
3 schematic.

4 **DR HODGSON:** This diagram is actually reproduced in full in the
5 package there, as it's a bit hard to read at this scale, as
6 you might imagine. The colour coding on the diagram
7 indicates the different owners of the pipelines; these are
8 gas transmission pipelines and also some field pipelines
9 located in the Taranaki region.

10 There's three points we'd like to bring out here. Can
11 you see there's some small gas gathering pipelines
12 associated with the fields, these are very small gathering
13 lines. They are clearly not included in the inquiry and
14 appropriately not included. The line that is in a dark blue
15 colour near the north of the top of the diagram has actually
16 been overlooked in defining which pipelines should be in the
17 inquiry; this is the transmission pipeline from the McKee
18 Production Station to the Faull Road mixing station.

19 **CHAIR:** Which line is that on the -- I just want to make sure
20 I --

21 **DR HODGSON:** The blue -- [**indicates**]. The blue ones there owned
22 by Todd Taranaki. That may obviously just be a simple
23 oversight. The point really is, if you're looking at the
24 Taranaki area, there's a quite a range of networked pipes.
25 If you actually take into account other fuels the diagram
26 becomes a lot more complicated again.

27 So, we offer this to you as a way of simplifying, if you
28 like, which pipelines are in the inquiry and which are out.

29 **CHAIR:** So, the McKee, you think, should be included in...?

30 **DR HODGSON:** To the extent that it's downstream of the
31 production station, yes.

NGC

1 NGC, on the energy side of the business, as we've
2 alluded to earlier, has a much decreased supply situation
3 going forward. Obviously historically we had the benefit of
4 being one of the Maui buyers which gave us large
5 entitlements. That position's unlikely to be replicated.

6 So we on the energy side of the business have adopted a
7 gas gathering strategy, we're looking at diversity of supply
8 where we can to try and improve, if you like, our
9 competitive position. In fact if you recall back to the
10 earlier diagram of reserves by owner, we would say our
11 reserves position is such that we are, you know, really
12 looking to find any way to compete on the energy side of the
13 gas supply now we're quite a small player.

14 That said, and you would have heard this from PEANZ
15 yesterday as well, for the smaller fields if there are new
16 ways developed for bringing the gas to market, these small
17 fields, can be economic on the gas side, and this is why we
18 have struck deals with Indo-Pacific, with Westech, and
19 obviously we're actively out there in the market trying to
20 improve our position obviously, but also it improves the
21 position of the smaller producers who may see some of these
22 other difficulties of getting the gas to the market.

23 When Methanex exits the market, which we expect now to
24 be early 2004, our LTS pipeline which is currently covered
25 by the inquiry --

26 **CHAIR:** Can you wait for a second. [**Pause**]. Please proceed.

27 **DR HODGSON:** Our LTS pipeline which is currently covered which
28 the inquiry, will actually be reversed in its flow and will
29 be supplying the Kapuni gas treatment plant, and in case
30 will fall outside the definition of a transmission system,
31 so certainly looking forward we would say that the LTS

1 pipeline should be outside the looking forward part of the
2 inquiry.

3 That, I would say, would be in contrast to the McKee
4 pipelines, which I highlighted on the earlier slide. The
5 obvious example is that McKee would still want to get the
6 gas to the market and would tie in to the Maui pipeline, and
7 there are existing pipes lines there which would enable
8 that.

9 To further explore the concept that in practice
10 definitions of what's included and what's not included are
11 critical, we've included a schematic drawing of the Faull
12 Road mixing station, and I've highlighted here ownership of
13 different assets. Now, these schematics are typically --
14 have marked on them demarcation lines where people own
15 different assets, and looking at this one, you can see
16 there's a section marked "NGC LTS gas", these are the assets
17 associated with our supply of LTS gas, this is all within
18 the boundary of the mixing station.

19 There's also one marked "Todd Gas", so this is where the
20 inlet from the McKee field is coming into the mixing
21 station. The land and buildings are owned by Methanex,
22 which is denoted with an MX. There are then, if you like,
23 pipelines that are looking to move the gas out and other
24 associated equipment, both in terms of fuel gas and
25 processed gas, and those are owned by Methanex.

26 Interestingly on this slide, the SKADA system, which is
27 used for controlling the gas flow, is actually owned by Maui
28 development limited, and so that's the plant that's on site,
29 the remote units of the SKADA system, but NGC owns the
30 central SKADA system without which all the rest of the plant
31 would be useless.

1 So, what we're saying here is, when you are defining
2 what's included in the inquiry, and as Forrie noted what may
3 possibly be subject to control, is very -- you have to very
4 carefully define what's in and what's out, and currently
5 obviously Methanex's pipelines have not been included as
6 part of the inquiry.

7 I will now handover to Forrie who will talk about
8 services.

9 **MR MILLER:** So, this is the other leg of the inquiry, if you
10 like, things that are ancillary to the core access and
11 transport functions the inquiry's obviously directed to. We
12 interpret, "connected with" to have three dimensions,
13 following the Minister's clarification. The first being
14 ownership of assets by a pipelines business.

15 The second being a direct connection to that business,
16 and that connection is an economic connection, we would
17 submit. The reason being that it's defined as supplied by
18 persons in markets directly related to. So, the
19 significance of that, for instance, in relation to meters
20 would be that the connection is in the form of information,
21 metering data; because NGC, as with any pipelines business
22 that has a variable component to its charges, needs metering
23 information in order to bill. So, that's the immediate
24 basis on which you'd say there is an economic connection.

25 The third, and we'll come back to metering, the third
26 dimension is clearly the asset owner has to sell goods or
27 services that employ those assets to third parties, because
28 we're talking about things that are supplied by persons in
29 markets -- in other words, we're not talking about inputs.

30 Section 52 does talk about "supplied or acquired", but I
31 don't think that as a matter of fact there is any area in

1 which NGC is said to be a monopoly buyer, so if we can put
2 "acquired" to one side, what we're really saying here is
3 we're talking about outputs from the business rather than
4 inputs. So, there are those three dimensions as we see it.

5 And just looking at the purpose of this limb, it seems
6 to be looking at the possibility that, if there is market
7 power in the core functions, is it being leveraged into
8 other markets? So, that's the inquiry as we see it that the
9 Commission's being asked to undertake. So, with that
10 introduction, we can look at the question of meters.

11 **CHAIR:** I want to check and see if there are any questions
12 before we proceed. [**Pause**]. Please proceed, thank you.

13 **DR HODGSON:** I'd just like now to speak briefly with regard to
14 metering, which we believe is outside the scope of the
15 inquiry. Metering is an unbundled and contestable service.
16 Within NGC itself it is in a different business unit from
17 the pipes transportation business. NGC owns meters on other
18 networks, and as you can see from the pie chart there, the
19 majority of meters, gas meters that is, are owned by Contact
20 Energy who are not subject to the inquiry.

21 The last point on that slide is that meters themselves
22 are covered by a New Zealand standard which defines the
23 quality of metering and also the testing regime, so
24 certainly there's a high degree of independence in
25 specification, so it's not something a network owner can
26 control. For example, can you only put my meters on my
27 network; it's very much an open process.

28 Just to illustrate that a little further on the
29 following page I actually step through the process for meter
30 installation, just to show that it's contestable at every
31 stage of the process. A user would make a request to one of

1 our channel partners or to a retailer to become connected.
2 The channel partner would subsequently have to contact a
3 retailer and the retailer would go to a metering company,
4 which would be one of several.

5 The network company itself does specify the pressure on
6 its networks, obviously, and there is some degree of
7 specification of where meters can actually be located on the
8 buildings, but as I understand there is actually an
9 industry-wide code that is going to replace that. So, the
10 network company would only actually be specifying the
11 pressure, which is quite proper given that they are
12 responsible for system integrity.

13 The metering company would acquire meters, obviously in
14 the case of standard domestic meters, that's the sort of
15 stock item that you would have. With larger sites there can
16 be a question of actually determining the cost of the meter,
17 how much it would then cost to make, install, and obviously
18 what the lease fee would be associated with that. But
19 again, that is a contestable activity.

20 The metering company puts out a request to an installer,
21 that's a third party that would actually install the meters,
22 and again those installers are available to any party.

23 **CHAIR:** What's the sort of cost involved in installing a meter?

24 **DR HODGSON:** Typically for a domestic meter, or a larger meter?

25 **CHAIR:** Let's talk about both.

26 **DR HODGSON:** Okay, a domestic meter is typically around \$50.

27 That is not an up-front cost, that is built into the lease
28 fee.

29 **CHAIR:** So, it would cost you \$50 to have the meter --

30 **DR HODGSON:** The metering part of it yes, that's assuming the
31 service pipes etc are there.

1 **CHAIR:** And have you looked at what impact that has on the
2 customer's willingness to...

3 **DR HODGSON:** What the customer sees is, from the retailer, a
4 fixed metering fee, which I presume would just be a pass-
5 through of our lease fee. I would suggest the customer is
6 probably indifferent to the metering cost, but we haven't
7 actually made a formal study of that.

8 **CHAIR:** But the retailer, they must not be indifferent to
9 whether they have to change the metering system? Is that
10 right to say?

11 **DR HODGSON:** In terms of gas meters, I can only speak to gas
12 meters, we provide open access. I guess there wouldn't be a
13 great incentive for the retailer to switch existing sites.
14 That has happened in regards of larger meters, which is why
15 we have a number of off network meters, but for the
16 residential consumer, because the existing meter would be
17 replaced with the identical existing meter; from all
18 perspectives it would be a little bit of a pointless
19 exercise as long as you have access to the meter.

20 **MR STEVENS:** Do you fully cost your on-market meters vis-a-vis
21 your off-market meters?

22 **DR HODGSON:** Yes, metering is a separate business unit and it
23 has its own cost and profit objectives, so it charges us the
24 same as it charges everybody else.

25 **MR STEVENS:** And that's disclosable?

26 **DR HODGSON:** For the --

27 **MS WILLIAMS:** You mean, the actual prices themselves? Yes, they
28 are. We have -- the metering business has a posted tariff,
29 if you like, which applies to most metering situations. For
30 anything in the large commercial, industrial category though
31 generally they're customised metering installations, so they

1 have to be priced individually.

2 **MR STEVENS:** Thank you.

3 **CHAIR:** I just want to understand what happens with the
4 residential, if the retailer wants to switch suppliers in
5 terms of access to meters; what happens with the meter that
6 is there? I'm just trying to get a sense of how contestable
7 it really is.

8 **MR CUMMINGS:** Do you mean physically? Physically there's an
9 isolation valve so it can be isolated and new meter
10 installed.

11 **CHAIR:** They'd obviously bear the cost again of installing
12 another meter, right, the retailer?

13 **MR I WILSON:** That's generally rolled into the fee. I don't
14 know of -- I don't think any of the meter companies charge a
15 separate fee for that. Not our one, at any rate.

16 **CHAIR:** So there's not an installation fee per se, there's
17 simply a rental fee?

18 **MR I WILSON:** Correct.

19 **CHAIR:** Right, okay. Go ahead. I just want to make sure I
20 understand this, because we hear a lot about metering in
21 electricity, and it sounds quite different here than the
22 situation in electricity.

23 **MS BATES QC:** Just a couple of questions as well just to make
24 sure I understand it. Take the situation where a
25 subdivision's being put in, a new one, and you're providing
26 the network. How many cases would there be where you're not
27 also providing the meters, your metering business?

28 **MR I WILSON:** Initially I would say very few, because generally
29 the situation is that, as a line company we'll have
30 negotiated with a developer so that the developer is happy
31 that we install our pipelines in the subdivision; that's

1 contestable of course, a number of other line companies will
2 also be trying to get their pipelines in.

3 Generally the situation will be that the incumbent
4 retailer in that area, knowing that the subdivision is going
5 ahead, will have advised all the channels in that area, you
6 know, appliance outlets like Placemakers and gas fitters and
7 so on that the subdivision is going ahead, and generally
8 they'll tailor some marketing promotion around that new
9 development to try and make sure that customers are going to
10 use them as the retailer, but again, that's contestable.

11 Generally speaking, on NGC reticulation -- new
12 reticulation, initially it's NGC meters that is installed,
13 but that would change over time. Customers are contestable
14 at any time, so...

15 **MS BATES QC:** So, just to put another scenario to you. If
16 customers want to switch away from -- switch retailers,
17 you're quite happy to do the metering?

18 **MR I WILSON:** Yes, that's right, yes. The owner of the meter
19 doesn't necessarily care who the retailer is. I say
20 "necessarily" because one of the major meter owners is, of
21 course, Contact Energy and, of course, Contact Energy would
22 much rather that Contact Energy were also the retailer, so I
23 can't speak for them. But NGC, NGC is indifferent to who
24 the retailer is.

25 **CHAIR:** Okay.

26 **DR HODGSON:** And just a last point on that slide, that the
27 retailer actually arranges the meter reading. Or the
28 metering company may offer it in specialist circumstances,
29 but the direction of a lot of the metering businesses now
30 are actually looking at, if you like, further data
31 administration type services, as you may be familiar with in

1 electricity etc.

2 **MS BATES QC:** Just to come back to your metering business for a
3 moment. How much of that business is unconnected with NGC
4 activities?

5 **DR HODGSON:** Gas metering?

6 **MS BATES QC:** Yeah, how much of your gas metering business?

7 **DR HODGSON:** In the contestable -- not in the contest -- in the
8 confidential submission that you will have, we give numbers
9 for the number of meters that we have off network. I prefer
10 not to say that in the open forum, because it's competitive.

11 **MS BATES QC:** Okay.

12 **DR HODGSON:** There are also a number of services that we believe
13 are outside the scope of the inquiry, and I'll just briefly
14 list those, we've detailed them in the written submissions.
15 Obviously, the pipeline operator for the Maui pipeline. We
16 offer metering inspection services. I would note that also
17 calibration, these can also be the larger meters that may be
18 on other parts of the network. We manage easement services
19 for other parties, we do surveying and we also do some
20 general sort of maintenance work for third parties. We see
21 these services and the associated revenues and costs being
22 outside the scope of this inquiry as they do not relate to
23 our pipeline service.

24 **CHAIR:** I'll just quickly check and see if there are any
25 questions before you go on.

26 **MR STEPHEN:** Ken Stephen. On the question of the definition of
27 meters on consumer premises; as I understand your
28 submissions and indeed the Gas Act suggested that consumer
29 gas metering is included in the definition of a distribution
30 system. And, therefore, at least on one reading of the
31 scope of the inquiry it would be caught. Could I seek your

1 comments on that?

2 **MR MILLER:** Yes, I've looked reasonably closely at that, and it
3 seemed to me that the Minister's clarification was intended
4 to make it plain that that wasn't the position. That you
5 would not capture assets that were -- or meters that were
6 owned by Contact for instance, and so, you have to take a
7 purposive view of it, I think. It says those are best
8 analysed as "connected with" rather than part of the gas
9 pipeline services, which is the core definition of the term
10 of reference.

11 So, I think the attempt to clarify has potentially led
12 to them being captured as an element of distribution and we
13 say, both for the reasons that Paul has outlined and as a
14 matter of the Minister's purpose, that doesn't seem to be
15 appropriate.

16 **MR STEPHEN:** So you concede, though, that in the careful
17 analysis that the Commission will have to go through about
18 the definition, that we're going to need to pay attention to
19 the purpose that we will ascribe to the clarification that
20 the Minister's given us?

21 **MR MILLER:** That's correct, yes.

22 **MR STEPHEN:** And you also concede, presumably that that isn't
23 immediately clear from his clarification?

24 **MR MILLER:** You've got to read it as a whole, that's correct.

25 **MR STEPHEN:** Thank you. Can I also please ask a question in
26 relation to your submission on what I think you describe as
27 the LTI pipeline?

28 **MR MILLER:** LTS. [Pause].

29 **MR STEPHEN:** If I understood your submission correctly, you
30 seem to be saying at least again on perhaps a technical and
31 perhaps literal meaning of the definitions, that it falls

1 within the scope of the inquiry, is that right?

2 **MR MILLER:** No, I think it's more accurate to say that in the
3 time frame that's relevant to the Commission, that is by
4 late 2004, it will be flowing in the other direction; it
5 will be a gathering line.

6 **MR STEPHEN:** Okay, thank you.

7 **MS BEGG:** I just wanted a point of clarification. In terms of
8 the accounting entity NGC Transport, I just wanted to know
9 whether any of the activities that you suggest are outside
10 the inquiry would be within that accounting entity? And, if
11 so, how simple would it be to separate them?

12 **DR HODGSON:** The metering activities are in a completely
13 separate business unit. The third party services are
14 accounted for within, but they're easily identifiable as
15 being separate revenues.

16 **MS BEGG:** I'm not sure if this is the right time to ask the
17 question, but there's the suggestion that it might be
18 possible to find that, where the Maui pipeline competes with
19 NGC's pipeline, that's a separate market and there's
20 sufficient competition in that aspect, whereas there might
21 not be in the rest of NGC's business. How feasible is it to
22 separate out a part of a network like that for different
23 treatment to the rest of the network?

24 **MR I WILSON:** It is feasible. Did you want me to discuss the
25 general proposal that the two pipelines compete, or are you
26 just asking whether --

27 **MS BEGG:** It's really just an issue of how feasible it is in an
28 accounting sense, costs allocations, rather than whether or
29 not there is competition. I just wanted to know whether
30 your accounts are such that you could separate out the costs
31 and revenues for parts of your business.

1 **MR I WILSON:** Yes, they could be separated. There would be some
2 common costs obviously, and there would have to be some
3 costs allocations, but the major costs I would say could be
4 separated, yes.

5 **DR HODGSON:** Just on that point, I would refer to the
6 Commission's information request. We provided information
7 back 7 years and that was basically back to when the
8 information disclosures came in, and it was easy to separate
9 the pipes from the other, but earlier on, if we were going
10 back 10 years or so, you'd have the situation where the gas
11 supply is bundled at the wholesale level and at the networks
12 level it would be much more a difficult task to unravel.

13 I'd just now like to touch on the regulatory regime for
14 gas pipelines, both the current regime and the prospective
15 regime. I think it's also important to point out that we
16 have had a mix of self-regulation in Government or central
17 oversight of the processes, and in this presentation and
18 also in the subsequent section when I talk about asset
19 valuation, there are processes going on through the 90s, and
20 I think we've obviously submitted on those in our written
21 submissions and have been mentioned earlier in regard to a
22 regulatory compact or regulatory bargain and I'd just like
23 to put more context around those issues as we go forward in
24 the next two sections.

25 The current regime on the NGC system, and some of the
26 other systems, is one of open access. On this slide I have
27 a diagram and the extra document that was handed out gives a
28 schematic view of the particular parts that are listed here
29 and also a brief description, and I think it gives a better
30 picture how the pieces hang together, if you like.

31 Obviously, there's a legislative framework which hangs

1 over the industry, and if you like, uppermost in that is the
2 Commerce Act and obviously the nature of the processes we're
3 going through here.

4 There's also the Gas Act, and under that we have
5 information disclosure regulations. Then there's a number
6 of self-regulatory codes that involved extensive
7 consultation. The Pipeline Access Code, which is, if you
8 like, the base document that provides for open access on
9 pipeline services. Information memoranda, which are
10 promulgated under the Access Code by the companies involved,
11 and we have one for transmission and one for the
12 distributional networks business.

13 And one of the undertakings through that is with regard
14 to ringfencing confidentiality of information. So clearly,
15 there's also confidentiality protocols which companies
16 develop so that they can comply with the Access Code.
17 There's also an Industry Reconciliation Code, which is
18 obviously necessary for people to trade on different
19 networks to ensure that people get charged for the correct
20 amount of gas and also the correct amount of gas services.

21 Then at the contractual level, if you like the glue that
22 sticks all the pieces together, we have Transmission and
23 Network Services Agreements, we have Allocation Agreements
24 and clearly for gas to people we have Gas Supply Agreements.

25 I'd like to now speak briefly with the transition to
26 open access, and I think this is part of the regulatory
27 compact that we didn't explain in our submission, we spoke
28 through the deregulation process, so some of this
29 information may be new to people who are not familiar. I'd
30 be happy to pause and take comments on the process.

31 You may recall the previous system we had in place was

1 one of a franchise system, and Mr Boulton on Monday alluded
2 to the fact that the situation here was different where you
3 didn't have exclusive franchises. We in fact had such a
4 system through the early years of the gas industry.

5 In the move to deregulation it was clear that the
6 Government policy of the day was -- and obviously once we
7 had the Commerce Act coming in to being -- was one of
8 wanting competition and seeking the benefits of competition,
9 and clearly a franchise system undermined that. And so
10 there was official encouragement to abolish the franchise
11 areas in what are known as the 1980 contracts, the utilities
12 that each had a franchise area had an exclusive contract
13 with NGC Transmission for the supply of gas to certainly
14 delivery points, and those contracts were such that no-one
15 else could therefore get gas at those points.

16 They were overridden when gas was in price control, but
17 once gas came off price control the utilities reverted back
18 to these contracts. So clearly, to enable other people to
19 get into the networks and supply gas these contracts had to
20 be unravelled.

21 This process is monitored closely, and I say closely by
22 both the Ministry of Commerce, as it was at the time, and
23 also the Commerce Commission itself; and we had a number of
24 communications with the Commission explaining how we were
25 going about moving to open access, the nature of the pricing
26 methodology we were using. It's probably fair to say from
27 the officials' perspective, they did -- this did take some
28 time, it was negotiation, it wasn't something that NGC could
29 go out and impose on people, we were happy with open access
30 to our networks. However, for various reasons other gas
31 suppliers were less keen.

1 So, the negotiation, the first or draft Open Access Code
2 was put out for consultation at the end of the 1992 and we
3 finally got resolution of this in 1998, so you can see it
4 was definitely a toing and froing process.

5 In the latter stages an organisation called Gas House
6 was involved, and that's what the -- actually finalised the
7 Access Code and I've listed a number of the participants in
8 this Gas House process here, and it was a mixture of
9 acquirers and owners who got to a solution on how the access
10 regime should work, what were important considerations for
11 different people.

12 **CHAIR:** I just want to clarify the second bullet point and why -
13 - I don't know whether the progress was monitored closely
14 and by whom, but even if it was, what's the significance of
15 that in terms of a regulatory bargain?

16 **DR HODGSON:** I would say that the Government officials and also
17 the Commission officials at the time were aware of the
18 access -- how the Access Code was developing and also the
19 nature of the pricing methodology and the valuation
20 methodologies that were being used. My point here is, we
21 progressed this and we keep people informed, and I guess
22 people didn't say "you shouldn't do that" or "that was
23 inappropriate".

24 **CHAIR:** Did they endorse it or...?

25 **DR HODGSON:** With regard to ODV, we have mentioned a document
26 that came in the -- I think it was in 1992 from the Ministry
27 of Commerce, with regard to valuation methodology, they
28 didn't feel the need to mandate the ODV methodology unless
29 inappropriate valuation methodologies were implemented.

30 **CHAIR:** I mean, the rest of this -- the Access Code and how is
31 there any regulatory bargain with respect to any of that?

1 **DR HODGSON:** Well, I guess from our perspective, if people were
2 giving up their franchise areas and allowing competition, if
3 you like implementing Government policy voluntarily, rather
4 waiting for it to be imposed on us by legislation, which was
5 the threat, if you like, of the alternative; if we were
6 acting in a way that they felt was inappropriate we would
7 have expected to be certainly made aware of that during the
8 time rather than being made aware of this some point down
9 the track.

10 I mean, I concede that it wasn't rubber stamped, if you
11 like, by the regulator, so it may be from different
12 perspectives that a different term may be more appropriate.

13 **MR STEVENS:** Can I just pick up a question, if I may please,
14 Dr Hodgson, on the Pipeline Access Codes themselves. With
15 particular reference to the confidentiality protocols that
16 you mentioned.

17 Can you describe to me what the confidentiality
18 protocols relate to?

19 **DR HODGSON:** The confidentiality protocol is a way of ensuring
20 that any retailer can act or trade on that network and be at
21 no disadvantage to any other retailer. So any information
22 that a retailer gives the gas pipeline business that is not,
23 if you like, public domain information, the pipeline
24 business has processes in place to ensure that any other
25 retailer, obviously including its own affiliates, has no
26 access to that.

27 So, this includes segregation of information systems,
28 strict processes for dealing with associated companies -- in
29 fact, or with other companies, and this may be even to the
30 extent where someone approaches us with respect to a
31 prospective deal or, say, a new industry coming in. You

1 know, the fact of that needs to be kept confidential from
2 other retailers.

3 **MR STEVENS:** How do you manage that internally for yourselves,
4 given that you do market directly to the customers above 10
5 PJ?

6 **DR HODGSON:** As I say, there's protocols in place and the
7 information systems are segregated so, people have no access
8 to information. The two business units are located in
9 different areas, and Ian can probably speak more detailed to
10 it. Would you like to, Ian?

11 **MR I WILSON:** Yeah. The protocols are largely modelled around
12 the same kind of arrangements that are in place in the
13 United States for example. I'd have to go back and check
14 this, but I think it was FERC Order 495 that defined their
15 requirements for "ringfencing" as it's called, where a
16 pipeline owner is also a retailer, and this was a big issue
17 while the Access Code was being negotiated, because at that
18 time NGC had a much more significant position in retail, and
19 it was a real concern to other retailers that we might be
20 able to use our position in the transport business to give
21 an unfair advantage to a retailer.

22 I think there's less concern about that because as you
23 mentioned, we're only now retail to the over 10 TJ
24 customers, but it has been raised quite recently in respect
25 of the Maui pipeline as an issue again, where in the Maui
26 pipeline you have that situation, some of the owners of the
27 Maui pipeline are vertically integrated, and I'd have to say
28 that although those owners I think have recognised the
29 significance of -- or the need for some kind of ringfencing,
30 they haven't put forward any protocols as yet.

31 **MR STEVENS:** Do your users still have those concerns with NGC's

1 operations now?

2 **MR I WILSON:** I think it's much much less of an issue. Yeah,
3 much less of an issue.

4 **MR STEVENS:** Thank you.

5 **MS BATES QC:** Just a couple of questions for Mr Miller at this
6 point by way of clarification of the legislative framework -
7 - probably should have asked you these before. But, what
8 year is the Gas Act?

9 **MR MILLER:** 92 I think, yeah.

10 **MS BATES QC:** Is the enabling Act for the disclosure regs?

11 **MR MILLER:** I can't answer that question directly, but I think
12 it is.

13 **DR HODGSON:** Yes, I'm pretty certain it is.

14 **MS BATES QC:** Okay, what about this Ministry of Energy Abolition
15 Act? I probably should know what that is, but I don't.

16 **DR HODGSON:** That's the part that gives the Minister the power
17 to call inquiries such as this.

18 **MS BATES QC:** And what year is that?

19 **DR HODGSON:** 1989 I think.

20 **MS BATES QC:** Just looking at the -- this document here --
21 [indicates] -- when talking about self-regulatory codes
22 disclosures and protocols, does the disclosure relate --
23 aspect of that relate to the information memoranda?

24 **DR HODGSON:** Yes.

25 **MS BATES QC:** Who's that available to, that information
26 memoranda?

27 **DR HODGSON:** It's on our website, it's available to everyone.

28 **MS BATES QC:** Okay, thank you.

29 **DR HODGSON:** Just continuing on this slide, I'd like to say; at
30 the same time as this open access process was going on, we
31 were also involved in extensive and lengthy negotiation

1 about moving to new pricing methodology, clearly to --
2 having moved from price control, the utilities reverted to
3 the 1980 contracts. We had to move to a new scheme of
4 pricing, and most people preferred to only pay for the part
5 of the system that they actually used, if you like, so the
6 concept of a distance related price came in. And,
7 underpinning that was the use of the ODV methodology. In
8 this regard I would note that the acquirers themselves were
9 promoting the use of ODV as the underlying methodology for
10 pricing on the system.

11 In the end, we got to a negotiated solution, which both
12 abolished the 1980 contracts and the franchised areas and
13 provided for competition and open access on the network
14 system and also saved the cost of Government legislation to
15 do so.

16 In terms of the counterfactual looking forward, we have
17 heard comment earlier in the week regarding the proposed
18 regime. My understanding, and I have been involved in this,
19 is that the details of this are likely to unfold within the
20 inquiry's timeframe, and we can, as far as I'm possible,
21 subject to confidentiality, try to inform the Commission of
22 what I know at least; I'm not privy to everything.

23 The Government, as you know, had an extensive gas review
24 process over the last 2 years and at the end of that process
25 I think the most important issue with regard to the proposed
26 regime is that they reconfirmed an enhanced disclosure
27 regime.

28 I'd note here that that regime was actually consulted on
29 in 1999 and Cabinet confirmed it at that time -- well, in
30 2000 the Cabinet confirmed. So, the industry has been aware
31 of these enhancements to the disclosure regime, and however,

1 we're still waiting for the officials to implement it.

2 Features of that are a mandated ODV handbook, the use of
3 the avoided cost accounting methodology to make it clear
4 which costs are attributable to the pipeline business and
5 which are attributable to other businesses. Updated
6 financial and performance measures, looking to make the regs
7 more consistent with the electricity regulations and the
8 definitions more precise, and also requiring people to
9 disclose their information over the internet rather than in
10 the hard copy -- well, as well as the hard copy form.

11 The Government Policy Statement that came out at the end
12 of the gas review process required the industry to develop a
13 new governance structure. I think it's fair to say, this
14 has some details of the proposals and the proposed
15 legislation have been leaked to media and have been reported
16 in the New Zealand Herald, so I feel a little bit more
17 comfortable talking about some of the detail here, if you'd
18 like.

19 The industry has a steering group together, which
20 includes both consumers and industry people, and the Right
21 Honourable Jim Bolger is the independent chair of that
22 group. That group's developing a proposal that is really a
23 model of co-regulation rather than simply self-regulation,
24 and -- well, hopefully I can be confident in saying I can
25 disclose in this forum that it will be based -- the proposal
26 anyway from the industry, will be based on the New South
27 Wales model, where, to participate one has to have a licence
28 from the Government body.

29 If you like, conceptually it's similar to the regulation
30 of lawyers in this country where you have to have a
31 practising certificate which are meant to have to comply by

1 a set of rules, and in that way you have a sanctioned
2 mechanism against people who don't comply with the rules.
3 So, essentially this is how the New South Wales gas market
4 operates; you have to have an authorisation to participate
5 in the gas industry, and to have an authorisation you have
6 to be a member of an approved scheme, of which the gas
7 market company is one.

8 So, the industry proposes that this will be the model of
9 co-regulation going forward. So I think I can say with some
10 confidence that the, if you like, the status quo, which I've
11 demonstrated on the previous document, are the codes that
12 are in place; however, there will be a greater degree of
13 governance sitting over that, a more formalised governance
14 may be a better way of saying that.

15 **CHAIR:** Can I just ask you a question on this. I mean, I have
16 heard the same thing, that that's the proposed approach at
17 this point that the industry is discussing. And I'm not
18 aware that the Crown has agreed in any way to provide any
19 sort of legislative backing for the arrangements that you
20 put in place.

21 And I have to wonder generally whether, once you move
22 down that path it's not really an industry-led process any
23 more, and leaving aside the merits or otherwise of
24 legislative backing, my understanding at this point is, is
25 that the Crown has not endorsed, or otherwise the approach
26 that the industry is proposing, particularly the need for it
27 to put in place legislation in order to support that
28 arrangement. Is that a fair statement of where things are
29 at?

30 **DR HODGSON:** That is indeed a fair statement. I would say that,
31 failing the legislative back-up to, if you like enforce this

1 scheme, it is probably unlikely that the industry could get
2 a sufficient number of players to volunteer, if you like, as
3 there may be one or two players that choose not to volunteer
4 to comply with any scheme. Should that be the case, we may
5 find ourselves at the end of the process of not meeting the
6 Minister's test of having sufficient participation.

7 **CHAIR:** I just want to pursue that, because it is my
8 understanding, and I don't have any -- I'm sure I have less
9 knowledge of this than you do -- but it is my understanding
10 there's no commitment at this point from the Crown to
11 provide that legislative backing for an industry-led
12 process. I'm not saying they won't, I'm just saying there's
13 been no indication that they're prepared to do so.

14 And you've indicated to us now that without that the
15 industry-led process won't happen, which then leads us to
16 the backstop legislation vis-a-vis the Energy Commission,
17 but that legislation is at this stage only in draft form.
18 So -- and even in its draft form I'm not sure how much
19 clarity there is about what the arrangements would be if it
20 did revert to an Energy Commission.

21 So, I really wonder where this all takes us in terms of
22 something that the Commission can actually build a
23 counterfactual on?

24 **MR MILLER:** Certainly, on the disclosure point, there have been
25 Cabinet decisions in relation to the improvements to the
26 regulations, and I think you can say there's a sufficient
27 degree of certainty around those.

28 **CHAIR:** You know, we can talk about the disclosure, but there's
29 a lot more at play here than enhancements to the disclosure
30 regime, and I suspect that the way in which this may -- you
31 know, the substantial impact on this inquiry of the

1 counterfactual, the disclosure enhancements matter, but I
2 don't think that's where the biggest impact is likely to
3 come, from one counterfactual or another.

4 But if I even accepted for now that the enhanced
5 disclosure requirements somehow should be built into the
6 counterfactual, what can we take into account in terms of
7 the rest of this situation?

8 **DR HODGSON:** That's fair comment. I think I'm putting this
9 forward in terms that there will be oversight. My
10 understanding is that issues to do with pricing etc would
11 still be the domain of the Commerce Commission rather than
12 the Energy Commission.

13 So our point here is that the regime going forward is
14 liable to change. Clearly the information disclosures will
15 be enhanced, and I guess our last point on this slide in
16 terms of going forward is that the Commission is putting in
17 place a thresholds regime for lines companies.

18 Now, people will tend to judge us against that regime
19 whether or not we're subject to it, you know, particularly
20 if the disclosures are enhanced to a degree where there's
21 comparability in the measures that are disclosed.

22 **CHAIR:** I don't understand this point about a defacto regime for
23 gas, the threshold regime, and I would be interested to hear
24 what you think that actually means in practice.

25 **DR HODGSON:** Well, certainly my understanding from, if you like,
26 a Manager of Regulatory Affairs, my view would be that at
27 the end of this process the Commission will clearly have a
28 great deal of knowledge about gas pipeline companies.
29 Should gas pipeline companies in the future disclose rates
30 of return that are, if you like, greater than we've seen put
31 in place for electricity lines businesses, I'm sure

1 acquirers or other parties would pretty quickly come back to
2 the Commission and ask you to look at us again.

3 **MR BIELBY:** Could I add as well, I'm not sure this is entirely
4 helpful. Both of us here today, the Commission and
5 ourselves, are on request from the Minister. Why exactly
6 the request was triggered and why it was done when it was is
7 something we could both speculate about. It certainly
8 diverted us from a number of things that we were doing back
9 at the office.

10 The reality we're putting to you is the one that faces
11 us day-to-day in the industry, and basically we've had a gas
12 review process going on for 2 years now, which is a
13 substantive issue for us. So, my only point there is, I
14 think the Commission, the issues you're raising are real
15 ones for you and are real ones for us; how can either of us
16 divine a helpful outcome from the Minister's request in this
17 milieu which we have in front of us?

18 I guess it's an early stage in the process, but looking
19 forward I guess the steer we're giving is that the focus
20 here is going to be pricing issues and getting some
21 information together and understanding the pricing issues,
22 and I imagine towards the end of this process we may have to
23 check back what you're findings and hence your
24 recommendations might be against anything that you can
25 definitely put your foot on in terms of the policy changes.

26 **CHAIR:** You know, I appreciate the point that's being made about
27 some of the uncertainty, but I just noticed in the last
28 slide where you talk about the open access regime being put
29 in place on the networks, i.e. Competition, and then the
30 discussion on the next slide about changes in the regulatory
31 environment, and there's a strong sort of suggestion here

1 that all this leads to a situation where the regulatory
2 environment's changing in such a way that this inquiry, it
3 seems to have the tone of it that this inquiry is just not
4 necessary any more.

5 And I know that you haven't come straight to that point,
6 but that's what I'm reading into what your slides say, and
7 I'd just like to make the point to you that it is, I think,
8 very clear that when the Government does want to -- it has
9 instructed this Commission to undertake this inquiry, and if
10 it felt that the open access regime had brought competition
11 to the market and all issues were gone, I doubt if we would
12 have proceeded with the instruction to the Commission to
13 undertake the inquiry.

14 So, that almost goes without saying. But in terms of
15 the current developments, the Government very clearly has in
16 the past when it has thought it's relevant to transmit to
17 the Commission statements of Government policy. At this
18 point it has not chosen to do that, it has simply instructed
19 us to undertake an inquiry.

20 So, I'm still left in the situation of wondering how
21 much can we build into a counterfactual at this point based
22 on discussions, draft -- speculation about what's in draft
23 legislation, not an actual legislation but draft
24 legislation. And, you know, it may be something that
25 evolves as this inquiry proceeds, but at this point in time
26 I don't hear a strong submission from you that there's a lot
27 that we can actually go on here.

28 **MR MILLER:** On the Section 26 Statement, I think there is a
29 distinction in that that's obviously directed to guiding the
30 Commission in the exercise of decisions that the Commission
31 makes. And what we are suggesting here is that, as a

1 different point, which is that the pragmatic counterfactual
2 that you should have regard to in exercising a decision,
3 factors into account a number of regulatory changes that are
4 likely, and that's as far as we're taking it.

5 **CHAIR:** It may be likely that there will be regulatory changes,
6 but what I'm suggesting to you is, that there's not a great
7 deal of certainty about what those changes might be, and in
8 a situation like that how can the Commission define it, what
9 it might be?

10 **MR BIELBY:** And ultimately, we've got to agree with that and
11 say, that's the real world we're living in and you've
12 accurately described the shifting sands, as it were. I
13 guess all we can suggest is, that we take that in mind going
14 forward, rather than setting the counterfactual now as you
15 may in some inquiries be able to do with a little more
16 clarity.

17 Could I just say, we appreciate entirely where the
18 Commission is positioned, you have a request from the
19 Minister and you can and will of course go forward; we'll do
20 nothing other than co-operate despite the sentiments we're
21 expressing here.

22 **CHAIR:** Can I just ask one further question on this.
23 Strengthening the disclosure regime and the use of ODV; is
24 there any place that the Government has in any way indicated
25 ODV is appropriate for pricing purposes in this industry?
26 [Pause].

27 And in fact my recollection is right, they'd made it
28 very clear that whatever they're doing was not meant to be
29 seen as indicating what is the appropriate approach for
30 pricing purposes for this inquiry. Is that a fair statement
31 of what they actually have said in the context of the work

1 that's been done on strengthening the disclosure regime?

2 **DR HODGSON:** I guess it's fair to say that, yes -- well, yes is
3 the short answer. I don't think they've ever actually
4 either said it's okay or said it's not okay over time. But
5 certainly with regards to this inquiry, in the Cabinet
6 papers they drew the distinction.

7 **CHAIR:** Yes, okay. Thank you for that.

8 **DR HODGSON:** And on the subject of ODV, I'll go through this
9 certainly reasonably quickly as --

10 **MR BIELBY:** I just note, I understand Dr Lally's in the room, so
11 we're in your hands as to what you want to do. We could
12 pause Dr Hodgson if you want and come back to complete this
13 section or whatever you want to do.

14 **CHAIR:** I did want to note for the record that Dr Lally is now
15 present for this session. Can I just ask you how long you
16 have available? Do you have any time constraint?

17 **DR LALLY:** No.

18 **CHAIR:** Okay. Then I suggest we just proceed in the order that
19 you have at this point. Thank you.

20 **DR HODGSON:** I'll cover this fairly quickly because it is a
21 summary of what is in our written submission. I'll talk
22 briefly about how we got to using ODV, talk about some views
23 expressed by stakeholders and also we'll then talk about the
24 valuation of intangibles and easements.

25 As I've indicated earlier, over the 90s there was a
26 deregulation process and certainly for NGC it became
27 apparent from as early as 1990 that ODV would be the
28 regulatory valuation approach, and I've mentioned the letter
29 from 92 regarding it being mandated if inappropriate
30 valuations were adopted.

31 There is also the question that Transpower's other, if

1 you like, related or sister transmission company was valued
2 at ODV, and in guidelines provided by the implementation of
3 information disclosure, it was made apparent that Transpower
4 would be seen as a comparator for NGC. So certainly, if
5 they were being valued at ODV, NGC would expect to be judged
6 on the same basis.

7 Our first ODV, as we've supplied to the Commission, for
8 transmission was done in 1991, and it was clear to investors
9 subsequent to us becoming a public company, that we were
10 using that valuation approach. We've actually covered the
11 last two points here in our previous discussion with regards
12 to the new disclosure regime, and, if you like, the interim
13 mandating of the ODV.

14 Stakeholders, and I think this is important to point
15 out, have supported ODV off their own bat. Certainly during
16 the process I described where we move to an open access
17 regime, acquirers promoted the use of ODV in terms of
18 pricing for the transmission. Contact, Genesis and Mighty
19 River all openly supported ODV during the gas review
20 process.

21 MEUG supported consistency between the electricity and
22 gas industries during the gas review process. The
23 Government's consultants for the gas review, ACIL Consulting
24 supported the use of ODV.

25 If I can make a summary of, certainly my view, the
26 comments that we have heard over time, certainly over the
27 recent time of the gas review, are more along the lines that
28 people want to see a transparency and consistency in the
29 application of ODV, and in fact some people have promoted --
30 they've wanted a one-off audit of people's ODVs as the
31 Commission undertook for the electricity lines, and I guess

1 it's a question of people being concerned that the process
2 wasn't as transparent, or perhaps as consistently applied
3 between companies that has been causing them concern.

4 **CHAIR:** I just want to stop you on that for a minute, if I can.
5 I wonder why companies such as Contact then have reserved
6 their position on ODV, and it's fair enough to say they put
7 it to us that their view that the current disclosure regime
8 is not effective for a number of reasons, one of which was
9 because the ODV inputs were not sufficiently standardised,
10 and they had concerns about treatment of capital as well. I
11 wonder if this really does reflect the view as it currently
12 stands amongst a number of the parties that you've mentioned
13 here.

14 My reading of it is, they're pretty much holding their
15 fire at this point and that they do have concerns; they have
16 concerns about the disclosure regs, they have concerns about
17 the use of ODV, and that it is pretty much an open question
18 how much support you have from major users or not.

19 **DR HODGSON:** If I could make a general comment firstly and then
20 I'll respond to the specifics.

21 Contact, both in their written submissions and also
22 before the submission on Monday, pointed to the fact that
23 they were, if you like, overwhelmed with the amount of
24 regulatory processes they were under and felt there was
25 insufficient time for them to prepare properly. In that
26 context my specific comments are that in the gas review
27 process, where they did have time, they went on written
28 record as saying that they supported ODV. And I must admit,
29 they have reserved their position. Should they change their
30 position now, one would have to draw some conclusions about
31 whether it was suddenly an opportunistic view rather than a

1 consistent view over time.

2 I think their concerns, and the bit that you quoted, was
3 that they were concerned that the inputs haven't
4 consistently or transparently applied, and I think in the
5 absence of a mandated handbook that's fair comment.

6 By way of illustrating that, perhaps Contact didn't have
7 sufficient time to prepare, they also said they did not have
8 any special Transmission Services Agreements to keep
9 customers on the system, and we're clear that they have.
10 It's a question of whether, given events in the electricity
11 industry, whether perhaps they've had much time to prepare
12 and focus on the details in this inquiry.

13 **CHAIR:** I just wondered if the context of an inquiry that's
14 going to take place over the next short while; you seem to
15 acknowledge there's some difficulties with the ODV -- how
16 well specified the ODV handbook is. What are the chances of
17 us being able to deal with that in the context of this
18 inquiry, in terms of coming up with a more solid basis on
19 which to base our consideration?

20 **DR HODGSON:** Well, the draft ODV handbook has been updated just
21 recently, as Guenter Wabnitz indicated yesterday. I guess,
22 the draft is sitting there, it's been consulted with
23 industry.

24 **CHAIR:** But it hasn't actually been utilised, has it, to
25 calculate ODV?

26 **MR I WILSON:** Yes, in the absence of anything else, we have been
27 using the draft handbook as the basis of our ODV.

28 **CHAIR:** And do we know whether all parties have done the same?

29 **MR I WILSON:** All parties I think have done to some extent, that
30 there's a question about some discrepancies between ODV and
31 FRS3 in terms of valuation methodologies, and I think

1 perhaps different parties have come to a different view on
2 which is more appropriate, and that kind of ambiguity would
3 be sorted out if the handbook were mandated.

4 **CHAIR:** All right. Okay. Please proceed, thanks.

5 **DR HODGSON:** Almost at the end here. We just want to touch
6 briefly on intangibles and then I'll pass over to Forrie
7 with regard to easements.

8 In terms of intangibles as such that have a real value
9 to our business and should therefore be considered for being
10 part of the asset base, the actual systems we have in place
11 for managing our assets, being aware of when things are
12 needing renewal, needing maintenance, these are things that
13 you couldn't properly run a business of our nature without.
14 However, they're not reflected, if you like, in the fixed
15 asset base.

16 Similarly, I would say that long-term contracts such as
17 ones with the power stations obviously have a value to the
18 business in that there is some, certainly longer term
19 revenues for at least a portion of our business. And also
20 growth options have a value.

21 Now, the ODV handbook recognises a certain time horizon
22 for growth which is allowed within the assets. That is
23 subject to some debate between the industry and officials,
24 if you like. Certainly, if we are putting pipes in the
25 ground, we would be looking for a return in 15 years. The
26 Government, I think perhaps thinks you should only be
27 looking and, therefore, optimising down for growth in a
28 shorter number of years; I'm afraid I can't say off the top
29 of my head whether it's sort of 5 or 10 years, but certainly
30 there is an option value associated with that.

31 **CHAIR:** Do we have any guidance provided anywhere in terms of

1 what the definition of fixed assets are, and whether it can
2 be taken to cover intangibles?

3 **MR MILLER:** We may have to come back to you on that one.

4 **MR BIELBY:** We may be able to address that later as well.

5 **DR HODGSON:** I'll pass over to Forrie to talk about easements.

6 **CHAIR:** I'll just see if there are further questions before we
7 do that.

8 **MS BATES QC:** Just on the intangibles question; are these taken
9 into account in your own accounts at the moment?

10 **DR HODGSON:** I guess another way of looking at that question is,
11 our market value is different from our fixed asset values,
12 and certainly the market is valuing those into our accounts,
13 while they might not be reflected in the statutory accounts.

14 **MS BATES QC:** They're not reflected in your accounts as
15 produced, but if you value the business on the basis of its
16 income stream rather than its assets, then I can see an
17 argument for it, but it's not taken into account in your
18 actual accounts, is it?

19 **DR HODGSON:** I think the hardware part of the information
20 systems probably is, but not the other parts. So, it's a
21 question of intellectual property which the market is
22 valuing.

23 **MR MILLER:** Right, just on the subject of easements. The
24 position in NGC's case has been that -- the transmission
25 system obviously crosses a great deal of private land, and
26 the historic regime was the Petroleum Act which allowed the
27 Minister to establish easements.

28 **MS BATES QC:** Could you just tell me this. Under the
29 Electricity Act, there probably still is, a right of access
30 to people's land? I'm not talking about a compulsory
31 acquisition regime, I'm just talking about a straight right

1 of access to maintain the lines?

2 **MR MILLER:** Yep.

3 **MS BATES QC:** Is there any comparable provision in the gas
4 legislation? I appreciate this is something we can look up,
5 but do you know?

6 **MR MILLER:** The Gas Act has a right of ongoing access to --

7 **MS BATES QC:** What section is that, please?

8 **MR BIELBY:** We might have to respond to you on this, but my
9 broad understanding is that there was parallel Electricity
10 and Gas Acts put in in about 1992.

11 **MS BATES QC:** Yeah, I think that's probably right.

12 **MR BIELBY:** And under the electricity regime they perpetuated a
13 minimal right for people to go on to land in respect of
14 existing lines, but a broad right pre-92 for electricity
15 lines operators for people to go on to people's land was
16 taken away, and post --

17 **MS BATES QC:** No, no, there's a right to go on to people's land
18 under that Act, but the change was that it's now restricted
19 to maintenance, and that maintenance has been defined by the
20 Courts not to include upgrading. So that the actual -- the
21 right is more limited, but you can still go on there.

22 **MR BIELBY:** You can still go on there, but with new lines that
23 you built post-92 or any upgrade, you're on your own
24 recognizance and you had to negotiate with the landowner.
25 Now, my broad understanding is, it's the same, and the Gas
26 Act will need to confirm, but the practical position from
27 NGC's point of view is, we haven't really had to rely on
28 these statutory rights at all because we do have these
29 easements in respect particularly of the transmission
30 system, and otherwise the pipes go down the road reserve as
31 they get down to the low pressure systems where you don't

1 need easements, you can rely on your rights to go into the
2 road reserve.

3 **MR MILLER:** Yep, I think that's summarised the position. So,
4 there are easements in place in relation to private land,
5 it's obviously particularly a feature of the transmission
6 system that runs over a great deal of private land. They
7 were the subject of the Public Works Act regime.

8 **MS BATES QC:** That's another thing that I wanted to ask you
9 about, as the Public Works Act regime operates where it's
10 considered to be essential -- upgrading's gone or whatever
11 it is, it is essential to take the land. I mean, would you
12 always come within the Public Works Act framework? I mean,
13 do you always have compulsory acquisition as a tool to
14 negotiate with?

15 **MR MILLER:** That was the position under the Petroleum Act, yeah,
16 so that invokes the Public Works Act provisions in relation
17 to how the taking is done and compensated for.

18 **MS BATES QC:** I know, but you still have to reach a threshold
19 with the Public Works Act to get that to come into
20 operation. You understand what I mean?

21 **MR MILLER:** That arose out of the Minister's decision, though,
22 to designate the easement.

23 **MR BIELBY:** And the frontline position going forward is under
24 the RMA, so if we want to lay out a new pipeline we need a
25 designation or a network utility operator, and underlying
26 that there is the right to invoke the Public Works Act if
27 you can't agree with landowners. Now, that's an extremely
28 rarely, if ever used, provision to hook into the Public
29 Works, but it does exist.

30 **MS BATES QC:** Yeah, I know about the provision, but don't you
31 actually have to -- to invoke that regime, there has to be

1 an element of, it's necessary to do so? Do you understand
2 what I mean? If you're just putting in networks that are
3 not "necessary" in a Public Works sense, then you may not
4 have the right to invoke that?

5 **MR BIELBY:** That's actually built into the RMA test so you can't
6 designate the land unless you get pass a need threshold.
7 Once you've got the designation then you go in and negotiate
8 for the land once it's in the District Plan.

9 **MR MILLER:** So that's the short point I think in relation to the
10 road reserves, there are no easements because you don't need
11 them. But the short point has been that there's an
12 obligation to compensate in circumstances where you have
13 required an easement that is in relation to private land.
14 [Pause].

15 **MR BIELBY:** That just brings us to the end of the --

16 **MS BATES QC:** Just on the easements question; do you think it
17 would be possible -- I mean, are all the easements in the
18 same terms, or do you have different types of easements? It
19 would be quite helpful for us to actually see some examples,
20 with the terms.

21 **MR BIELBY:** Look, I imagine we could, I don't know if
22 Mr Wilson's got some general comment, otherwise that's
23 something we'd happily come back to you on.

24 **MS BATES QC:** Could you? It might be helpful.

25 **DR HODGSON:** It would have to be a sample. We have just over
26 3,300 easements.

27 **MS BATES QC:** I don't imagine for one moment any of us wants to
28 look at that, no, it's just -- is there a standard form?

29 **MR I WILSON:** They have changed slightly over time, but we can
30 give you samples at different points of time.

31 **MS BATES QC:** And transferability, of course, is something you

1 need to look at in those easements, in terms of their
2 ongoing value.

3 **MR I WILSON:** Sure.

4 **CHAIR:** Try to make sure the sample's as representative as you
5 can get it.

6 **MR BIELBY:** Without diverting, there's a wonderful room in our
7 office up in Bell Block in which these easements for 5,000
8 kilometres worth of pipe are managed, and some wonderful
9 staff who do it, we'll talk to them.

10 The summary slide is the same one I introduced to remind
11 you what we set off to say and what I think we've hopefully
12 covered.

13 There is one other point I did want to highlight. The
14 Chair was raising some good points about the extent to which
15 we particularly have the regulatory situation pinned. Just
16 one other reflection I'd like to offer is that, the material
17 you've heard here that looks back over particularly the
18 self-regulatory aspects is very important to NGC.

19 So, although I do have to agree with your analysis as to
20 what's actually bolted and what the Commission can take as
21 sufficiently certain, I wouldn't want you to go away from
22 this presentation giving anything other than quite
23 significant weight to the material we're putting about self-
24 regulation.

25 This industry, as Mr Goodwin said to you yesterday, got
26 its act together and a great deal of effort and investment
27 has been put into self-regulation. Yes, we have to say to
28 you the Government stood back to an extent and watched. It
29 never formally endorsed, but there is a very very
30 considerable investment and merit associated with the
31 systems we put in place.

1 If I could draw it closer to the Commission's ambit,
2 over the years when we've come to you with an application
3 for clearance or similar we've provided you with all these
4 documents and said that we consider they provide a very
5 significant fetter or constraint on what we do; we put it in
6 place voluntarily and we hope due weight will be attached to
7 that system that's been put in place over the years.

8 Now, I'm just checking, were there any other comments
9 from NGC's side, otherwise what we propose to do is move to
10 Professor Boyle.

11 **CHAIR:** We'll just take a few questions and then we'll move
12 forward, thank you.

13 **MS BATES QC:** I just want to know how you handle land at the
14 moment in your accounts; how do you value it?

15 **MR BIELBY:** We don't own a lot of land.

16 **MS BATES QC:** Well, you must own some, surely.

17 **MR I WILSON:** It's recorded at historic costs in the accounts.

18 **MS BATES QC:** I thought it might be.

19 **MS BEGG:** Just a question on your pricing methodology for the
20 open access approach. Do you in that pricing methodology,
21 do you make reference to your asset valuation at ODV and
22 cost of capital on that in calculating your prices, and if
23 you do, how do you estimate the weighted average cost of
24 capital?

25 **MR I WILSON:** Sorry, could you repeat that question?

26 **MS BEGG:** In setting your pricing methodology, do you calculate
27 an overall revenue requirement, I guess, is what I'm asking,
28 based on your asset value and required rate of return?

29 **MR I WILSON:** Yes, but perhaps not in the black and white way
30 that you are representing there. Certainly when we were
31 under price control back in the early 90s, that was the

1 approach very much; it was quite clear cut. Now there's a
2 much more commercial approach to the whole issue.

3 Certainly, rates of return are one issue, but the recent
4 price review, for example, has focused mostly on the cost
5 side where we've got significant shifting costs, and there's
6 also a lot more emphasis now on the views of customers about
7 price changes, and that wasn't top of mind when we were
8 under price control, so we didn't really have to pay so much
9 attention to that because the Commission, if you like,
10 represented those views, or acknowledged those views.

11 Now we're in much more of a commercial situation.
12 Prices are to some extent negotiated and we're looking over
13 our shoulders back at what happened the previous year, what
14 kind of outcomes we got in terms of throughput through the
15 system, and returns.

16 So, it is true that we're paying attention to all these
17 factors when we look at prices, but there's certainly not a
18 single focus on WACC, for example, or rates of return.

19 **MS BEGG:** So when you say you optimise down the pipelines and
20 that affects prices, that's an indirect sort of effect, and
21 the same with the distance pricing you talked about,
22 it's...?

23 **MR I WILSON:** That's right, it's an affect that would be
24 apparent over time. If you look back, for example, over our
25 disclosed returns, accounting weight of profit for example,
26 you will see that there's quite a bit of variability year-
27 on-year, perhaps on transmission, for example a couple of
28 percent.

29 So, it's very difficult to -- you get that opportunity
30 once in a year to adjust the steering wheel and it's very
31 difficult to end up at exactly one point; so many other

1 factors will affect it during the year. This past year, for
2 example, we've had the rates issue and the change in the gas
3 price, two major effects on costs that weren't anticipated.

4 **MS BEGG:** I just had a question on the easements, and you
5 mentioned that Contact had threatened to build their own
6 pipeline to Auckland, and you were talking about
7 developments in the Wairarapa. I just wondered what
8 proportion of the total cost of laying a pipeline would be
9 attributable to acquiring easements, if you had a sort of
10 order of magnitude feel for that?

11 **MR I WILSON:** Perhaps we could come back to you on that, but
12 we've recently been through the exercise of designating a
13 pipeline to Auckland, so we've obviously been in negotiation
14 with the landowners there, and although we haven't made
15 those payments yet, we will have made an assessment of how
16 much we will have had to pay. My feeling is that it would
17 be of the order of 5 to 10%, but if we could come back on
18 that.

19 **MR MELVILLE:** Yeah, I've just got a question regarding your
20 treatment of FRS3 and ODV. I was wondering if you can even
21 briefly explain now, provide some information about how you
22 treat that relationship in your reporting in your annual
23 reports.

24 **MR I WILSON:** We only have one valuation. The ODV is the
25 valuation we carry through into our statutory accounts.

26 **MR MELVILLE:** It's just, I understand that FRS3 or ODV doesn't
27 fit naturally with FRS3 and I was wondering how you treated
28 that relationship or how you allowed it to fit in?

29 **MR I WILSON:** There are certainly issues between ODV and FRS3,
30 and we have discussed those in some detail with our
31 auditors. In the end we came to the view that, for NGC at

1 any rate, they were unlikely to be material.

2 **MR MELVILLE:** And also, when you're providing the information on
3 easements, can you provide a breakdown of the total value of
4 your easements and also the methodology you used to value
5 those?

6 **MR I WILSON:** Yeah.

7 **MR MELVILLE:** Thank you.

8 **MR ADAMS:** Mr Bielby, you summarised right at the end, talked
9 about effectively; the argument as I understood it was that
10 there's not a need for industry control here because the
11 industry has proven over the last 5 years or 7 or 8 years
12 that it is able to self-regulate and introduce open access
13 regimes and so on and that that would indicate that formal
14 controls of the sort we're talking about here aren't
15 necessary.

16 But I was just wondering whether -- my memory of that at
17 the time was that these things were -- took a long time to
18 develop, there was the constant threat of Government and
19 Commerce Commission and probably other bodies putting
20 pressure on the industry to develop this.

21 If the Commission and the Government came to the
22 conclusion that control wasn't necessary here, as you have
23 been arguing, would that pressure that's constantly on the
24 industry now, not lessen considerably, that the threat of
25 the Government doing something terrible would dissipate so
26 that you wouldn't have the same incentive to self-
27 discipline?

28 **MR BIELBY:** That's a good question, Dick. Point one, we're not
29 arguing that you shouldn't control full stop or black and
30 white because of the regime in place. My comment was, we'd
31 like weight to be put on that, but coming back to the

1 earlier discussion, the Commission's got a request to go
2 through the industry, it should do so and take into account
3 all factors if a control decision is put in place. That's
4 fine. So, we'll participate in the process. All I'm saying
5 is, that look-back view has some quite substantial elements
6 that we wouldn't like to brush over lightly.

7 The second point I'd make is indeed the pressure you're
8 talking about that was applied at the time I think does, to
9 an extent, confirm the point we're making that the
10 Government was there, it was reasonably close, and the
11 Commission was in the room as well, and whether you -- even
12 if no-one gave it a formal stamp, in the end there were real
13 pressures brought to bear to get a solution and a solution
14 was found on a voluntary basis.

15 To put it bluntly, we think we should get a big tick for
16 that, because we got together, and as Mr Goodwin said,
17 proved to be an industry that could do stuff, and perhaps in
18 contrast with some of the things around, say, electricity
19 distribution that weren't able to be quite as well
20 organised, but I wouldn't take it any further than that.

21 But look, going forward, yes, if the Commission goes
22 through and decides for any reason not to impose control, I
23 would hope that would be for good reason as well, and if
24 some of the pressure came off at that point because we'd
25 done a good job in organising ourselves, probably we've
26 earned it.

27 **CHAIR:** I just want to say, it won't be the Commission's
28 decision to impose control. I'm sure you realise that we'll
29 be making our recommendation to the Minister one way or the
30 other.

31 **MS BATES QC:** There's just one more matter I want to follow-up

1 and that is disclosure of pricing methodologies, because I
2 note that Regulation 20 of the regs requires the businesses
3 to do that.

4 **DR HODGSON:** The compliance with that regulation is carried out
5 through the information memoranda, so there's disclosure of
6 the methodology in there.

7 **MS BATES QC:** And where is that?

8 **DR HODGSON:** We've got them on the website but we can certainly
9 get some copies printed if you'd like?

10 **MS BATES QC:** I'm just interested in it. What is the
11 relationship between the pricing methodology used and ODV
12 currently?

13 **MR I WILSON:** Umm, yes. The pricing methodology was a
14 methodology that was developed in negotiation with the
15 industry at the early days of deregulation, and what the
16 methodology will say is that NGC aims to recover its costs
17 and a fair return on its investment. Having said that, I
18 think it is -- we do need to point out that the methodology,
19 it's actually called "the optimised system costs
20 allocation", it's just a costs allocation, it hasn't
21 actually been used since 1999, and the reason for that is
22 that the prices that the transmission pricing methodology
23 threw up were just too volatile in the marketplace. They
24 produced prices that at any one particular delivery point
25 would go up and down quite dramatically year-on-year, and
26 those movements in price weren't necessarily, or at all, a
27 reflection of any movement in underlying economic costs;
28 they were just purely a result of the methodology.

29 So, NGC since that time, since 1999, has effectively
30 frozen prices apart from a PPI adjustment last year.

31 **MS BATES QC:** So, let me just try and get this clear. If I

1 looked on the website I'd find your pricing methodology?

2 **MR I WILSON:** Correct.

3 **MS BATES QC:** That it was in operation in 1999?

4 **MR I WILSON:** That's the pricing methodology that we've used
5 since coming off price control until 1999.

6 **MS BATES QC:** But you don't use that, what's on the website, any
7 more?

8 **MR I WILSON:** We haven't recast the prices according to that
9 methodology since 1999. There's effectively been a price
10 freeze apart from a PPI adjustment last year.

11 This year we've advised retailers that we'll be --
12 before the end of this calendar year we will be discussing
13 our proposals for a new pricing methodology with them.

14 **MS BATES QC:** Sorry, but I'm still not clear. Are you using the
15 pricing methodology shown on the website?

16 **MR I WILSON:** The pricing methodology hasn't been used since
17 1999.

18 **MS BATES QC:** Okay. So, in fact, I'm not -- you don't appear at
19 the moment to be complying with the regulation?

20 **DR HODGSON:** Sorry, I guess the point we were sort of talking at
21 cross-purposes; the prices that have been used for
22 transmission were generated by that pricing methodology. I
23 guess your point is that, since we didn't change the prices
24 over time, we haven't actually reflected that fact in what's
25 on the website, no, but the underlying prices were generated
26 by that methodology.

27 **MS BATES QC:** And what I did ask you was to explain the
28 relationship of your methodology to ODV and I'm not sure
29 whether I understood the answer.

30 **MR I WILSON:** Yes. The methodology says that NGC will aim to
31 recover its costs and a return on its investment, and that

1 would mean a return on the ODV valuation.

2 **MS BATES QC:** Okay.

3 **CHAIR:** Okay, thank you. We can proceed then with Professor
4 Boyle, if you like, please.

5 **MR BIELBY:** We've got just a few slides here in presentation,
6 you should have those in front of you as well, and I think
7 Professor Boyle will be known to the Commission, and I'll
8 just hand over to him in that case.

9 **PROF BOYLE:** Thank you. Good morning.

10 **CHAIR:** Welcome back.

11 **PROF BOYLE:** Thank you, it's a pleasure to be here again to try
12 and convince you of the merits of my views.

13 The issue that I have to talk about is a very small one
14 than the very wide range of issues that you have to
15 consider, so I'll therefore try to be correspondingly brief,
16 thereby leaving as much time as possible for you and Martin
17 to ask me any impossibly difficult questions. That's the
18 good news.

19 The bad news is that in doing so I'm going to have to
20 move away from the specifics of NGC and delve into the
21 realms of the abstract, because my topic that I've been
22 instructed to talk about is measurement of the cost of
23 capital.

24 Now, as an academic theorist I think this is absolutely
25 fascinating but strangely not everybody seems to share my
26 views on this.

27 In the past the Commission's approach to this subject
28 has been to use a weighted average of the estimated costs of
29 debt and equity capital, the so-called WACC. And, within
30 that, to estimate the cost of equity using the capital asset
31 pricing model, the CAPM.

1 Now, I'm not going to get into the details of that
2 particular approach, instead what I am trying to draw your
3 attention to is the fact that, for the purposes of
4 estimating the cost of capital for any firm or investment
5 project, that approach is not necessarily a complete one.

6 In a nutshell, contrary to the CAPM WACC framework view
7 that holds that only systematic risk matters for the cost of
8 capital, what I'm going to argue is that there are good
9 economic reasons for believing that unsystematic or project
10 specific risks matter also, and that they potentially matter
11 quite a lot.

12 Now, in order to see where I'm coming from, we have to
13 delve a little bit into the bowels of the CAPM itself, and
14 it's important to remember just what issue it is that the
15 CAPM tries to address. The CAPM is a stylised model that
16 describes the pricing of financial market securities. So,
17 what it does is set up a framework for describing the
18 optimal construction of portfolios and asset pricing in
19 financial markets.

20 So, it provides an answer to the question, what expected
21 return is required by an investor on a \$1 invested in some
22 firm's shares? Now, that's not quite the same question as
23 what we're concerned with here, or it's not quite the same
24 question that confronts a firm when it has to make some
25 investment decision.

26 Because then what we want to know is, this -- the
27 question that then is asked is, what expected return is
28 required by that same investor when the firm applies that \$1
29 to a specific purpose? That is, it spends that \$1 on some
30 investment project?

31 Now, the answer to the first question we know from the

1 CAPM is that only systematic risk of the investment matters.
2 Does that also apply to the second question? And, based on
3 finance theory and practice my answer to that is, no.

4 Stealing a title of a very recent Journal of Finance
5 paper, idiosyncratic risk matters. By "idiosyncratic risk"
6 I mean firm and project specific risk.

7 There are two main reasons for this, and these are
8 covered in some detail in the written submission, in fact I
9 see I've actually got two submissions on the programme, one
10 of which is a year old but essentially covers the same
11 ground, so, some might say I've already said far too much
12 about these issues, but I'll just briefly repeat the reasons
13 for why project or firm specific risk matters for the second
14 question; the question of what's the cost of capital on some
15 investment project.

16 The first is, is that these risks, these firm and
17 project specific risks potentially expose the firm to the
18 costs of financing constraints. When a firm makes an
19 investment, then it potentially exposes itself to losses on
20 that investment. Now, to the extent that those losses
21 aren't correlated with the return on the market portfolio,
22 that is they're unsystematic, then they don't matter
23 directly to investors, providers of the capital that the
24 firm's spent because those losses can be diversified away.

25 However, that's not the full story, because although
26 there are no direct costs, there are indirect costs because
27 these losses can weaken the firm's financial position. And,
28 in the presence of market frictions, once a firm's financial
29 position becomes weakened, it finds it harder to raise
30 capital to fund its other projects, its future projects, its
31 ongoing projects.

1 So, financing becomes more costly, or in the worst
2 possible case, it can't raise funding at all, and what that
3 does, of course, is lower the value of the firm's other
4 projects that may already be existing, or that may be coming
5 along in the future. In the worst possible case, the firm
6 may actually have to abandon some of those projects. In
7 other words, it losses valuable investment opportunities
8 because of these financing constraints, these costs or
9 restrictions on financing.

10 And what that means, therefore, is that when the firm
11 comes to spend that \$1 that the investor has provided, it
12 uses not only that \$1, but because of the specific risk of
13 the project, it also eyes up some other capital in the firm;
14 the fall in the value of these other firm assets, the future
15 and current investment opportunities.

16 And so, as a result, in order for the investor to earn
17 his required return, say it's 10%, on all the capital that
18 the firm's using up, he obviously needs to earn more than
19 that return, more than 10% on the direct capital cost, on
20 the \$1 itself. And so, there we have the first source of a
21 wedge between the conventional WACC and the true cost of
22 capital. When there are market frictions, then the active
23 investment itself exposes the firm to these project specific
24 risks in a systematic manner by exposing the firm to
25 financing constraints which affect the value of the firm's
26 other projects. That, and I'll come back to this very
27 briefly later, is a phenomenon that's ignored by the CAPM
28 WACC framework.

29 The second reason for why a project or firm specific
30 risk can matter is a little bit more subtle, but I'll try
31 and explain it as briefly as I can. Most projects have some

1 degree of irreversibility involved in them, and by that I
2 mean that they can only be taken once. If the decision to
3 make some investment subsequently turns out to be a bad one,
4 then most of the time the firm that's made that decision
5 can't just switch that investment off and pretend the
6 original decision never happened. There are irreversible
7 costs associated with that original decision to invest, and
8 that's what I mean by irreversibility.

9 Now, what that means is that there's obviously for the
10 firm an incentive to make very sure, or at least as sure as
11 possible, that it's made -- it makes the right investment
12 decision, and in particular that it invests at the right
13 time. It doesn't want to invest today and find out a year
14 down the line, this was a bad idea, we should have waited
15 and gathered more information.

16 So, in the presence of irreversible investments the
17 ability of the firm to time its investment, to delay
18 investment, is a valuable piece of flexibility; in effect,
19 it gives the firm an option on investment, something it can
20 choose to do but can choose not to do if conditions don't
21 turn out to be viable for the investment. But of course,
22 flexibility is valuable, and that flexibility is therefore a
23 part of the capital of the firm.

24 Therefore, when it comes to use the investor's \$1 for a
25 specific purpose, for some investment, it uses up not only
26 that \$1 but also it sacrifices the value of this option to
27 wait, because of course once it's used, once the project has
28 begun, that option to wait no longer exists, it's been used
29 up.

30 And so, again, when the firm expends the specific \$1, or
31 spends this \$1 on a specific purpose, the investor requires

1 his expected return, not only on that \$1 but also in the
2 loss of value of his other claims -- his claim to the
3 remaining firm assets, the loss of this timing option. So
4 again, if the required rate of return according to the CAPM
5 is 10%, then that's the 10% on all the capital used, it's
6 gonna be a bit more than 10% on just the \$1 itself.

7 Now, both of these issues of irreversibility and market
8 frictions don't feature in the CAPM WACC framework, and as
9 far as the CAPM is concerned I think that's quite
10 reasonable, because the CAPM is a description of the way
11 assets are priced in financial markets, and these issues of
12 irreversibility and frictions really don't apply in
13 financial markets. It's when we try and apply the CAPM to
14 this more concrete situation of what's the cost of capital
15 for a firm's investment project that these factors come into
16 play.

17 That's the general idea. I thought it might be useful
18 just to give you some idea of the potential quantitative
19 implications of these ideas for the cost of capital. Now,
20 you'll have noticed in I think both of the written
21 submissions that I've got in, references to empirical and
22 mainly survey evidence on actual hurdle rates that firms use
23 in practice, and these seem to be far greater than any
24 possible, the maximum possible value of WACC. So, that's
25 fairly compelling evidence that in practice firms do care
26 about project specific risks and that they incorporate them
27 in investment decisions.

28 What that same evidence tells us, though, is that the
29 framework for incorporating those risks in the cost of
30 capital tends to be a fairly ad hoc one. That is, the
31 typical firm seems to say, well, we use the CAPM and the

1 WACC and then we add a bit more on, and the bit more seems
2 to be by and large a number that's picked out of the air,
3 and to be fair, that fairly well represents until very
4 recently the state of play in the finance research areas to
5 how we might actually quantify these additional project
6 specific risks.

7 However, in recent years there's been a bit of progress
8 in this direction and so just to give you some idea of the
9 sort of effect these factors can have; with regard to market
10 frictions there's a forthcoming paper in the JFQA, by Frank
11 Kerins, Jane Smith and Richard Smith that takes the specific
12 case of entrepreneurs and venture capitalists and considers,
13 well, given the fact that there are considerable market
14 frictions related to these types of investments, what effect
15 does that have on the cost of capital?

16 And what they show is that the standard CAPM needs to be
17 modified, as I've indicated in the first bullet point, and
18 what I've then done is simply applied that to NGC. I've
19 gone away and used the market data to estimate the
20 parameters and plugged those into that formula and you see
21 you come up with a cost of equity of 27%, which obviously is
22 a bit higher than anything you'll have seen in here before.

23 Now, I'm not suggesting that you should take that
24 estimate literally. It's a rough and ready idea -- or rough
25 and ready calculation to give you some idea of the sort of
26 effects that the interaction of project specific risks and
27 market frictions can bring about. The types of frictions
28 envisaged in the Kerins et al paper are probably a bit more
29 extreme than those faced by NGC. So I think we can safely
30 assume that 27% is probably an upper bound, but
31 nevertheless, I think the point is useful from an

1 illustrative purpose.

2 With regards to irreversibility, here we're on somewhat
3 firmer ground, because the modelling process of the costs
4 associated with this form of risk is much better developed,
5 and Bob McDonald of northwestern, who is one of the two
6 original researchers that demonstrated the whole idea of the
7 value of waiting to invest, has shown that we can actually
8 come up with a very simple formula for the margin that must
9 be added to WACC for the costs of irreversibility.

10 It's probably not too illuminating from the slide up
11 there, but it's equal to a ratio; on the numerator it's
12 something called D, which is actually just a dividend yield
13 of the project, and in the denominator there is another
14 unknown parameter, B, or B minus 1. B's a bit complex, but
15 what it effectively depends upon is the volatility or the
16 project specific risk of the investment being considered.

17 Again, I've just done the same thing, I've taken NGC and
18 market data for the last year, estimated the parameters that
19 go into that formula and substituted them back in, and you
20 will see that I get a WACC margin of 6.7%.

21 Now again, I'm -- I would stress that -- or I'm not
22 suggesting that this estimate should be taken too literally
23 and is the be all and end all, because this formula assumes
24 that the option to wait is a perpetual one. Now, speaking
25 to the boys at NGC, I gather that while they do have
26 flexibility to time their investments, it probably doesn't
27 go on forever. So, this again probably overstates to some
28 extent the costs associated with irreversibility, but again
29 I think it's a good illustration of the potential effects
30 that these types of -- or in that case irreversibility can
31 have.

1 So, to sum up, contrary to the CAPM WACC view of the
2 world, which I agree is a very good description of the way
3 financial markets operate, I think that once we move away
4 from financial markets and consider the costs of undertaking
5 actual physical investments, there are other factors that
6 the Commission might want to consider. Thank you.

7 **MR STEVENS:** Professor Boyle, if I may ask a question that
8 really came out of the issue of timing of flexibility, and I
9 don't know if it's one that you can answer. But previously
10 when we were looking at the potential for new pipelines
11 emerging in the Wairarapa and the East Coast, and we talked
12 about the contestability of the investments that are going
13 to be required in that market, and obviously there will be
14 other players who are seeking to actually invest in the
15 roll-out of any new gas pipeline.

16 Does that suggest, therefore, that there is limited
17 flexibility on NGC to be able to time whether it goes into
18 those types of investments or not given that, if they don't
19 step up to the plate, others soon will?

20 **PROF BOYLE:** The short answer is, yes. So my 6.7% there would
21 be correspondingly lower because that assumes that the
22 option's perpetual and what you're pointing out is that in
23 this case for competitive reasons it may not last very long,
24 or there will be limitations as to how long that flexibility
25 will last.

26 **MR STEVENS:** Will almost be a nanosecond if the competitiveness
27 is that strong.

28 **PROF BOYLE:** Well, that would potentially reduce that value of
29 that increment to zero, but I'd be surprised if the
30 flexibility was quite that short.

31 **MR STEVENS:** Another question that really just highlights my

1 lack of understanding in some of the areas, but to a certain
2 extent once you have perfect business knowledge then the
3 decision is no longer a business decision. Would you agree
4 with that? I mean, there comes to a level that once you
5 have perfect knowledge and you are no longer taking a risk
6 assessment so your flexibility will be limited by that also?

7 **PROF BOYLE:** I think the point of this is that, you don't have
8 perfect business knowledge, that in fact investment
9 decisions are highly uncertain and, therefore, to try and
10 minimise the adverse effects of that uncertainty, the
11 optimal investment policy of the firm is to, in effect, add
12 a margin to WACC.

13 **MR STEVENS:** Would you likewise add a margin to your income
14 potential from it?

15 **PROF BOYLE:** For uncertainty?

16 **MR STEVENS:** [Nods]. Because other players in the market would
17 be in a similar position unless they had access to better
18 information than you did.

19 **PROF BOYLE:** Quite. I mean, for different firms the risk of a
20 given investment may be different, so depending on the
21 particular situation, it may be that laying out some pipe
22 for NGC is inherently less risky than for, say, Powerco.
23 And in which case the value of the timing flexibility is
24 less for NGC than it is for Powerco.

25 **MR STEVENS:** So NGC are more likely to be in a better position
26 given that they are already the main player in the
27 transmission pipeline business, for example, and their
28 likely competitors are more likely to be from overseas
29 competitors who have less knowledge of the New Zealand base
30 market?

31 **PROF BOYLE:** I think I'd rather not speculate on that. That

1 would be very difficult to say. It's true that NGC already
2 have pipe in the ground, but presumably they may well be
3 interested in putting more pipe in the ground?

4 **MR BIELBY:** With respect, I don't think you can derive that from
5 Professor Boyle's proposition, I think his example's a good
6 one; you know, if a proposition comes in to build a pipeline
7 from Wairarapa. They call a tender process, our friends at
8 Powerco might well have a go, someone from France might well
9 have a go, we'll have a go, we'll each have our own risk
10 profiles and might look at our WACCs differently.

11 **MR STEVENS:** Just from the market friction side -- I mean, I can
12 understand the reversibility as the effect you're talking
13 about to a certain extent. On the market risk side I was
14 having a little bit of difficulty actually understanding the
15 basis of the formula there and what other issues you take
16 into account. Could you possibly walk us through a little
17 bit more slowly through that aspect?

18 **PROF BOYLE:** Through the formula or --

19 **MR STEVENS:** What are you actually measuring in terms of the
20 market frictions again?

21 **PROF BOYLE:** Okay. What I'm thinking of is the situation where
22 a firm takes on a risky project. Now some of that risk
23 would be systematic and would be priced via the CAPM, be
24 incorporated into the WACC. The rest wouldn't be, but the
25 rest can nevertheless have a real economic cost, because
26 suppose that project goes badly and the firm incurs losses
27 as a result; it's still got other projects ongoing, it's got
28 new projects coming on-line, it needs funding to undertake
29 those other projects or to keep the existing ones going.

30 Now, where does it get that? Well, it gets that capital
31 from the usual sources. But the trouble is, those usual

1 sources now see that the firm's, you know, not quite the
2 same base it was before it undertook this original project.
3 Previously it was profitable, now it's suffering losses, so
4 they're gonna say, well, that's not quite such a good
5 investment any longer, we might not offer you any more
6 funds.

7 **MR STEVENS:** So are you suggesting therefore, for example, if
8 we're looking at an equity investor or a debt provider, that
9 they more concentrate on the wider NGC which is as opposed
10 to the particular project at hand?

11 **PROF BOYLE:** Well, in the future, once the -- if the project at
12 hand suffers losses, then any future providers of capital
13 are in fact providing capital for, at least in part, future
14 investment opportunities as well as the ongoing ones.

15 **MR STEVENS:** So you're suggesting therefore --

16 **PROF BOYLE:** So they would, yeah, I am suggesting that.

17 **MR STEVENS:** If the project suffered a loss this time that that
18 cost, therefore, would be allocated across the future
19 projects?

20 **PROF BOYLE:** Yes, that's right and that has an effect on the
21 value of the firm's capital now, because of course the value
22 of the firm reflects both the value of its assets in place
23 and its future growth options, as I think Paul mentioned
24 earlier.

25 **MR STEVENS:** Thank you.

26 **PROF BOYLE:** And it's the value of the latter that would be
27 affected primarily by the project's specific risks and the
28 market frictions.

29 **CHAIR:** I'm just mindful of the time, but I would like to ask
30 our own advisor, Dr Lally to put any questions that he has
31 to you at this time, please.

1 **DR LALLY:** Thanks. Glen, you've raised two issues, what you
2 call market frictions and also the irreversibility issue,
3 and it was my intention when I came down here this morning
4 to ask you just how you might quantify these things, and I
5 see that you have perfectly anticipated that question and
6 provided some information here.

7 Obviously, the Commission would be interested in seeing
8 the calculations that underlie the figures that are
9 presented here in this slide, so rather than ask you at this
10 point to work through exactly what your parameters were and
11 so forth, it might just be more sensible if you were to give
12 us the detail that lies behind that.

13 I trust you would agree, if we look at the market
14 frictions issue, that if this cost of equity of 27% is an
15 upper bound, and the conventional number that comes out of a
16 CAPM framework is something less than that -- and let's just
17 for argument's sake call it 12 -- that the truth lies
18 somewhere between 12 and 27. Do you have any means of, in
19 the light of such a wide band, do you have any suggested
20 mechanism for arriving at just where we are in such a very
21 wide band?

22 **PROF BOYLE:** So you are going to ask me how I quantify it.

23 **DR LALLY:** Well, you've quantified an upper bound but you
24 haven't actually told us how we might figure out where we
25 lie between the upper and lower bounds.

26 **PROF BOYLE:** No you're quite right, I haven't, and I think it's
27 fair to say that I can't, at this particular date anyway,
28 shed much more light on that. It wasn't part of the brief
29 at this stage because we're only developing a framework, and
30 I guess my approach has been to try and convince the
31 Commissioners that they should take these ideas on board and

1 then we'll worry about how exactly it might be quantified.
2 And so, I've given a couple of examples of recent
3 developments that address this issue that maybe, and only
4 maybe, we could exploit to try and come up with something
5 better than an upper bound.

6 **DR LALLY:** In terms of the market frictions issue, my own
7 personal position here is that you're knocking on an open
8 door. The general principle is accepted, and it's really
9 just a question of how big the premium is.

10 The way I like to look at these kind of issues is to
11 treat them as very much an example of a general issue that's
12 called asymmetric risk. What we're looking at here is some
13 adverse side effects from taking on a project that aren't
14 generally recognised in cashflow forecasts, and I suppose
15 one way of trying to deal with them would be to make some
16 allowance for these adverse side effects, possible adverse
17 side effects in the cashflows, and another way of trying to
18 deal with it would be through the discount rate. Would that
19 be fair comment?

20 **PROF BOYLE:** Oh, absolutely. For a couple of reasons I tend to
21 think that in this particular situation the discount rate
22 adjustment is more feasible. Adjusting the expected
23 cashflows, given that you're talking about big numbers, is
24 going to require a degree of precision that I'm not at all
25 confident that any of us would be able to come up with.

26 Adjusting the discount rate, on the other hand, there's
27 a bit of work to show that it doesn't matter too much how
28 much you adjust it, as long as you don't end up with a
29 discount rate that's too low. Because, if you set a
30 discount rate that's too high, then at least from the
31 dynamic investment point of view -- ignoring the fact that

1 those of us who pay for gas would have to pay very high
2 prices -- just from the dynamic investment point of view,
3 firms tend to be constrained, not necessarily by their
4 financial capital, but simply by organisational, managerial,
5 physical, all sorts of other resource constraints.

6 And so, while setting a rate too high obviously
7 encourages wasteful investment, there's generally a fairly
8 binding limit on how much of that they can actually
9 undertake. So in other words, as long as you get the
10 discount rate somewhere in the right ballpark, you capture a
11 lot of these costs.

12 The other reason, and I'm sure Lew Evans sitting behind
13 me will tell me if I'm wrong here, but my reading of a paper
14 by himself, by Lew and Graham Guthrie, suggests that the
15 same thinking applies to the irreversibility issue. Namely,
16 that if you set the rate too high, it doesn't have much
17 effect in terms of accelerating investment, in terms of
18 wasteful investment, but if you set it too low, even by a
19 little bit, it really results in a big delay of investment,
20 and so the effect's asymmetric there.

21 For those sorts of reasons, I think it's easier in this
22 case to adjust the discount rate rather than the expected
23 cashflows.

24 **DR LALLY:** Sure. That's a pragmatic point. I was thinking more
25 in terms of getting my head round the concept that you could
26 think about these market frictions as being like an
27 asymmetric cashflow effect and, therefore, they need to be
28 taken account of. From a pragmatic point of view you could
29 do it through the discount rate, you could do it through the
30 cashflows, but in principle one could think about these
31 things as being adverse side effects in the cashflows;

1 purely in principle.

2 **PROF BOYLE:** Sure.

3 **DR LALLY:** If I move on from there and think about the whole
4 regulatory process, it's perhaps a little simpler in
5 regulation to think about regulating output prices rather
6 than just looking back over a firm's cashflows and profits
7 to see whether it has in fact earned excess profits. The
8 end result of this whole process may very well be price
9 control. So, perhaps from a regulatory point of view it's
10 easy to think about these sort of concepts in terms of
11 what's the right output price to set. Okay.

12 **PROF BOYLE:** Yeah.

13 **DR LALLY:** Now, in trying to figure out what appropriate output
14 price would be, would you agree that the net present value
15 test would be appropriate. That is, one should set an
16 output price so that the present value of the future
17 cashflows over the life of a project equals the initial
18 investment by the firm?

19 **PROF BOYLE:** Given a correctly estimated cost of capital, yes.

20 **DR LALLY:** Right. And if we take the market frictions as an
21 example of that, if you don't provide for them in the
22 discount rate and you ignore them in the cashflows, then the
23 resulting present value of the cashflows will be less than
24 the initial investment. So, the output price will not be
25 high enough to meet that net present value test.

26 **PROF BOYLE:** That's right.

27 **DR LALLY:** And again, what I'm -- from a purely conceptual point
28 of view here, I'm trying to accommodate these kind of issues
29 through the cashflows rather than the discount rate, but
30 that's just an approach in principle, I'm not debating
31 whether from a pragmatic point of view it might be easier to

1 do the mechanical adjustment through the discount rate; I'm
2 just thinking at a conceptual level, okay.

3 **PROF BOYLE:** Sure.

4 **DR LALLY:** Okay, if we take that net present value test in which
5 market frictions are dealt with as asymmetric cashflow
6 effects that ought to be provided for in the cashflow, or
7 could be provided for in the cashflow estimates, and the
8 cost of capital is defined in the usual CAPM way but we've
9 got to crank up the allowed cashflows to reflect these
10 possible adverse side effects in order to satisfy the MPV
11 test, okay.

12 So, turning then to the question of irreversibility, if
13 we go to the example that you mention in your paper, you
14 call it example 2. We've got a firm that has got a WACC of
15 10%, so this is the CAPM WACC defined in the usual way, it's
16 not incorporating any allowance for this irreversibility
17 issue.

18 We've got a project that has a cost of \$1 million, and
19 if the present value's \$1 million well the MPV is zero and
20 the firm's kind of indifferent on whether it will enter the
21 project or not.

22 Then you introduce the idea of this timing question,
23 this timing flexibility, and timing might suggest that the
24 firm should hold off, and if it holds off then there could
25 be an increment in present value now of \$1 million, okay.

26 **PROF BOYLE:** Uh-huh.

27 **DR LALLY:** Now, it seems to me that that increment of \$1 million
28 is something over and above MPV equals zero, okay, by
29 construction it's an extra \$1 million over a MPV is zero;
30 and if you accept that for the purposes of setting an output
31 price, one should set an output price so that the net

1 present value is zero, if you incorporate into the output
2 price an allowance for this timing issue, either by
3 explicitly cranking up the cashflows or by explicitly
4 raising the allowed rate of return above 10%, does it not
5 seem to you that the result would be that the present value
6 of the cashflows over the life of the project would exceed
7 the initial investment of \$1 million and, therefore, the MPV
8 test would not be satisfied?

9 **PROF BOYLE:** Not quite. On the face of it yes, but that's
10 because the MPV test should include all the -- the costs of
11 all the capital being employed.

12 **DR LALLY:** Okay, but the usual definition of MPV of a project is
13 the present value of the future cashflows minus the initial
14 expenditure, which in your example is \$1 million, not \$2
15 million.

16 **PROF BOYLE:** I agree that's the textbook definition, but the
17 point I've been trying to emphasise here is that, the
18 \$1 million isn't the full capital cost of project; in fact,
19 because of the costs created by, in this case
20 irreversibility, the full cost is \$2 million, and it's to
21 that 2 million that I believe your MPV test, Martin, should
22 be applied.

23 **DR LALLY:** But wouldn't that be -- insofar as there is a
24 flexibility here that boosts the present value of the
25 project from \$1 million to \$2 million, couldn't you describe
26 that flexibility as generating a super profit?

27 **PROF BOYLE:** It's not increasing the value of the project,
28 rather we've got the value of the project in place, and
29 we've got a separate value of it before it's put in place,
30 and the trouble is, once you put it in place you no longer
31 have it potentially in waiting, and it's that cost that you

1 give up once you start it.

2 So, in other words, when you start the project, at that
3 point it may have two fewer cashflows such that its present
4 value is worth \$1 million, but prior to that time you are
5 holding something else that was worth -- I'm taking it from
6 my example, was also \$1 million as well. So, once you begin
7 the project you give up that second million because you no
8 longer have it, you can't start the project again once it's
9 already started.

10 **DR LALLY:** Sure, but if we go back to the market frictions
11 question where I introduced this MPV test, the definition of
12 MPV that I was using in the market frictions case was that
13 one should set an output price as a regulator so that the
14 present value of the future cashflows equals the initial
15 investment defined as the cost of the project; how much
16 money you pay to buy the assets. That's the sense in which
17 I was using the words MPV, the phrase MPV and I'm simply
18 applying the same definition to the irreversibility
19 situation.

20 **PROF BOYLE:** Right, and what I'm saying is that, either you
21 recognise these costs in terms of that test by changing --
22 by appropriately adjusting the initial capital cost from
23 \$1 million to \$2 million, or you don't bother with that, you
24 say it's \$1 million, but you instead incorporate those costs
25 by applying a higher discount rate, and so therefore, then
26 for it to be able to pass the net present value test you're
27 gonna have to correspondingly increase the numerator, the
28 expected cashflows, which is the higher output price.

29 So, I'm relaxed with either approach; that is, whether
30 these costs, these market frictions or irreversibility are
31 incorporated in the initial expenditure component of your

NGC

1 MPV test or in the discount rate. My point is simply, if
2 you accept these costs exist, they must appear in one of
3 those places.

4 **DR LALLY:** So if we took your example, example 2, the investment
5 project there and we treated it as a perpetuity, just to
6 keep the maths of it simple; that if we were going to allow
7 for these things in the cashflows, you would say, well, the
8 cashflows have to be \$200,000 a year; the output price that
9 the regulator allows must be such as to provide expected
10 cashflows of \$200,000 a year out to infinite?

11 **PROF BOYLE:** Yes.

12 **DR LALLY:** So if I'm a regulator and I'm listening to NGC here,
13 and NGC says to me, "dear regulator you should be giving me
14 \$200,000 a year". And we all agree that the CAPM discount
15 rate's 10% so we don't need to fiddle with that, we've
16 incorporated this in the cashflows, and I'm just a naive
17 regulator and I take the \$200,000 a year and I present value
18 it at 10% and I get \$2 million, and the financial records of
19 NGC shows that it only paid \$1 million for the asset, well,
20 it looks like they've done pretty well. I mean, thinking of
21 it from the point of view of a regulator or a customer, it
22 looks like NGC has been given twice the output price that
23 would be justified by the cost of the asset.

24 **PROF BOYLE:** I think that's actually -- I think that's a very
25 good illustration of my earlier claim that it's probably
26 better to adjust the discount rate.

27 **DR LALLY:** Right, but if we do stay with my framework, how would
28 you respond to a customer who appears to be saying "I appear
29 to be paying twice what I ought to"?

30 **PROF BOYLE:** I would say the investment base of \$1 million is
31 only half of what it should be. It looks like this is a

1 very good deal for NGC simply because the calculation under
2 which it's based underestimates the true costs of the
3 investment.

4 **DR LALLY:** Okay, I see that this is an issue that we're not
5 going to resolve now, and people are hungry and they're
6 tired of listening to me, so maybe I could move on briefly
7 and have a look at the empirical evidence that you mention.

8 If, and this is a huge "if"; if you were to agree that
9 the WACC should not be cranked up to deal with the
10 irreversibility issue, and I'm sure it's probably not a
11 position that's going to be achieved, but if that point were
12 reached, then there wouldn't be any particular significance
13 in the empirical evidence that you mention of people who use
14 hurdle rates that are well in excess of WACCs, possibly
15 because of the existence of timing options. That empirical
16 evidence that we don't dispute would not bear on the
17 regulatory question if, and it's a huge "if", if you were to
18 agree that the WACC in a regulatory situation shouldn't be
19 cranked up.

20 **PROF BOYLE:** And if market frictions generated no costs as well.

21 **DR LALLY:** That's fine.

22 **PROF BOYLE:** In other words, if these high hurdle rates were due
23 entirely to what's called an "internal control premium",
24 which quite apart from anything else there'd have to be huge
25 internal control premia to account for that them.

26 **DR LALLY:** One other issue, looking at these hurdle rates, in
27 looking at them in practice, and seeing they seem to be
28 larger numbers that come out of a CAPM type framework; you
29 have mentioned that one view about all these things is that
30 managers in the higher levels of an organisation tend to
31 crank up or -- this is the suggestion -- that they might

1 crank up the WACCs to compensate for the fact that they know
2 people lower down in the organisation who know more about
3 the projects are just pushing up unjustifiably the
4 cashflows.

5 In your paper you say, well, that as a story doesn't
6 make sense to me, because once the people lower down in the
7 organisation realise that's been done, they'll just boost
8 the cashflows even more and then the managers at the top
9 will just push up the WACC even more and it all turns to
10 jelly; there's no equilibrium there, as you put it, and I
11 think that's a reasonable point to make.

12 Nevertheless, it did get me thinking about whether there
13 are parallel situations like this anywhere else in the
14 world, and do we in fact achieve equilibrium results there,
15 and it seems to me if we can get equilibrium results
16 elsewhere, it's not inconceivable that this type of game
17 might in fact be consistent with an equilibrium.

18 If I could just give you an example that might
19 illustrate this problem. Suppose we've got a car dealer who
20 is -- really want to sell a car for \$40,000. One of the
21 problems with just putting the sticker on at \$40,000 is that
22 people come in and they want to twist your arm and bring the
23 price down a bit and maybe they want to get a couple of
24 thousand off it. As a dealer a way to try to protect
25 yourself from that is to put the sticker price at 42 to
26 people twist your arm down to 40 and everyone is happy.

27 Of course the way you might respond to that situation is
28 to say, well, once the customer realised that this game is
29 being price and the sticker price of 42 really means a
30 sticker price of 40, they'll want to twist the deal down
31 3,000 or 4,000 from the 42 figure, and of course once the

1 dealer realises this game is being played the dealer will
2 have to put the sticker price to 43 or 44 in order to
3 achieve the end result of 40.

4 So, you're belief that there's no equilibrium in the
5 situation you refer to, presumably you would think there was
6 no equilibrium there either, and yet we do seem to see an
7 equilibrium. Yes?

8 **PROF BOYLE:** Umm, I haven't bought a car recently, so I'm not
9 too sure. I think you have the advantage over me here,
10 Martin --

11 **DR LALLY:** No, the last one I bought, Glen, there was no
12 negotiation over price.

13 **PROF BOYLE:** Yes. I guess, perhaps, equilibrium on this point's
14 been reached.

15 I think there are more compelling reasons, shall we say,
16 for why it's hard to believe that these high hurdle rates
17 represent internal control premium. It may be that the type
18 of game that I was describing is limited, and so, perhaps
19 that can't be used as a complete reason for why firms won't
20 set internal control premium.

21 But the fact of the matter is that they don't, or at
22 least not much of these high hurdle rates can be attributed
23 to internal control premia, because the same research that
24 indicates that these high hurdle rates exist also indicates
25 that it exist not because of internal control factors but
26 because of factors that are quite clearly linked with these
27 issues of market frictions and require reversibility.

28 **DR LALLY:** I'm entirely comfortable with the notion that hurdle
29 rates inside firms are in excess of conventional CAPM WACC
30 type numbers, in part because of the issue of timing and
31 flexibility. I've no difficulty with that. The really

1 crucial question here, though, is whether in a regulatory
2 setting the WACC or the cashflows directly should be boosted
3 to reflect what looks to me like super profit, and that is
4 something that a regulatory process should not be providing
5 for.

6 **PROF BOYLE:** Quite, but as I've suggested, that's really just
7 profit illusion.

8 **DR LALLY:** Okay. Okay, thanks very much.

9 **CHAIR:** I'm just mindful of the time, I don't know, Sue, if you
10 had any questions?

11 **MS BEGG:** Just a question of clarification on the
12 irreversibility. Would you propose, if these options were
13 valued and included in the asset base, that you would just
14 use the CAPM number, that would be an equivalent way of
15 doing it?

16 **PROF BOYLE:** Yes, yes. You shouldn't double count, that's for
17 sure.

18 **MS BEGG:** The other question I have is related, which is, given
19 that people don't value their options in their asset bases
20 generally, wouldn't -- and assuming people act as you have
21 suggested on the irreversibility one by having a higher
22 hurdle rate of return, wouldn't that get reflected into
23 market risk premiums, because people who have these options,
24 they wouldn't be valued, but they would be seeking as higher
25 a return and so it would be captured through that? On the
26 other hand, I can see why the market frictions wouldn't
27 because of the asymmetric effect on cashflows, but...

28 **PROF BOYLE:** Through the market risk premium in the CAPM
29 formula, you mean?

30 **MS BEGG:** Yeah, people would have sought higher returns and that
31 would have been reflected in the market data.

1 **PROF BOYLE:** I think in the first place -- you see, the market
2 risk premium in the CAPM formula is the risk premium
3 attached to a \$1 investment in the financial markets.
4 Whereas, what I'm suggesting here is that once we move away
5 from financial markets, these types of issues affect not
6 that rate of return, they don't affect the WACC 10% figure
7 or whatever, they just change the base on which that rate of
8 return has to be earned. So, there's no reason why that
9 should affect the market risk premium in the CAPM itself.

10 If it did, then we'd have real problems in applying the
11 CAPM framework, wouldn't we, because then clearly financial
12 market prices are not being set according to the CAPM, and
13 if the CAPM is not even working for that then we can't be
14 too confident in it working for these broader types of
15 investments.

16 **CHAIR:** I'm just mindful of the time. I believe you have two
17 further presentations. We are scheduled to start with
18 Vector, I think, at 2.30.

19 So, what I would like to suggest is that we adjourn now,
20 return in 45 minutes, slightly less in fact, at 1.45, and
21 I'll just try to get an estimate from you on how much time
22 you think the two last presentations will take?

23 **MR BIELBY:** What we were going to suggest is, we'll talk to each
24 of our speakers over lunch and see if they can keep their
25 presentations to no more than 30 minutes each and I guess
26 allow for whatever questions over the top. I guess that
27 takes you out of your timeframe; we can try an abbreviate
28 further, if we can, over lunch.

29 **CHAIR:** I'll talk to staff at lunch on what we might want to do
30 in this case. I'll need to talk to Vector to see how much
31 time they need. I have to close the session today at 5.30.

1 It may mean somebody has to carry over into the morning, and
2 I'll just talk to the parties separately to see what we can
3 agree.

4 **MR BIELBY:** We'll talk similarly and see if we can suggest
5 anything.

6 **CHAIR:** All right, thank you.

7

8 **Adjournment taken from 1.05 pm to 1.50 pm**

9

10 **CHAIR:** Okay, I would like to reconvene this session of the
11 Conference please and, for anyone who's just come into the
12 session, we are considering the NGC submissions and I
13 believe at this point we're moving on to the NERA
14 submission. But I'll ask you to introduce the next stage,
15 please.

16 **MR BIELBY:** Yes, thank you, Chair. Indeed, we've just got the
17 two presentations remaining, Mr Houston from NERA and
18 Professor Evans. I've spoken to both of them and we'll try
19 and keep to a tight timeframe and, after a brief discussion
20 with our friends from Vector, hopefully we'll have time in
21 the day. So I'll just go to Mr Houston and ask him to
22 address you. The material should be up on screen and in
23 front of you.

24 **MR HOUSTON:** Thank you, Steve. Good afternoon. This is the
25 third time I think that I've come before the Commission to
26 discuss asset valuation issues, and an important theme on
27 each of those occasions has been that asset valuation very
28 much depends on the context in which the issue is to be
29 addressed. I guess the answer depends on the question.

30 My presentation today reiterates this theme, and to be
31 fair the Commission has reflected also this principle in

1 each of its recent asset valuation decisions on airports,
2 telecommunications and electricity lines businesses.

3 One problem that the Commission appears to have
4 struggled with in the past, however, is the ability to find
5 useful precedents from other jurisdictions to guide its
6 deliberations on asset valuation. The reluctance of the
7 majority to adopt the ODRC or ODV approach to asset
8 valuation in the Airports decision was by reference, for
9 example, to the absence of a clear view on asset valuation
10 from the economic or regulatory literature.

11 The good news, I guess today.

12 **CHAIR:** You said that quickly, maintain the full -- can we just
13 have that statement again, please. I want to make sure I
14 understood what you said.

15 **MR HOUSTON:** One of the things that was cited by the majority in
16 discussing -- the majority of the Commission in discussing
17 the decision on asset valuation in the Airports decision,
18 and the reluctance to adopt ODRC or ODV for all assets in
19 the Airport was the cited absence of a clear view on asset
20 valuation from the -- on the asset valuation principles from
21 the Commission or regulatory literature as I recall reading
22 that decision, and I'm raising that to put to you a good
23 news story which I'm going to talk about today, which is
24 that recent developments in regulatory case law in Australia
25 in particular have brought forth a clear and well argued
26 analysis and decision on asset valuation in a context that
27 is almost precisely the same as that before the Commission
28 in this Gas Inquiry. I'll return to that in the course of
29 my presentation.

30 But first I think it's useful just to reiterate the
31 context for these issues that arise in this inquiry. And

1 that, as we have on the screen, is the central question
2 before the Commission; is it necessarily desirable for gas
3 services to be controlled in the interests of acquirers?
4 The basic question is, should price control or should not
5 price control be imposed?

6 And, to address this question the Commission's set out
7 its framework which essentially involves comparing prices
8 without control based on the current or prospective plans of
9 the businesses in question, the counterfactual, with on the
10 other hand, prices under control, which as is set out in the
11 framework paper, are competitive prices, and that's the
12 factual.

13 The challenge which lies before the Commission is to
14 determine prices that are likely to prevail -- that are
15 competitive or under workable competition. And, the
16 Commission proposes in the context of asset valuation or in
17 the context of this workable competition to adopt a building
18 block analysis, and the paper discusses whether or not that
19 analysis should take place with an ODRC or ODV or historical
20 cost asset valuation, with the basic principle being that
21 efficient prices should be established by reference to an
22 efficient level of capital.

23 One of the problems I think with this approach is that
24 efficient pricing is a far from straightforward concept for
25 an infrastructure business, and this -- some of these issues
26 are also discussed in the paper. There's a great tension
27 between the average price level which is, sort of,
28 relatively easy to measure, and efficient price structures
29 which are a much more complicated issue, and there's also a
30 tension or by virtue of the NPV principle between efficient
31 prices, or prices and asset values today versus prices

1 yesterday and prices tomorrow.

2 And what I think we can conclude from reading the
3 Commission's paper is that the efficient -- and this is
4 quite a reasonable conclusion -- is that the efficient price
5 standard, or efficient prices standard doesn't by itself
6 offer very clear guidance on the appropriate approach to
7 asset valuation. And, you can see this in the draft
8 framework paper which starts to develop this stand. Then it
9 goes on to canvass historical costs, replacement costs and
10 even scrap value approach to asset valuation, all by
11 reference to this efficient prices standard.

12 So, one of my messages today is that there is a more
13 suitable framework for addressing asset valuation issues in
14 this context, and that approach involves focusing on the
15 threshold concept which is part of the Commission's brief of
16 workable competition. That concept, or competition,
17 workable competition, lies at the heart of this inquiry.
18 And, put simply, prices in a workably competitive market are
19 determined by entry opportunities. And entry, of course,
20 opportunities are based on the forward-looking costs in
21 providing the service on a sustainable basis, and my message
22 to you today is very much to think about asset valuation,
23 not by starting off by thinking about efficient prices, but
24 by starting off and thinking about entry.

25 Now, of course the economies of scale in these
26 industries mean that, unlike markets where competition
27 really is fierce between suppliers, within any geographic
28 market it's usually most efficient for there to be just one
29 supplier of gas transport services. So, that test for
30 entry, and the asset valuation issues which flow from that,
31 must necessarily be a hypothetical test. That is an

1 estimate of the forward-looking price that reflects some
2 sustainable competitive equal in a hypothetical situation.

3 In Australia there is some recent experience with this,
4 and this test has been coined "the hypothetical new entrant
5 test". And, as I said, I'm going to come on to the specific
6 cases that have been developed in Australia. But, the
7 important message at this stage is that, rather than
8 worrying about efficient prices and what that means for
9 asset valuation, to focus on the relevance of entry and the
10 prospect of entry and the costs of entry by reference to the
11 standard of workable competition.

12 Of course, the asset valuation concept that's consistent
13 with the hypothetical new entrant standard is ODRC or
14 perhaps ODV; I'm using them at this stage anyway,
15 interchangeably.

16 Of course, a greenfields entrant which requires new
17 assets and so, ODRC, is an estimate of what -- and it's hard
18 to -- what we have is existing businesses with existing
19 assets, and that's what is most convenient to measure. And
20 so, optimised depreciated replacement cost, which is the
21 sort of -- usually the most prevalent part of ODV, is an
22 estimate of what the existing assets would be worth to a
23 prospective entrant, given the fact that those existing
24 assets will need to be replaced earlier and may have higher
25 operating costs, hence the optimised -- the O and the D
26 components which are added to replacement cost.

27 Now, to bring this back to the reality of examining an
28 existing business with existing assets serving an existing
29 market, what this means is that any business that is earning
30 the cost of capital, however defined on an ODRC, valued
31 assets cannot be engaged in monopoly pricing, and that's the

1 central tenet of this hypothetical new entrant test and the
2 role of ODRC or ODV asset valuation in this context. So, if
3 you're earning WACC on an ODV or ODRC asset valuation, there
4 is no, and can be no monopoly pricing problem.

5 This principle is quite consistent with views put by the
6 Ministry of Commerce back in 1994 in its various papers on
7 asset valuation in the context of developing the disclosure
8 regime for the electricity lines businesses when they put
9 very clearly that this was the asset valuation concept that
10 would or would not reveal monopoly pricing, and of course
11 has been reinforced, I think, by the slower but nevertheless
12 development of the disclosure regime for gas transport
13 businesses.

14 Now, I think it's important to note just at this stage
15 that an important assumption behind the ODRC approach to
16 asset valuation, and the hypothetical new entrant test which
17 it is part of, is that services in that context -- the
18 assumption is, the hypothetical new entrant would be
19 providing services in perpetuity, and I labour that
20 distinction because, where you have circumstances where
21 there is a significant risk of asset stranding -- and we
22 heard about the out-turn or out-workings of that risk this
23 morning in relation to say the transmission pipeline serving
24 Gisborne -- then an ODRC asset value will underestimate the
25 capital costs that a new entrant would face, because quite
26 simply they need to spend and invest and recover that
27 investment in a shorter period of time. So, where there is
28 a significant context of asset stranding, I guess it's
29 something that could be managed by a higher return, but if
30 we put that aside for the moment, then the ODRC value is --
31 understates the costs that a new entrant face.

1 With that by way of principle I want to focus for the
2 rest of my presentation on the practical application of this
3 concept and what we may learn from other jurisdictions where
4 this has been applied.

5 Now, ODRC or ODV and its role in economic regulation is
6 widespread across Australia; it's been enshrined in the
7 Electricity Code, it's more often than not applied in
8 establishing initial asset values in the Gas Code. As I'm
9 sure you know, by contrast it's not used in the UK, since
10 the basis for the initial asset valuations and regulation in
11 the United Kingdom following the privatisation was almost
12 always the flotation values.

13 However, the then future water Regulator Ian Byatt in
14 his landmark report on Accounting for Regulated Businesses
15 clearly established the linkage back in 1986 between
16 replacement cost valuations and the concept or the worth of
17 assets to potential competitors, even though subsequently,
18 and for reasons which are quite proper in that context,
19 different asset valuation concepts were applied for
20 regulation there.

21 Then of course we have the US, which I'm sure you're
22 also familiar with, where the predominant basis for asset
23 valuation is historic cost. So, three jurisdictions, three
24 approaches, but what's important I think is that the
25 guidance that can be taken from situations where control
26 is -- price control is already in place, is somewhat
27 limited.

28 The Commission's task here is quite different to each of
29 those situations, and the task is to focus on not how
30 control should be implemented, perhaps with -- and not to
31 take account of all of the specific circumstances that exist

1 in those jurisdictions which explain the way things are done
2 there, but the Commission's task is to focus on whether
3 control should be implemented by reference to the workable
4 competition standard.

5 Now, it's the case that such tests for control are
6 extremely rare. It's very hard to find outside
7 New Zealand -- it's very hard to find places where those
8 tests exist and are conducted in the regulatory
9 arrangements. But last year there is precisely one such
10 case which has emerged in Australia, and I'd like to explain
11 the details of that to you.

12 And this case is a gas transmission pipeline, as it
13 happens, and it's the pipeline from Moomba to Sydney. And
14 for those of you not familiar where Moomba is, it's
15 essentially right in the centre of Australia where some
16 major gas production fields are. This pipeline has been in
17 existence for 20 or 30 years, and in mid-2001 the owner of
18 that pipeline made an application to the National
19 Competition Council for what's called revocation of coverage
20 under the Gas Code, but essentially in very simple language
21 what that means is, the pipeline is or was, or was and still
22 is, subject to price control, and there's an arrangement
23 where that decision -- and that arrangement can be reviewed
24 under Australian Trade Practices Act.

25 It's interesting, the basic situation in terms of gas
26 transmission pipeline serving Sydney, is that one comes from
27 Moomba in the centre of the continent, and there's a second
28 one that's been around for two or three decades; and the
29 second one was developed in the late 1990s, coming from
30 Gippsiland in Victoria, coming from the south.

31 In an earlier decision, the second one is called the

1 Duke or the Eastern Gas Pipeline, by reference to the access
2 legislation in Australia. The owners of that pipeline were
3 successful in an application which decided that price
4 control shouldn't apply to the second and new entrant
5 pipeline.

6 Without going into the details of that decision, that
7 gave rise to a situation where you had two pipelines serving
8 Sydney, one subject to price control and the new one not.

9 In response to that, the Moomba-Sydney pipeline
10 exercised their entitlement under law to have the
11 continuation of price control and whether or not that should
12 be the case, reviewed. And so, the National Competition
13 Council was the body to do that.

14 So, essentially you have a situation identical, in all
15 respects, to what we have here, except for the fact that in
16 this situation control was in place and the decision was
17 whether or not to remove it.

18 **MS BATES QC:** Except you've got two systems in parallel and
19 going head-to-head.

20 **DR HOUSTON:** There was a question about the extent to which
21 these pipelines were competing with each other, but for the
22 purposes of -- as it happens, the way this case unfolded,
23 and the way the issues were decided and their relevance for
24 here, that issue was set aside completely.

25 Essentially, the second pipeline, the Moomba-Sydney
26 pipeline, sought revocation of its control arrangements on
27 the basis, exactly as you say, that competition from the
28 second pipeline was real, and that was keeping its tariffs
29 in check. And the national -- and this is under the, what's
30 called the Part IIIA access provisions in the Trade
31 Practices Act -- and the National Competition Council had to

1 assess that application.

2 The access provisions in the Trade Practice Act in
3 Australia are quite different in some respects from the
4 criteria you have to apply in this inquiry. And the main
5 economic thrust of the access provisions in Australia is
6 whether or not control -- to use control synonymous with the
7 imposition of access, because it essentially amounts to the
8 same thing in this case -- whether or not control will
9 promote competition in an upstream or downstream market;
10 that's the criteria.

11 But, what's important about this case is that, in
12 interpreting those provisions, the parallel with this
13 situation was established by two New York economists, Janus
14 Ordovery and William Lair from New York University, who wrote
15 a landmark paper that essentially said that, if you're
16 thinking about whether access or control will promote
17 competition in an upstream or downstream market, the
18 critical question is, is this pipeline engaging in monopoly
19 pricing. They wrote a paper which essentially made the
20 proposition that, if there was monopoly pricing being
21 exercised, then control, or the removal of that, or the
22 reduction in that through price control, through the access
23 legislation would improve competition in those related
24 markets.

25 So, this case of whether or not price control should be
26 continued in this pipeline came down to a question of, is
27 this pipeline currently engaging in monopoly pricing. So,
28 there's a number -- I appreciate there's a number of steps
29 here, but --

30 **MS BATES QC:** Was it a monopoly to begin with?

31 **MR HOUSTON:** Whether or not it was a monopoly was clearly an

1 issue that reasonable people could debate enough to have
2 competition, but essentially the process worked through the
3 stage where people said, we're going to cut through all of
4 that and just look at is it charging monopoly price.
5 Because clearly, if it is, then whether or not there's
6 competition is a somewhat academic issue; we'll deal with
7 the competition problem by looking at its pricing behaviour
8 and establishing whether or not, as a matter of fact now,
9 this pipeline is charging monopoly prices, and that's
10 what -- so, the whole basis of the analysis of the situation
11 boiled down to a question about whether or not monopoly
12 pricing was being applied.

13 And so, that's my story, if you like, to get us to the
14 position where I urge you to look at this case, because it,
15 from all of my knowledge of questions and deliberations
16 about whether or not price control should be implemented,
17 this is by far the closest one available.

18 I have to declare an interest here in that the National
19 Competition Council hired NERA to undertake analysis of the
20 existing tariffs and to determine whether or not they did
21 involve monopoly pricing, and all of this information is
22 available on the National Competition Council's website, so
23 I'm not telling you anything that's not publicly available.

24 **CHAIR:** Can I just ask you a question; when you say in the slide
25 that they found ODRC to be the more practicable approach,
26 what do you mean by "practicable?".

27 I hear you arguing this on a sort of principle ground,
28 not on a practicable test, and I just wonder what you mean
29 by that in this case?

30 **MR HOUSTON:** The question that was put by the National
31 Competition Council was, is there monopoly pricing, and that

1 question was answered by looking at two possible approaches
2 to answering that question. The first was essentially an
3 historical -- based on an historical cost assessment by
4 looking at whether or not returns over the life of the asset
5 from its original inception date to -- from its original
6 construction date to the present, accumulated returns were
7 in excess of a reasonable view of the WACC. And the second
8 approach that was examined was to apply a hypothetical new
9 entrant test which was to cast aside completely the past and
10 say, looking at this as we see it today, are the existing
11 tariffs in excess, or about the same as, or below those that
12 a new entrant would be expected to charge.

13 And those -- both those approaches were looked at quite
14 carefully, and it's the first -- or the historical cost
15 approach was found to be impracticable, essentially because
16 records were not available over that length of time in order
17 to reach any kind of conclusion.

18 **CHAIR:** Did they ever come to a view on which method then was
19 actually preferable, just from an in principle position, why
20 did they go to the trouble of doing both?

21 **DR HOUSTON:** Both were examined, and at the level -- both at the
22 level of principle and at the level of practice. The ODRC
23 approach was found to be -- both were found to be acceptable
24 in principle in quite carefully defined situations,
25 particularly with the historic cost approach. Those
26 carefully defined situations were that this was the approach
27 under which that entity had been operating and understood to
28 be operating from the beginning, and of course had that been
29 the case then the records would have been available because
30 people would have wanted to have monitored and understood
31 those issues from the outset.

1 But it was found, I guess, that firstly that wasn't
2 the -- I mean, it's always hard to go back 20 years and
3 untangle what understandings there may have been, and not
4 unlike here there's changes of ownership; there was
5 originally Government ownership, privatisation and so on.
6 But the main thrust was that the records weren't available,
7 and in any case there's absolutely no indication of a firm
8 or clear understanding about the application of an historic
9 cost approach to measuring cumulative returns.

10 **CHAIR:** Was historic cost never used in that case?

11 **MR HOUSTON:** No.

12 **CHAIR:** So, right from the beginning they used an ODRC approach?

13 **MR HOUSTON:** No, that's also -- neither approach was used, and
14 not unlike many situations, you have simple problems like
15 not having any unbundling or differentiation between the
16 value or the cost of gas transport and the cost of the gas.
17 So, it's one of those things, it's like unscrambling an egg,
18 and in a minute I'll take you through an exercise where
19 people have attempted to do that as well. But there was no
20 basis on which to draw any conclusions about the way in
21 which tariffs had been set in the past.

22 **CHAIR:** So, they never came up with an historic cost estimate.

23 **DR HOUSTON:** No, there was no assessment of what -- whether
24 tariffs were too high or too low by reference to that
25 principle, because there was just no basis on which to do
26 it.

27 **CHAIR:** Were they going to optimise in the approach that they
28 had proposed to look at on historic cost?

29 **DR HOUSTON:** Yes, so...ah.

30 **CHAIR:** Was there going to be any optimisation done?

31 **DR HOUSTON:** That question was never addressed because it didn't

1 get that far. So, the approach that was adopted to make
2 this assessment was to use an ODRC asset value and -- which
3 was in practise defined and applied by in a NERA paper,
4 which you can read as part of this process, and the out --

5 **CHAIR:** Can I just ask you, in terms of the ODRC, at the time
6 that the test was done, were they using ODRC?

7 **DR HOUSTON:** Well, that -- yes, more or less, yes. It happens
8 that concurrently with this exercise, which is conducted by
9 the National Competition Council, we have a lot of
10 regulatory agencies in Australia, too many. But there was
11 another agency which is the ACCC which was simultaneously
12 and coincidentally undergoing a process of reviewing what
13 the tariffs should be on this pipeline. But clearly that
14 would have become redundant had the decision been taken to
15 remove price control. But that process also was sought to
16 apply an ODRC principle.

17 So anyway, the upshot of this is that, while there were
18 reasons, and there still are outstanding disputes between
19 the parties about some of the issues of detail in applying
20 this test for monopoly pricing, one issue that has never
21 been in dispute and is agreed by all of the parties, is that
22 ODRC was the appropriate asset valuation to apply in
23 designing and applying this hypothetical new entrant test.

24 **CHAIR:** And in these particular circumstances, you mean?

25 **DR HOUSTON:** In the circumstances which essentially is that
26 there was no --

27 **CHAIR:** I understand that.

28 **DR HOUSTON:** There wasn't sufficient information or any
29 understandings that would support a historic cost test.

30 **CHAIR:** Can I ask you this: In the ODRC methodology, was that
31 somehow prescribed? What they were actually using, was it

1 prescribed in any way?

2 **DR HOUSTON:** Not in the way that you see, for example, in the
3 ODV Handbook that applies in the electricity lines industry
4 in New Zealand, and in the way that the gas industry is
5 heading towards. The way in practise these valuations are
6 arrived at is essentially on a case-by-case basis with the
7 use of an independent engineering based valuation that looks
8 specifically at that pipeline.

9 So, there's no schedule in Australia of unit costs and
10 unit to unit costs that are applied every time there's an
11 ODV valuation of a gas pipeline undertaken. It's always
12 done on a case-by-case basis.

13 **CHAIR:** What do you mean by "independent"?

14 **DR HOUSTON:** There's two ways these things can be undertaken in
15 practice. Sometimes the entity will hire an outside
16 engineering come valuing expert to undertake valuation.
17 That then will be subject to scrutiny and checking by often
18 a second firm which is hired by the Regulator, and the
19 alternative way, and there's no -- both cases exist; the
20 Regulator will hire that entity and ask them to undertake
21 the valuation themselves.

22 **CHAIR:** What happened in the case, when NERA did this work?
23 What did you -- it sounds to me like you didn't take the
24 ODR numbers that the company had.

25 **DR HOUSTON:** I think, from memory -- I must admit, I can't
26 remember because there wasn't really much dispute about the
27 ODR numbers themselves, and I think from memory it was the
28 numbers that the company had produced.

29 To give you a feeling, the way this came out was that
30 the work found that the prices that were prevailing were 30%
31 above -- even at the sort of upper bound, were 30% above the

1 upper bound prices that would be established under an ODRC
2 asset valuation and a WACC. So, the -- there wasn't much --
3 the fields for debate about, about sort of all the different
4 components, the actual valuation itself was not one of the
5 issues. It wasn't particularly in contention.

6 **CHAIR:** I ask that question because, the many times I've spoken
7 with Australian Regulators about this matter, been
8 interested in the debate, but in almost every case they've
9 told me that the result didn't hinge on this one way or the
10 other, so it was never really one of the big moving parts.

11 So, it makes me -- it does make me wonder to some extent
12 how much guidance we can take from the Australian examples
13 when I hear that, in terms of what it does or doesn't tell
14 us about choices made by regulators in that environment.

15 **DR HOUSTON:** Well, it would be wrong to convey the impression
16 that any of these valuation concepts can be applied without
17 some controversy about, you know, what exactly an ODV
18 valuation will give you or what exactly an historic cost
19 valuation will give you. But, one thing's for sure, that in
20 the few cases where there have been -- that calculation's
21 made of the cumulative historic cost value, they provide
22 significantly wider ranges of possible valuations than do
23 ODRC values.

24 Maybe the best way to illustrate that is just the next
25 slide, I'll take you through that. But just by way of
26 prelude, historic cost doesn't provide any information
27 that's relevant to the concept of a hypothetical new entrant
28 in limited or workable competition. And, it is highly
29 sensitive to assumptions which are essentially arbitrary.

30 And the best way -- I mean, those assumptions really
31 fall into two kinds, or three kinds of assumptions that you

1 need to make. First of all there's the starting point,
2 second is the depreciation schedule that you apply over the
3 number of years, and the third one is assumptions on the
4 allocation of revenues often between the transportation
5 business and between the commodity business, because most
6 often these gas businesses have had bundled tariffs, rather
7 than separate transportation tariffs.

8 The best way to illustrate that is to take a look at the
9 next slide, which is a straight-out reporting of an exercise
10 undertaken by the Victorian Gas Distribution Regulator, it's
11 now the Essential Services Commission, but was then the
12 Office of the Regulator General. And, this was in 1998, and
13 the context here was the restructuring and privatisation of
14 the Victorian gas industry. And, the Regulator in that
15 context was asked, or had to under the Gas Code, to
16 determine pipeline tariffs according to the provisions of
17 the Code, and what's important to remember here is,
18 previously this industry had been operating as a vertically
19 integrated monopoly, so retailing, gas production, or gas --
20 the gas commodity distribution and transport were all
21 bundled into one tariff.

22 So, one of the tasks of the privatisation and
23 restructuring process was to determine tariffs for each of
24 those components.

25 That task, under the Gas Code, fell to the Victorian
26 Regulator. Now, the Gas Code in Australia -- and again this
27 is an example not of whether to impose control but how to
28 impose control. So, the decision about control is
29 effectively a foregone conclusion.

30 But what's important about this example is, it
31 illustrates the wide range of outcomes that you can have

1 when you start to try and work up what possible valuations
2 you can get by adopting an historic cost approach.

3 So, the Regulator in the end adopted an ODV valuation.
4 But, as part of the process in arriving -- and the ODV
5 valuation that was adopted was -- for three businesses
6 combined, was about \$1.8 billion for the asset value. Part
7 of the process in getting to that conclusion was to
8 undertake what is known in the Gas Code as a depreciated
9 actual cost valuation. So, effectively it's a cumulative
10 historic cost valuation, and the reason this was undertaken
11 was, because there was a good deal of pressure from consumer
12 groups to the effect that the assets had already been paid
13 for, and so if this was going to be a privatisation, and if
14 gas transport or gas distribution tariffs were to be
15 derived, it was unfair if users were being asked to pay
16 again.

17 And so, the Regulator undertook an exercise where they
18 derived a written down value for the assets based on the
19 original acquisition cost, which went back to 1958 when the
20 Victorian gas system was constructed and developed. So,
21 they took the original costs, accumulated capital
22 expenditure since that time and accumulated depreciation.

23 It was also important to -- remembering this was a
24 bundled service, they had first of all to isolate the assets
25 that were gas distribution. They also had to make an
26 allowance for the commodity -- the value of the commodity in
27 order to derive the implicit revenues that were accruing to
28 the gas distribution business.

29 That was quite a difficult task, as you might imagine,
30 because gas for something like a 30 year period in Victoria
31 was subject to a long-term contract with a Government, and

1 so they did the exercise with two bases for valuing the gas.
2 One was the contract basis, which was the actual cost of the
3 gas to the Government, and the other was based on
4 commercial terms. And, of course, the difference being that
5 if the gas was under-valued, which the view was taken that
6 that was the case, then you need to make a decision about
7 whether the rents get accrued to pay off the costs of the
8 transport system.

9 The important thing about this -- so that gave rise --
10 so, there was eight different valuations developed under
11 this, or eight different scenarios developed under this
12 approach. So, there was two ways of valuing the gas, there
13 was the contract basis or the commercial basis.

14 Then there was four different long -- four different
15 rates of return that one could assume over that period from
16 1958. And, you know, very simple, essentially, either the
17 long-term bond rate or the long-term bond rate plus 1, plus
18 2 and plus 3%. And extraordinary result, the range of
19 valuations for the distribution system on this historic cost
20 basis went from something like minus \$1 billion, so it had
21 negative value, in the sense that it had been paid for many
22 times over, through to more than A\$10 billion. I mean, an
23 extraordinarily wide range.

24 The most preferred scenario of the Regulator who
25 undertook this exercise was to use a commercial cost of gas
26 and a long-term bond rate plus 2%. So, on your graph that's
27 the third one along from the left, and the crimson line, and
28 that was an asset value of around about A\$8 billion. And,
29 by contrast, the ODRC or -- the ODRC value of that pipeline
30 was said to be \$2.2 billion and the ODV, which was the --
31 after the economic value adjustment was \$1.8 billion, which

1 was the sum that was conveniently adopted for the regulatory
2 determination.

3 So, this is one of the few exercises that I know of
4 where a genuine approach has been made to try and understand
5 what a reasonable view of the cumulative historic cost would
6 be, and I mean those involved would say the exercise was
7 useful because it just -- it showed that actually it was
8 useless in the sense that it provided no guidance, or no
9 guidance that was of practical value to the Regulator, hence
10 the decision to adopt an ODV value.

11 **CHAIR:** Was there any optimisation done?

12 **DR HOUSTON:** No.

13 **CHAIR:** I suspect, if there had been, the discrepancy might not
14 have been quite so big if what we've been told earlier in
15 these hearings are right, about the degree of optimisation
16 that might need to occur over time?

17 **DR HOUSTON:** I don't think that -- that would be -- that's not
18 quite right, because the optimisation was definable at the
19 end in the sense that it amounted to \$400 million over
20 \$2 billion. Other than that, there isn't a lot of
21 redundancy in the physical system. So, the optimisation
22 was essentially amounted to that which had an economic value
23 adjustment, and that was a pretty small amount by reference
24 to the wide range that came out of the historic cost
25 valuation.

26 What's the big driver of an historic cost valuation if
27 you undertake it over a long period of time is your
28 assumption about the rate of return that should -- you know,
29 what was the right rate of return on gas transport assets in
30 1963? Well, it's a very hard -- you know, even our finance
31 professors, I think, would struggle with that.

1 Because, you will remember there are times in the 70s
2 and 80s of very high inflation, so returns --

3 **CHAIR:** This was done over a long period, this study?

4 **DR HOUSTON:** It was, it was done from 1958 till -- 40 years,
5 1998.

6 **CHAIR:** Sounds to me like the driver is the timeframe.

7 **DR HOUSTON:** That's right.

8 **CHAIR:** We wouldn't be looking at a timeframe like this.

9 **DR HOUSTON:** Well, even if you do these things over 10 or 20
10 years, you will find that some more adjustments to the rate
11 of return, cumulatively over periods of time, take into
12 account under-recovery; because it's important to remember
13 that almost always in the early days of any new
14 infrastructure investment there's under-utilisation in terms
15 of their capacity, so returns are often quite low. And if
16 you think the returns should be 10% but it's only 2% and you
17 take that 8% and capitalise that loss and add it to the
18 asset value, then you can soon find that small adjustments
19 to the rate of return assumption can have very big impacts
20 on the asset valuation that you get at the end.

21 **CHAIR:** In principle, if you can do these things properly you
22 shouldn't get a large divergence between the two over the
23 life of these assets. I mean, I found it rather -- the
24 debates went on relentlessly with respect to airports. Once
25 the underlying assumptions that were used in each of the
26 valuation methods were brought into line with one another,
27 it actually turned out not to be pivotal and they were very
28 close together.

29 So, I wonder sometimes -- I mean, this is interesting,
30 but this is contrary to where, at the end of the day, the
31 results turned out when we did the airports exercise. By

1 the time we got the assumptions corrected and set out there
2 was very little difference between the two results, and in
3 fact it wasn't pivotal to the outcome. It appeared to be
4 early on, but in the end it wasn't.

5 So, I find this interesting, but I also can fully accept
6 if you looked over the life of assets you shouldn't get a
7 difference in result if you stick with one method through
8 the two. So, I don't know, I think we need to look at this,
9 and it's worth looking at, but, you know, I can well imagine
10 you make a few wrong assumptions about appropriate rates of
11 return in a 40 year period you can drive any kind of result,
12 you know, you can drive a huge wedge here between the two.

13 **DR HOUSTON:** That's right. I don't think that -- the purpose of
14 illustrating this is not so much -- I think it's not a
15 question of whether your assumptions are wrong or right, but
16 simply to say how sensitive the results can be to those
17 assumptions on which reasonable people can differ.

18 **CHAIR:** I'm sure that's right, I'm also sure, absolutely
19 positive in fact, that you can pick certain assumptions
20 in -- you can vary the way the ODV Handbook is drafted and
21 drive huge differences in the results as well, and that's
22 the problem with all of these valuation methodologies; they
23 are quite susceptible to either intentional or unintentional
24 manipulation, and results that can vary significantly. And
25 that's exactly the problem, is often it comes down to a
26 practical choice of which one you can most rely on in a
27 particular fact situation regardless of what, in principle,
28 you might think ought to be most desirable.

29 **DR HOUSTON:** Sure. While I hear what you say, and while one can
30 set out circumstances in which one kind of approach would
31 lead to -- will cause, and particularly the historic cost

1 approach, will cause greater uncertainty in a wider range of
2 valuations; I think it's absolutely the case that, where
3 assets have been around for a long time and where
4 information is poor, which is always the case for these
5 businesses, that the historic cost approach has a much much
6 wider field -- gives you much less guidance because the
7 plausible boundaries are so wide.

8 And that's exactly what I'm trying to illustrate here,
9 that while it would be wrong to suggest that an -- you know,
10 that there was no contention or uncertainty about the ODRC
11 value in this case, the breadth of plausible valuations was
12 many many times wider under the historic cost approach.

13 Just finally to wrap up, I just wanted to touch on two
14 issues that are really by way of, sort of, tidying up or
15 issues at the edges of asset valuation in principle which
16 have come up already. And these are two quite, I guess,
17 practical issues in applying an ODRC valuation, or for that
18 matter an historic cost valuation, which is easements and
19 intangible assets.

20 The important thing here is that the hypothetical new
21 entrant test, which is what I believe conceptually the
22 Commission should be applying given the task that it has,
23 simply calls for all costs that would be faced by a
24 prospective new entrant to be included in that valuation.

25 I know there are some issues about when people use the
26 term "system fixed assets", what exactly they mean by that
27 and does that include all assets, and it seems to me that it
28 clearly doesn't include all the assets that need to be
29 accounted for, because not all assets are fixed assets in
30 the narrow sort of gas transport network sense of the term.

31 But two which are important are first, easements. And

1 we've discussed these quite a bit already today. I think
2 it's only -- it's sufficient for me to say that, if
3 easements need to be acquired in order to lay transmission
4 pipelines, then their cost should be included, and finally
5 that intangible assets or assets -- any asset that's
6 necessary for running a gas transport business also needs to
7 be included. And that may include, for example, the costs
8 of developing IT or asset management systems.

9 And in practise these assets are often likely to be
10 included somehow or other, but one needs to make sure
11 they're counted, whether they're captured in operating costs
12 or whether they're captured in non-system fixed assets that
13 maybe being depreciated. But if the business has had to
14 incur costs, and those costs are relevant for running the
15 business, then they need to be included. And, that
16 concludes my presentation.

17 **CHAIR:** When you talk about identifiable and tangible assets,
18 the significance of the identifiable, what did you do when
19 NERA did the case that you just took us through? Did you
20 put a value on long-term contracts?

21 **DR HOUSTON:** No, there wasn't any valuation put on long-term
22 contracts, but essentially all of the assets that were on
23 the books of the business were.

24 **CHAIR:** So, if they weren't on the books, you didn't value them?

25 **DR HOUSTON:** Not in that case, no.

26 **CHAIR:** Is that the approach you think is appropriate?

27 **DR HOUSTON:** I think that probably is right, but you have to
28 look at it on a case-by-case basis. So, if you think there
29 is anything -- I find it hard to imagine exactly what these
30 might be, but...

31 **CHAIR:** If you found that in the books there was no value put on

1 easements that were provided for on a statutory basis, then
2 presumably you'd take the same approach of not evaluating
3 it?

4 **DR HOUSTON:** No, there's a distinction. For those assets that
5 are system assets that essentially the engineers can go out
6 and look at and see, then easements do need to be included,
7 and are included in those -- in the ODV or ODRC valuation
8 that's made. I'm talking about assets that are not -- don't
9 readily -- that wouldn't normally be thrown up in a typical
10 ODV or ODRC study. So say, the cost of an IT or an asset
11 management system, which -- I mean, there are always assets
12 that a firm has in addition to its fixed assets for which an
13 ODV or ODRC study is made, and those are the assets for
14 which one would in the first instance go and have a look at
15 what's in the books on the entity; you know, motor vehicles,
16 there's lots of simple things that need to be included as
17 well.

18 **CHAIR:** What about goodwill?

19 **DR HOUSTON:** I haven't -- I find it hard to imagine on what
20 basis you would include goodwill.

21 **CHAIR:** If you find a company whose market valuation seems to be
22 much higher than its own valuation according to its books,
23 what do you do about that differential?

24 **DR HOUSTON:** Well, market valuation is a whole different field,
25 and we're not interested in measuring a company's market
26 value in the capital market sense, and almost always that is
27 going to be different to its ODV value or the book value of
28 its non-system assets. So, you need to focus on the
29 physical assets and the infrastructure and the systems that
30 are needed to operate the business, not on its value in the
31 capital markets.

1 **CHAIR:** I just want to put to you something that Professor Evans
2 wrote with Graeme Guthrie, and probably came to a view that
3 you'd be comfortable with respect to gas, but he, in the
4 concluding remarks, indicates that in this paper that he
5 wrote on efficient price regulation of networks that have
6 sunk costs should perhaps be based on historic or
7 replacement cost. They've written:

8 "We've shown enough to indicate that historical costs or
9 replacement costs are not to be chosen between a priori.
10 Rather, the choice should be guided by industry
11 characteristics."

12 I wonder if you accept that, because I don't necessarily
13 hear you saying that.

14 **DR HOUSTON:** Industry characteristics is quite a vague term.
15 And so, I don't think I'd just agree with that holus bolus.
16 I think what I've said to you is that, if you're applying a
17 test of whether or not to implement or impose price control,
18 and the threshold for that test is a concept that
19 essentially is the existence of monopoly pricing, then an
20 ODRC valuation is the appropriate concept.

21 The only basis for an exception to that concept, which
22 you may call an industry characteristic, but the only basis
23 for an exception is where there has been in place some clear
24 regulatory understanding or compact or contract that said
25 from the beginning these assets should be valued and returns
26 and prices all determined on an historic cost basis.

27 And unless those arrangements are -- those are what I
28 would call not industry characteristics, but institutional
29 arrangements, if they're in place and they say -- and
30 there's a common and well understood understanding, then
31 sure, historic cost would be the way to go. But, absent

1 that, there's absolutely no case for it.

2 **CHAIR:** But that's sort of like a regulatory compact issue.

3 **DR HOUSTON:** That's right, yeah.

4 **CHAIR:** And that's the only case you'd see that would lead you
5 to think that historic cost would be --

6 **DR HOUSTON:** It's the only one I can think of. There's nothing
7 that I can think of that would want me to broaden that
8 qualification. But, I'm happy to answer any specifics,
9 but...

10 **CHAIR:** No, that's fine. I mean, I won't pursue that, I want to
11 pursue it a bit with Professor Evans, but if you haven't
12 seen the article, I think it's probably easier to leave it
13 for now. I'll just see if there are further questions.

14 **MR WILSON:** Does the hypothetical new entrant test say anything
15 about which depreciation profile to use, to construct ODRC
16 from ORC? Should it be an annuity depreciation or a
17 straight line, or does it not matter, or how much does it
18 matter?

19 **DR HOUSTON:** That's a very good question, and there isn't a -- I
20 mean, I can tell you what the hypothetical new entrant test
21 says in principle, and what it says in principle is that
22 the -- it's a forward-looking test, and so an ODV or ODRC
23 asset value needs to have regard to -- is essentially a
24 function of the future replacement cost of those assets.
25 And, the future replacement costs of those assets will
26 depend on your assumptions about technical progress and the
27 rate of technical progress in that industry, which then
28 drives your assumption about depreciation, all assuming that
29 this -- the demand for these services will continue in
30 perpetuity, and that's a very important assumption.

31 Now, what either of those issues mean in practise,

1 essentially your depreciation assumption should be driven in
2 the first instance by your assumption about changes in the
3 future replacement costs of those assets, and that's an area
4 where good and reasonable people can differ.

5 I think the Commission's own draft framework paper
6 quotes another NERA paper which talks about precisely these
7 issues, and in that -- I mean, so you've almost certainly
8 looked at it, but what that paper essentially says is,
9 there's all these different variables, and some of them, you
10 know, move one way, some of them move the other, and that in
11 practise, you know, maybe a straight line depreciation is
12 not a bad approximation. But that's very much a sort of
13 empirical or pragmatic -- it's an empirical issue and a
14 straight line, which is, what are the conventional
15 approaches, what conventionally is applied in Australia is
16 not a bad approximation. So, I don't know if that's an --
17 that's an in principle answer with a bit of pragmatism
18 thrown in.

19 **MR WILSON:** Just to follow-up; the one you were involved in with
20 the Moomba to Sydney pipeline, you applied a straight line
21 depreciation in that case?

22 **DR HOUSTON:** Yes.

23 **CHAIR:** Have you attempted to do that same analysis on NGC that
24 did you for the NCC?

25 **DR HOUSTON:** No, not -- I guess, so far the focus has just been
26 on the framework, but I guess those issues await us for
27 another day in the next few months, but not so far.

28 **MS BATES QC:** Just looking at your statement that the
29 valuation -- well, I think you're saying the valuation of
30 land and easement should reflect supply and demand in the
31 market for land?

1 **DR HOUSTON:** Yeah.

2 **MS BATES QC:** In your Moomba to Sydney example, how was land
3 actually valued there?

4 **DR HOUSTON:** Look, I can't answer. I simply -- I don't think
5 there was -- I won't say none, but I don't think -- land
6 wasn't a big issue, because I think the whole thing is
7 driven by an easement and I'm not, to be honest, exactly
8 sure how that was incorporated, because the people that did
9 the actual nuts and bolts of the valuation was of less
10 concern to us than the way it was to be applied. But in
11 principle it should be just simply another item of the ODRC
12 valuation. So, it would be at the current market value.

13 **MS BATES QC:** But you're not sure how it was actually done in
14 that case?

15 **DR HOUSTON:** In fact, I simply can't recall how that was --

16 **MS BATES QC:** What about easements? Was that more of a
17 significant factor?

18 **DR HOUSTON:** I think same answer; I'm just not sure how
19 significant --

20 **CHAIR:** I think we might ask you to find out, if you could,
21 please.

22 **DR HOUSTON:** Certainly.

23 **MS BATES QC:** Just, in respect of easements, the value on sort
24 of traditional valuation approach doesn't always really in
25 accord with what a new entrant would have to pay, because a
26 new entrant has to pay as a matter of negotiation, and the
27 negotiation has a lot of factors in it which don't
28 necessarily relate to the actual underlying value of the
29 land.

30 **DR HOUSTON:** I'm not quite sure what you're getting at, but my
31 understanding --

1 **MS BATES QC:** If you want to value easements on a sort of --
2 some relationship to the market value of the land basis,
3 which has been put to us, what I'm saying --

4 **DR HOUSTON:** What I mean by that essentially is, you just value
5 at the costs -- at what would be the cost of acquiring them
6 today, which I think it's reasonable to assume would be a
7 function of the market value of that land.

8 **MS BATES QC:** Yeah, well, what I'm putting to you is probably
9 the cost to a new entrant of acquiring them would be more
10 akin to what was actually paid for them, because often
11 the -- what's paid for them, because it bears very little
12 relationship to the underlying value of the land, there are
13 other factors in the mix there like, you know, I've seen a
14 case where easements for electricity, some people were paid
15 \$250 and the outliers got \$200,000. Bears no relationship
16 whatever to the underlying value of the land.

17 All I'm trying to say to you, is probably what was paid
18 for them is more relevant to what a new entrant would have
19 to pay.

20 **DR HOUSTON:** Well, there is a practical issue of how you somehow
21 come to a reasonable view of what the current cost of
22 easements might be, taking into account the fact that
23 there's several thousand of them, each is a negotiation,
24 negotiations are uncertain, there may be a range. There are
25 different ways of doing that. You can cast your mind over
26 what you think that will be with today, you could take the
27 original costs and index them up by a land value index, you
28 could --

29 **MS BATES QC:** I'm just trying to get a basic approach, if you
30 accept that what you say is to look at what a new entrant
31 will have to pay.

1 **DR HOUSTON:** That's right.

2 **MS BATES QC:** So, the principle should be, look at what a new
3 entrant would have to pay?

4 **DR HOUSTON:** That's right, yeah.

5 **MS BEGG:** I just had one question about this hypothetical new
6 entrant test. And the question I have is the assumption
7 that you have, I think, that it should apply irrespective of
8 the history. And I just wonder, a firm could choose
9 historic cost as its valuation methodology and it could meet
10 the NPV equals zero test that Dr Lally was talking about
11 over the life of the assets, or it could use ODRC and
12 similarly it could meet the NPV equal zero test, but the
13 profile of recovery cost would be different.

14 So, if a firm had chosen historic cost and you used the
15 hypothetical new entrant test on an ODRC basis, surely you'd
16 find that, if you measured it say at the early stage of the
17 life of the assets, it would look like the company was
18 earning monopoly profits and if it was later on in the life
19 of the asset, it would like it was under-recovering.

20 So, isn't it true that rather than adopt an approach
21 like this, you need to look at what the company -- what its
22 profile of recovery is and assess it against that? So, if
23 it has chosen ODRC you'd test it against ODRC, and if you'd
24 chosen historic cost, you'd test it against that?

25 **DR HOUSTON:** You know, I think either of those approaches or
26 both of those approaches would be valid in principle. You
27 know, if we could only go back to the beginning and say,
28 what was in the minds of this company, what do they do, how
29 well do they achieve -- how well do they go in terms of
30 achieved returns by reference to what they wanted to do? If
31 we knew all of that, then that would be a valid analysis to

1 undertake.

2 But my point is that, I haven't seen a situation yet
3 where we do know all of that and so, you know, where are you
4 left? You're left with something which is -- just simply
5 doesn't give you much to go on. And what that means in
6 practise is that, if you persist with that approach, you end
7 up making decisions which are highly arbitrary.

8 So, my proposition is that you're better not to bother
9 with that, or you may want to bother with that just to
10 convince yourself how arbitrary it really is, but it's --
11 the scope for arbitrariness, if you like, or the scope for
12 reasonable views to differ is much narrower in taking a
13 current cost approach.

14 I guess the other point that I would make is that you
15 sometimes do hear the point being made that, if you -- if we
16 really do know what the firm is doing and they start off
17 applying an historic cost approach and then somehow midway
18 through they switch to an ODV approach, then that somehow
19 relates to double-dipping or, you know, getting profits both
20 ways.

21 Look, in concept that is true. But that concept, or
22 again, assuming you knew all those things and we had a good
23 understanding of what people thought they were doing, but in
24 practise it's often not like that. And the reason is that,
25 particularly for something like gas infrastructure, which is
26 this sort of more marginal fuel, it's not like electricity
27 in the sense that its market is more uncertain, the
28 penetration is much less, so systematically you find in gas
29 assets, when they're developed, spend the first few years of
30 their life being under-utilised, because it makes sense to
31 build in extra capacity because there are enormous economies

1 of scale.

2 So, even if you were applying an historic cost approach,
3 generally people are never achieving the returns they would
4 seek in the early years because of the under-utilisation of
5 those assets, even after you -- even if you -- and that's an
6 optimal -- it's an efficient under-utilisation of assets.
7 And so, you know, the typical profile of returns under
8 whatever approach, you know, taking account of the market
9 circumstances, which are often the most relevant thing, is
10 low returns early and higher returns later on. So, this
11 concept of people grabbing all the profits in the first 20
12 years and now they're trying to grab them again, especially
13 for gas, just doesn't stack up in practise. And there's
14 nothing about the situation here which leads me to think
15 it's any different. The Moomba to Sydney pipeline is the
16 same; in the first few years it wasn't used a lot. So,
17 returns are low.

18 **CHAIR:** Thank you for that presentation.

19 **DR HOUSTON:** Thank you.

20 **CHAIR:** I would like to go ahead and have the presentation from
21 Professor Evans now. We may have to defer the questions
22 until the morning, however; I hate to do that, but I think
23 that may be necessary. I just know Vector will be here from
24 out of town and we need -- we do need to make sure that we
25 cover that today.

26 **MR BIELBY:** We're very happy for you to direct that, so we'll
27 set him off if you feel you want to, and we'll see what time
28 we can find.

29 **CHAIR:** Okay, thank you.

30 **PROF EVANS:** Good afternoon. I'm following up the previous
31 presentations, obviously, and looking at the core question

1 that faces the Commission in its deliberations. And so, I
2 have a presentation here which relates to that. In the
3 presentation I'll cover the following topics broadly.

4 First of all, the nature of the problem the Commission
5 confronts is really whether gas transmission and
6 distribution businesses that operate under light-handed
7 regulation are likely to be more or less economically
8 efficient than a business under more formal price controls.

9 Then return to the brief review of organisational
10 behaviour under regulation, comment on the competition test
11 the Commission has proposed, a general appraisal of the
12 building blocks approach is a means for establishing
13 inefficiency, and review the methods the Commission intends
14 to use to assess benefits and costs of control.

15 It seems like a lot, but I think we can be quite brief
16 in going through these different sections.

17 First the nature of the economic problem. The case for
18 regulation in most forms of Government intervention has
19 traditionally been based on the idea of market failure. In
20 infrastructure sectors, because of increasing returns to
21 scale and sunk costs, financial or ownership controls have
22 long been used to curb perceived monopoly excesses. Sherman
23 and Clayton Acts in the US determine that prices should be
24 fair and reasonable, which has basically led to rate of
25 return legislation in that country and in other
26 jurisdictions, privatisation of former Government
27 infrastructure providers have been accompanied by regulatory
28 controls such as price cap or revenue caps as part of
29 licence conditions.

30 The traditional notion of regulation is that it is
31 necessary to prevent prices being above costs, and therefore

1 output being below optimal levels. But policy makers and
2 economists have increasingly come to recognise the burden
3 that regulation itself imposes. Waves of deregulation in
4 different infrastructure sectors have been driven by
5 changing technology and a recognition that the costs of
6 regulation have, in a range of instances, exceeded the
7 benefits.

8 Effective price regulation, particularly in the presence
9 of some competition, is proving very problematical to find
10 an efficient scheme.

11 The questions the Commission has posed before it are
12 fundamentally whether augmented, or whether just light-
13 handed regulation of the New Zealand transmission and
14 distribution industries is appropriate today and whether the
15 costs of more heavy-handed regulation are too high.

16 We recognise that the Commission is required to address
17 acquirers' interests as well as economic performance.
18 However, we consider that it would only be in very special
19 circumstances that if light-handed regulation was the
20 preferred institutional setting on economic grounds, that it
21 would not be in the acquirers' interest also, since this
22 interest is the derived demand for transmission and
23 distribution. This is particularly the case when it is in
24 the long-term interests of acquirers that are being
25 considered.

26 Acquirers are interested in transmission and
27 distribution services that are dynamically efficiently
28 provided. Positive producer surplus, or in economist's
29 jargon qua(?) rents, are consistent with dynamic efficiency
30 and the interests of acquirers, providing dynamic efficiency
31 flows from that. In a dynamic -- the efficient world there

1 may coexist some profits and high consumer benefits.

2 There's no such thing as perfect regulation. There will
3 always be information asymmetries between the utilities and
4 the Regulator and the customers, so it's always a choice
5 between imperfect regimes. The question is, what's really
6 important to consumers and which type of regime is likely to
7 best deliver it.

8 We are of the view that the evidence so far points to
9 the benefits of light-handed regulation exceeding the costs
10 of a more intrusive regulation which can be observed in
11 other jurisdictions, and in thinking through the
12 organisational and investor response to more heavy-handed
13 forms of control, in the context of transmission and
14 distribution, it seems to us that a reasonable theory of
15 regulation would point to a need to find substantial excess
16 profits before a more heavy-handed form of control with all
17 the attendant direct and indirect costs was advocated.

18 Now, this is particularly so of the pipeline sector
19 which has these particular characteristics that form a
20 background to consideration of how it might be regulated.

21 First, pipelines are long-lived assets that, once in
22 place, are almost entirely sunk. Secondly, the demand for
23 pipeline services is a demand derived from the demand for
24 gas, and so, pipeline services follow the demand for gas.
25 The substitutes for gas are going to be threats, competitive
26 threats for pipeline services.

27 Thirdly, gas transport is characterised by multi-path
28 tariffs. I'll return to this in a moment, but the
29 characteristic of multi-part tariffs is that they do affect
30 the extent to which even monopolists would be inefficient as
31 we would define it as economists.

1 I might also mention there that gas transport is
2 typically characterised as are various elements of the gas
3 industry with long-term contracts.

4 In contrast to electricity, gas is a discretionary fuel
5 for which there are alternatives, and we've heard a lot
6 about that today.

7 Secondly, gas transmission and distribution networks,
8 particularly in New Zealand, are not nearly as
9 geographically comprehensive as is the case for electricity.

10 Also linked to the point that gas is a discretionary
11 fuel is that there is no even implied universal service
12 requirement on the provision of gas. In telecommunications
13 and in electricity there are applied, or direct in some
14 cases, universal service requirements that actually affect
15 investment and regulation. These no longer apply in the
16 case of gas where the obligations to supply, or pipelines
17 rather, where the obligation to supply relates to the
18 contracts that have been entered into with the gas retailers
19 and wholesalers.

20 Also, which is more relevant for the governance
21 structure than we -- than price regulation which we are
22 considering today, in gas there are fewer externality issues
23 in transmission and distribution.

24 I just mention here that in electricity you have a
25 common quality problem that pervades networks. Things like
26 making sure the electricity will not blow up your appliances
27 and voltage support and things of this kind, which are
28 strong externality elements within electricity that are not
29 present in gas. That allows for more independent operation
30 within the gas sector as opposed to that of electricity.

31 Another point I would make is that gas is a relatively

1 low emissions fuel that does substitute for other
2 electricity generation fuels when gas is at a relatively low
3 price. However, at higher prices electricity fuels prices,
4 including gas, may find more use in final demand than they
5 have in the past.

6 In other words, as the gas, as it seemingly is becoming
7 in New Zealand, although who knows what we will find in the
8 next year or two, is becoming more scarce, the price of gas
9 is rising, and therefore becoming an expensive generation
10 fuel, and what's then for -- its uses in final demand are
11 likely to be its most economic in the future, if this trend
12 continues.

13 This flows from the fact that in New Zealand now we find
14 ourselves with proven gas reserves that are arguably a
15 suggestion that gas may be scarce in the future. Now, these
16 characteristics of pipelines in the performance of
17 regulation inform our view that the lighter regulation under
18 the auspices of the acquired gas industry governance
19 structure -- although as discussed earlier that's quite
20 uncertain the role of that, even in this inquiry -- must be
21 a serious contender as to the desirable institutional
22 structure for the gas sector.

23 In the household sector and in commerce and industry,
24 except in a few specialised applications, natural gas can
25 readily be substituted for electricity, coal and biomass at
26 prices which appear to be fairly comparable to delivered gas
27 price. The evidence is that transmission and network prices
28 have to be discounted to attract some customers to switch to
29 gas or to keep them using gas.

30 With expected increase in price and volatility
31 consequent on the run-down of Maui, there is likely to be

1 increasing pressure on pricing in order to maintain the
2 level of demand for pipelines.

3 If there is a switch to gas in the end-use applications
4 there will be substantial investment required as well in the
5 pipeline industry.

6 The following graph we've seen before which is just the
7 volatility of the demand for gas, as it's been reflected in
8 the data compiled by the energy data file. The volatility
9 is really important when we're considering irreversible
10 investment or sunk costs and planning for future investment.

11 Just by way of comparison, the electricity volatility
12 that we derive from the same period is, if we were to leave
13 out 1992, much smoother than that of gas. I accept that
14 this arises because in gas a lot of the gas is used directly
15 in industrial and commercial applications, for which there's
16 quite a lot of switching and alternative fuel substitution
17 going on over time and not necessarily systematically;
18 whereas in the household sector a lot more, or roughly 30%
19 of the output goes directly in final demand on households.
20 In any event that seems to be a difference between the two
21 sectors, at least at the aggregate level.

22 Such volatility, when it's combined with irreversible
23 investment, implies considerable systematics and specific
24 risks attend the pipeline industry that affect stranding.
25 Risks that is arguably higher than the graph indicates
26 because of the increasingly limited state of New Zealand gas
27 supplies.

28 If long-term stable prices are to be offered to
29 acquirers, pipeline companies must prospectively earn a
30 return that's commensurate with this risk. We note that
31 such price setting entails considerable commercial risk and

1 that under incentive regulation the regulator would have to
2 make many of these decisions and share the responsibility
3 for the outcomes.

4 Investors would demand a substantial premium in the
5 allowed rate of return if prices had to be set for lengthy
6 time periods under price cap regulation.

7 I think it's also true to say that even in long-term
8 contracts that pipelines are offering other users of
9 pipelines, that they would demand a premium for risk too if
10 they were to bear the risk of stranding. So, this is not
11 necessarily peculiar to a Regulator setting a long-term
12 price, it's an issue about pricing for long lived assets
13 which are sunk. And so, it is an issue for NGC, I imagine,
14 just as it would be for a Regulator.

15 Now, in weighing up the benefits of control the
16 Commission would need to assess its ability to set
17 reasonably efficient prices. In a prospectively volatile
18 environment the possibility of, and the risks that attend
19 setting inefficient prices could well be high. Effective
20 price regulation is particularly difficult to achieve in
21 dynamically changing industries. In this circumstance
22 regulation can be very costly.

23 I think one of the reasons that we've had some
24 deregulation in utility industries since the 1980s or even
25 1970s is the technological change that has engendered cost
26 structure change demand, but also volatility in those
27 industries, and that has been difficult to manage under a
28 very heavy form of price regulation.

29 New Zealand is unique in its small size and its use of
30 light-handed regulation. There's very little in the way of
31 academic research which evaluates how well light-handed

1 regimes have performed in delivering efficient outcomes to
2 customers in comparison to other regulatory regimes.

3 Really, the only evidence we have is evidence that's
4 been accumulated about benchmarking between New Zealand and
5 other countries in telecommunications. This contrasts --
6 this sort of analysis is in quite sharp contrast with that
7 of other regimes and other analyses which are typically
8 comparisons of price caps and earning sharing regulations
9 with that of rate of return regulation, and typically these
10 comparisons are made in markets that are much deeper and
11 larger than that of New Zealand's.

12 So, in the absence of empirical evidence at this stage
13 our report which the Commission has develops a qualitative
14 framework for evaluating the likely organisational
15 differences that are likely to be present when comparing
16 utilities operating under light-handed regulation against
17 those more heavy-handed controls such as price caps. We
18 won't go through the difference, or the difference that we
19 mentioned, but we'd like to touch briefly on where we see
20 the major differences and the consequence of those
21 differences in terms of efficient outcomes.

22 The first point we'd like to turn to is that a business
23 under price cap regulation does tend to become Regulator
24 focused, including by restructuring the business to be
25 Regulator-oriented rather than customer focused.

26 In Australia, as elsewhere, regulated businesses have
27 extensive regulatory divisions geared to meeting the
28 information requirements of the Regulator and developing
29 business strategies to capture higher returns through the
30 regulatory process. It's very difficult for Regulators to
31 counter those strategies, because the firms always have

1 less -- always have more information than the regulated
2 business -- firms always have more information than the
3 Regulator themselves.

4 More importantly though, price cap regulation is
5 typically based around setting a price path so that a WACC
6 return is earned, or at least that is earned over the
7 regulatory period. This can have two critical effects from
8 a customer point of view and from the point of view of the
9 performance of the business organisation. The first is that
10 investment will tend to be less forthcoming, especially
11 those investments that might require a higher return to
12 compensate for stranding risks. This point has been raised
13 earlier in the day, and I just make the comment that in
14 general for a monopoly that is not constrained to invest,
15 investment will fall as a price cap is lowered in a risky
16 environment.

17 In other words, a monopoly that's in a risky environment
18 that has options whether to invest today or to delay will
19 typically delay as the price cap is lowered, particularly
20 under ODV type valuation methodology.

21 Just as an aside; the paper that has been mentioned a
22 couple of times with Graham and myself addresses this
23 question, and what we were looking for was a choice between
24 whether you should use historical cost or you should use
25 ODV, and the idea there is that can we find a combination of
26 a price cap and a base on which to apply the price cap that
27 would lead to more investment as opposed to either later or
28 less investment.

29 And the only case we could come up with was where
30 historical costs were being used, and the price cap was
31 applied to historical costs, but in that particular case

1 what was required was that the costs had to be very
2 uncertain, and furthermore, the costs had to be perhaps
3 declining significantly over time, and the producer surplus
4 that was generated by these costs -- sorry, the consumer
5 surplus generated by these costs, it would help if that was
6 going up at the same time.

7 And in this peculiar situation you could induce more
8 investment with a price cap on historical cost basis,
9 however, we don't think that that applies to gas.

10 **CHAIR:** You mean, you came to the conclusion -- it was your view
11 that might be the case in telecommunications?

12 **PROF EVANS:** Yes, we thought it might be in an intuitive sense,
13 because if you think of a network price coming down quite
14 steadily and also offering new services, the networks
15 offering new services which are generating more consumer --
16 you know, benefits, then in that circumstance it would be
17 possible to argue that historical cost had some merit.

18 **CHAIR:** I see, okay.

19 **PROF EVANS:** Now, why this is -- let's just return to the
20 telecommunications one just for a moment. There are two
21 situations, it seems to me. One is where there's a
22 universal service requirement which basically requires that
23 the firm invest. In that circumstance, the investment issue
24 is not really an issue. The firm has to invest, it's being
25 regulated; so, what?

26 I think gas is different. That's why this is an
27 important issue. Gas has no universal service requirement
28 of any kind, it can choose -- gas pipeline companies can
29 choose whether or not they invest in pipelines and how much
30 and the quality of the pipeline. And so, in this
31 circumstance a price cap can be expected to delay or even

1 lead to lower investment than in the situation I mentioned
2 where there's a universal service requirement.

3 Just to complete this picture; it's always been
4 mentioned that, what happens if you have competition? Well,
5 if you have competition in this market then that would bring
6 forward investment, even with the uncertainties that are in
7 the market. And so, competition would bring earlier
8 investment than that of a monopolist.

9 However, price caps do not have the same effect, that's
10 what we show in our paper, that putting a price cap on in a
11 place where -- in a situation where there's a monopoly
12 provider of services facing uncertain demand, that has to
13 choose when to invest will simply lead to delays in
14 investment. Of course, the presence of a level of
15 competition that eliminates this issue is -- implies that
16 there's no need for price regulation in any event.

17 I just would add to this that I think there is
18 burgeoning recognition that price caps in certain
19 circumstances in a wide range of circumstances are stifling
20 incentives for investment. US Regulators are coming under
21 fire for stifling incentives to invest in transmission
22 assets, and that seemed to be the cause of the Cascade
23 failure in Canada and the US northeast just a few weeks ago.

24 We visited there in February and spoke to the FERC about
25 these issues, and the FERC is really concerned about the
26 investment in transmission and is really concerned about the
27 regulatory environment. And indeed at one stage it proposed
28 a rule that enabled people to -- companies to join PJM and
29 gave them sort of a holiday on the rates of return they'd
30 get if they invested in transmission: I don't think that
31 survived recent weeks, but nevertheless, that was proposed.

1 In Australia, we are informed, reliability has decreased
2 in recent years as networks have been under such pressure to
3 cut costs under aggressive price caps. In the UK regulatory
4 under-investment in rail has been blamed or attributed some
5 blame for rail accidents that have happened in recent years.
6 So, investment is a particular issue for price caps,
7 particularly where firms are not -- investment is not
8 specified as being required, but also it happens for those
9 firms as well; it just turns out that that's not the subject
10 of this hearing.

11 Gas is an industry, or gas pipelines is an industry
12 which is free to invest or not invest as it chooses.

13 So, that was the first point about, investment will tend
14 to be less forthcoming. The second is that price cap
15 regulation eliminates incentives to provide quality that
16 consumers would otherwise may be willing to pay for.
17 Because there's no financial reward for providing higher
18 levels of quality under a price cap, businesses will only
19 provide quality at levels set by the Regulator. The problem
20 is that the Regulator is never that well placed to take
21 account of the different levels of quality that different
22 consumers might prefer, so in the end it has to have
23 standardised levels of quality across large customer
24 segments.

25 In contrast under a light-handed regime, because prices
26 can be flexible, if a customer is willing to pay for higher
27 quality, then there is every incentive for the utility to
28 deliver it.

29 So, just to summarise: Overall, a qualitative theory of
30 behavioural response to regulation by the firm suggests that
31 the more heavy-handed the regulation in pipelines, the

1 greater the prospect for socially wasteful activity to be
2 concerned, that is to say employ regulatory economists such
3 as myself.

4 Secondly, there will be lower investment, and thirdly
5 the greater the distraction from getting on with the job of
6 running an efficient business. The move from light-handed
7 regulation to incentive regulation is an increase in
8 intensity of regulation. Such a move has not been studied
9 in other countries and such a move can be expected to
10 adversely affect dynamic and productive efficiency. Such
11 effects would have to be a trade-off against other
12 regulatory outcomes.

13 I'm at another section but I understand that the time is
14 now 3.20.

15 **CHAIR:** Yes, that's right. I think -- I hate to do this,
16 Professor Evans, but I think you will be available -- more
17 widely available to us, is that a correct assumption that
18 you can...?

19 **PROF EVANS:** I'm available tomorrow among from 8.30 till 9, if
20 that's convenient. I'm speaking at a seminar from 9 till
21 12.

22 **CHAIR:** Might have to consider that, but I will suggest that we
23 do break now for 10 minutes and, after the break, we will
24 have Vector and we'll see whether we need to, whether we can
25 come back to you this evening or whether we need to arrange
26 another time. So, with that I'll adjourn for 10 minutes,
27 thank you.

28

29 **Adjournment taken from 3.25 pm to 3.35 pm**

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PRESENTATION BY VECTOR

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CHAIR: Okay, I'd like to resume this session and would like to welcome Vector and apologise again to you for keeping you waiting. But, if you would for the record please introduce yourselves and begin your submission when you're ready, thank you.

MR MACKENZIE: Thanks very much. Good afternoon Commissioners and staff. Thanks for the opportunity to present our submission today. My name is Simon MacKenzie. I'm the Group General Manager Networks at Vector Limited. In this role I'm responsible for the electricity and gas networks, information technology, our telecommunications business, valuation demand services and regulation.

The Vector team that we have with us today is Bryan Crawford on my left. He's the Group General Manager Sales and Marketing. Where Brian is responsible for our gas business, retailer and customer management and interfaces, sales and marketing, communications, and our pricing and commercial issues. John van Brink is on my right. John is our Commercial and Pricing Manager where he's responsible for the use of system agreements, access agreements and pricing and commercial arrangements with our consumers and customers. We also have with us Stuart Shepherd on the far end there on the right from LECG, and Lindsay Jones from Chapman Tripp in Auckland at the other end.

Unlike all the preceding presentations you've heard so far, our presentation solely focuses on what we believe is the threshold question for the Inquiry, that being whether competition is limited in the gas services market. Vector is somewhat surprised that this Gas Control Inquiry is

1 taking place. We recognise, of course, that the Commission
2 has no choice in the matter and that it was requested by the
3 Minister of Energy to conduct the Inquiry. We are, however,
4 concerned by the Commission's approach to the Inquiry as
5 reflected in the draft framework. It seems to us that the
6 Commission has already concluded that competition is limited
7 and has adopted an inquirer framework that proceeds on this
8 assumption.

9 This concern is reinforced by references in the
10 Commission's Draft Assessment and Inquiry Guidelines for the
11 Regulation of Electricity Lines Businesses where the
12 Commission outlines, it's appropriate to the assessment of
13 public benefits and the building block approach, and says
14 that it expects to use this approach for the purposes of its
15 current Part 4 Control Inquiry into Gas Pipeline Services.

16 Now, this may simply be an unfortunate turn of phrase,
17 but we would be concerned by any expectation that the
18 Commission will need to go as far as this in relation to gas
19 distribution services in the Auckland marketplace. Our
20 experience tells us that competition is not limited, and we
21 urge the Commission to take a step back, rather than
22 initiating inquiries into consequential issues such as
23 whether control is necessary or desirable in the interests
24 of acquirers, whether there is a net public benefit from
25 control, or the details of WACC calculation etc.

26 The Commission should focus on the threshold question;
27 whether competition is limited.

28 **CHAIR:** If I can just interrupt you for a second. I think that
29 it's perfectly appropriate to reassure you that the
30 Commission has not prejudged the issue about whether
31 competition is limited or not, and we're very open to that,

Vector

1 and that step will be gone through in some detail in each
2 individual market that we need to consider, so I just do
3 want to give you that assurance, that there is no -- there
4 has been no presumption made on that point.

5 **MR MACKENZIE:** Thanks very much. The threshold question, as
6 we've mentioned for the Inquiry, is whether the gas services
7 are supplied in markets where competition is limited or is
8 likely to be lessened. This is the most fundamental
9 question for the Inquiry. The Commission has no cause to
10 continue any further inquiry into any gas services market
11 unless the suppliers in that market face limited
12 competition.

13 Vector appreciates that the Commission has considered
14 competition in energy markets in the past. A theme of those
15 decisions has been that competition in the gas services
16 market is limited to that faced by distributors from bypass
17 pipelines and that inter-fuel competition is not sufficient
18 to produce workable competitive markets. This theme is
19 reflected in the Commission's comments in the draft
20 framework, for example at paragraph 5.71.

21 It may be a natural reaction for the Commission to want
22 to fall-back on conclusions that it has reached before, but
23 they do not reflect the wider competitive forces at play.
24 Demand for Vector's gas distribution service is derived from
25 the choices consumers make. Vector has been operating in
26 the gas market for over 3 years now; the first few years
27 under the UnitedNetworks brand. In that time Vector has put
28 together a sizable gas marketing team and spent several
29 millions of dollars on marketing gas. Our experience is
30 that the market in which we operate is highly competitive
31 and likely to get more so across all segments of that

1 market. We have no doubt that competition is not limited or
2 likely to be lessened.

3 In this presentation our focus is on the level of
4 competition in the marketplace in which Vector operates
5 today and the steps Vector has to take to influence the
6 consumer's choice. There are a number of other aspects of
7 the draft framework for the Inquiry that Vector is concerned
8 about. We have noted these at paragraph 1.3 of our written
9 submission. They have largely been addressed by Powerco and
10 NGC. Just to emphasise, of course, that NGC has a different
11 type of business to Vector where we have a distribution
12 business in Auckland as opposed to the NGC with -- also with
13 its transmission business. However, they have presented on
14 the issues in their submissions and presentations.

15 We mostly agree with what they have said, but we will be
16 addressing those other issues in cross-submissions.

17 In our view competition is not limited in the Auckland
18 marketplace. In this respect this inquiry differs from the
19 Airfields Inquiry as in that Inquiry it was clear that
20 competition was limited.

21 Vector believes that it is essential for the Commission
22 to take a closer look at issues such as inter-fuel
23 substitutability and bypass competition to examine the
24 market dynamics from the perspective of a consumer and to
25 look at the actual behaviours of energy solution providers.
26 Vector considers there is an obligation on the Commission to
27 inquire further.

28 The Commission must focus its resources on the threshold
29 question. Only if competition is limited or likely to be
30 lessened in any of the affected markets should the Inquiry
31 proceed further, and then only in relation to those markets

1 and none other.

2 In this presentation we want to take the opportunity to
3 relay some of the realities of our marketplace to assist you
4 in making your inquiries. We will describe to you the
5 realities of the marketplace in which we operate. We will
6 look at the residential sector of that marketplace, the
7 features of that sector, the choices consumers have, the
8 challenges that Vector faces to sell gas distribution,
9 consumer perceptions of gas, and the marketing structures
10 and initiatives that Vector has had to take to respond to
11 competition in this sector.

12 We will then look at the commercial/industrial segment
13 of our marketplace, the features of that segment, the
14 choices commercial/industrial consumers have, the challenges
15 that we face in this segment, and we will tell you what
16 Vector does to compete in this segment. We will also give
17 you examples, we believe, then summarise the issues.

18 Finally, we will comment on what we believe the
19 Commission should do next. In the time available, we can
20 give you only a representative sample of competitive
21 activity in our marketplace, Auckland. Our intention here
22 is to demonstrate to the Commission the importance of deeper
23 inquiry into the fundamental question of whether competition
24 is limited and to emphasise to the Commission the need to
25 engage at a practical level with the industry in an effort
26 to understand at firsthand the nature of the market and the
27 source and strength of competitive forces at play in the gas
28 sector.

29 The realities of our market: As you know, Vector has a
30 series of gas networks, distribution networks in the
31 Auckland region, but the penetration of reticulated natural

1 gas in the region is small. Only 16% of households and
2 businesses in Auckland have chosen to connect to Vector's
3 gas distribution system. We have a very small share of the
4 Auckland marketplace. Our marketing effort is focused on
5 growing and retaining that share.

6 **MR STEVENS:** What percentage of that is of the total gas
7 connections? You're saying 16% of the total gas connections
8 are Vector's, or 16% of the market?

9 **MR MACKENZIE:** Of the marketplace. Households and businesses.

10 **MR STEVENS:** So, what percentage of the total gas connections
11 has Vector got?

12 **MR VAN BRINK:** In the Auckland area it would be approximately
13 85%.

14 **MR STEVENS:** Thank you.

15 **MR MACKENZIE:** Demand for natural gas distribution services is
16 driven by the choices consumers make. Consumers have a
17 number of choices. Electricity, natural gas, LPG, diesel,
18 coal, wood, and solar. The market will tell you that these
19 choices are real. We encourage the Commission to make
20 further inquiries of the market to ask those who actively
21 market to the consumers who are making the choices for the
22 most part in the residential sector; these are the appliance
23 retailers. To give you an idea of what you can expect to
24 hear, we have asked four people who are doing just that to
25 tell you what they think.

26 We thought the best way to bring the realities of the
27 market to life for you is to hear from these people in their
28 own words. The people in the video are part of the channel
29 to the consumer. This slide shows the various components of
30 the channel. The video includes Ray Ferner of Rinnai, a
31 wholesaler of natural gas and LPG appliances, supplier to

Vector

1 businesses such as Placemakers, Plumbing World, Mico
2 Wakefield, Mitre 10, LG Carter, Master Trades. Dean Abraham
3 from ABER, a retailer of natural gas and LPG appliances.
4 Tony Benson of Crane Group, which has various divisions
5 retailing residential appliances and Bob Monk of All Gas, a
6 provider of gas based energy solutions to the
7 commercial/industrial segment.

8 Each of the individuals in the video represents a
9 company that is part of our Channel Partner Programme. We
10 will talk more about this programme later. In essence there
11 are two components to it. One targeted at the residential
12 segment, and one at the commercial/industrial segment. The
13 Channel Partner Programme is designed to address what you
14 can see is a fragmented path to the consumer. We'll now
15 switch to the video.

16 [Video played to the Conference]

17 **CHAIR:** Just before you proceed, I just want to thank you for
18 taking the trouble to make that evidence available to us. I
19 think it's quite useful actually. Our staff often go out
20 and talk to people like that, but we don't always get the
21 direct exposure to it, so we're grateful to you for that.

22 **MR MACKENZIE:** Thanks. Well, as you've just heard the
23 marketplace characterised by a variety of different
24 practical and physical features which Vector has to consider
25 when trying to convert customers to natural gas or to retain
26 them. The Commission needs to examine each of these
27 features. A consumer's fuel choice will depend on a number
28 of factors. Use; what is the fuel required for? Cooking;
29 hot water, space heating or an industrial application. What
30 will it cost? Considerations here include the cost of the
31 energy, the cost of the delivery, and when the costs will be

1 incurred. For example, is there an up-front capital cost
2 and can the consumer afford to pay it at the time, and
3 convenience from the consumer's perspective of accessing the
4 service. The choices will also depend on the customer's
5 size and type. Consumers typically have a number of fuel
6 choices.

7 Another of the realities of the Auckland marketplace is
8 the increase in LPG penetration. The map we've shown
9 identifies the Auckland region and the marketplace in which
10 we operate, and the Commission may not be aware of the
11 extent to which LPG has developed as an alternative energy
12 option over the last few years. The dark dots on this map
13 represent the minimum numbers of LPG installations in the
14 Auckland area. These are LPG twin packs installed only over
15 the last 4 years. We know about these because pack
16 installations require certification and we are able to
17 access information about certifications.

18 In addition to the twin pack installations, there are
19 tens of thousands of other LPG appliances that use cylinders
20 and that do not require certification, such as gas heaters
21 and gas cookers. We will talk more about LPG later, but for
22 the meantime this map illustrates a point.

23 Also, Mr Stevens, your question with regards to the
24 market sizing, Brian will elaborate on that a little bit
25 further when he talks about the markets.

26 This graph shows the increase in LPG appliance sales of
27 one of our national wholesalers of natural gas and LPG
28 appliances. It shows that natural gas share of gas
29 appliances has declined over the time. In 3 years the
30 wholesaler's percentage of sales of LPG appliances has
31 nearly doubled.

1 The reality of the market is that consumers have a range
2 of choices. Natural gas is just one of them. In this
3 marketplace market power lies with the consumers. In
4 addition to choices of fuel types, Auckland consumers have a
5 choice of gas retailers on our network.

6 I will now pass over to Bryan Crawford, Group General
7 Manager Sales and Marketing, who will describe in more depth
8 the realities of our markets.

9 **MR CRAWFORD:** Thank you, Simon. I'll start by describing the
10 residential market in Auckland. As the slide indicates,
11 there are approximately 391,000 homes in the Auckland
12 market, of which 240,000 are passed by a natural gas
13 network, and of that number 63,000 have actually connected
14 to a gas network. That represents, as we heard earlier, 16%
15 of the total number of homes, or 26% of the number of homes
16 fronted by a network.

17 And, just a clarifying point to the question earlier, I
18 think the figure of 85% was a share of the reticulated gas
19 market and as we've indicated if we recognise that LPG
20 delivers the same consumer benefits to the end consumer if
21 we were to define the market for gas in Auckland as
22 including LPG, we are unable, I think, to accurately portray
23 the market share we have in that market due to the fact
24 that, outside of twin packs, we have no real substantive
25 knowledge of the quantity of gas appliances in homes that
26 aren't certified. So, its a little difficult to tell what
27 our share of the total gas market in Auckland is.

28 The point at the bottom of this slide in terms of the
29 appliance connections within homes; as it says, a third of
30 homes have a single type of usage. Most often that's
31 cooking; it's quite common for someone to -- for cook to be

1 almost the entry point into gas for a consumer. A third of
2 homes have two types of usage, and a third have three or
3 more.

4 What this slide demonstrates is that Vector cannot take
5 anything for granted. The majority of households have at
6 this stage not opted or chosen to connect to a natural gas
7 network, notwithstanding the fact that the opportunity
8 exists for them, through proximity to the network, and of
9 the households that have, most have not opted for gas for
10 all of the appliances for which natural gas could be used.

11 **CHAIR:** Why do you think the penetration rates are lower in
12 Auckland than, say, Wellington?

13 **MR CRAWFORD:** A matter of history; we will go on in a slide
14 perhaps to uncover some of the reasons we believe that maybe
15 has arisen.

16 In terms of choice, we heard in the video that consumers
17 have a range of energy choice options. In a residential
18 market for cooking, obviously they include natural gas, LPG
19 gas and electricity, and adding to those three fuel types
20 for space heating wood and coal.

21 Solar becomes an option in the decision set in water
22 heating, and natural gas and electricity are also options
23 for clothes drying.

24 Some of the marketing challenges that we face in the
25 residential market are summarised on this slide, and we do
26 face a number of challenges in marketing gas in the Auckland
27 market. These include the consumers' up-front capital cost
28 of connection which we heard about the video. This can be
29 seen as an impediment to switching to gas by consumers, but
30 can be addressed by incentive payments or by showing
31 consumers that the cost of connection can be recovered

1 through lowered delivered gas prices over time.

2 There are around 43,000 lower socio-economic houses in
3 Auckland. These consumers will often be deterred by that up
4 front capital cost of connecting to natural gas, and this is
5 in part perhaps one of the reasons, as is a couple of the
6 other points on this slide, to your point around lower
7 penetration in Auckland.

8 There are also around 18,000 homes in the Auckland area
9 that are not owner occupied. It can be a challenge to
10 persuade landlords that they should install or connect to
11 natural gas, given that they don't enjoy the lifestyle
12 benefits themselves of that decision; their tenants do, and
13 they would have to be satisfied that they could recoup that
14 through a higher rental.

15 There are also consumer perceptions about the shortages
16 of natural gas supply with the depletion of Maui, and this
17 is a factor which our Channel Partners, some of whom you've
18 seen on video, have to deal with as people make decisions
19 about whether to connect to a gas network or to take an LPG
20 option.

21 Consumer perceptions of gas relevant to other fuels is
22 also a challenge. I'm now going to move to some slides
23 which contain some take-outs from some independent market
24 research which we commissioned ACNielsen to undertake in
25 2002. We commissioned this survey to help us understand
26 people's preferences so that we could more effectively
27 compete against other fuel substitutes.

28 Just to quickly look at the methodology behind this
29 study, it was conducted as I said in 2002. It was a 20
30 minute interview of 250 -- a sample of 250; it did
31 include -- because UnitedNetworks had gas networks at that

1 time in Wellington, it did include the Wellington market,
2 but the bulk of the sample was from Auckland. It focused on
3 female house owners aged 30 to 50 years. I'll come back to
4 that point later, but effectively it is the female partner
5 in the household that appears to have the most influence
6 over the decision process around gas appliances or
7 appliances in general and, therefore, their views were of
8 particular interest to us.

9 **CHAIR:** Doesn't work that way in my house.

10 **MR CRAWFORD:** It does in mine.

11 So, looking individually at the various usages and the
12 predisposition of consumers, and firstly usage. As this
13 slide indicates, almost 1 in 3 consumers were using natural
14 gas for heating. We can see the predominance obviously of
15 electricity from this slide.

16 Moving on to cooking in the next slide. While 1 in 5
17 are using natural gas hobs, only 1 in 8 use a natural gas
18 oven, and we heard I think in the video that it was quite
19 common to have gas, possibly even LPG fired gas hobs but
20 still have an electricity supplied oven; that's quite a
21 common occurrence in this country.

22 In terms of usage for hot water, 1 in 2 people have at
23 some stage used natural gas for water heating purposes,
24 while only 1 in 6 are in fact current users, and again the
25 predominance of electricity as a source of hot water heating
26 is self-evident.

27 The next slide prefaces some slides which look at the
28 disposition of consumers in terms of their preference or
29 desire for gas and other energy options.

30 So looking at individual uses, the disposition for
31 heating; consumers are favourably disposed towards natural

1 gas but still -- but it is still on a par with electricity.

2 For cooking, a consistent picture in terms of the
3 previous slides, and moving on to hot water, the preference
4 and desire is still obviously higher for electricity.

5 So what does this really all tell us? It demonstrates
6 to our mind the reality of inter-fuel competition and
7 product substitutability. It enables us to understand
8 consumer perceptions and target our competitive responses
9 appropriately. It tells us of an increasing awareness of
10 use of LPG as a fuel option, and acknowledging that everyone
11 will have electricity in their home, it reinforces to us
12 that we need ensure that natural gas is top of mind as a
13 second option. Particularly in light of active marketing
14 campaigns of other fuels and in light of the fact that we
15 clearly have been losing market share to other fuels,
16 including LPG. In summary, we are effectively competing to
17 be the preferred second fuel in the home.

18 How Vector competes: To compete against other fuel
19 types, Vector designed a programme that would rebuild
20 consumer awareness of natural gas which had waned over the
21 years and build a trend toward a preference toward natural
22 gas. We wanted to increase natural gas connections and
23 increase gas usage in existing connections through the
24 purchase of additional appliances in homes.

25 We undertook research to identify a target audience.
26 That research told us our market were the style and image
27 conscious in the mid-to-upper socio-economic group, and as I
28 touched on earlier with women as the primary influencer of
29 the purchase decision. We developed the Pure Energy brand,
30 a brand registered as a trademark and a brand under which we
31 have since undertaken our marketing campaigns.

1 a business facing limited competition does not need to do.

2 We realise that, as a network company and not a
3 retailer, we were one step removed from the consumer, and
4 that to achieve the marketing objectives it would be
5 necessary to rejuvenate the channel through which gas
6 appliances and connections are sold. That demand growth is
7 a function of a healthy, profitable, effective and
8 sustainable industry ecosystem, and Simon covered the
9 Channel Partner Programme structure in an earlier slide.

10 **CHAIR:** Is that a common approach that's used, this Channel
11 Partner?

12 **MR CRAWFORD:** You've preempted my very next point. We recognise
13 that the marketplace is a competitive one and that we needed
14 to put in place a programme with the distribution channel in
15 order to compete effectively against other fuel types,
16 remembering that many of the outlets through which gas
17 appliances are sold, be they LPG or natural gas appliances,
18 the same outlets are selling electrical appliance.

19 So, if you go to a Plumbing World you have the choice of
20 an electrical hot water cylinder or a gas hot water
21 cylinder. So, we introduced the Channel Partner Programme.
22 This programme is typical of other trade marketing
23 programmes to your point. And I personally have been
24 involved with those types of programmes in other sectors,
25 they're very common; trade marketing programmes in fast
26 moving consumer goods. I think the supermarket industry for
27 one, from personal experience, trade marketing activity
28 almost dwarfs consumer marketing activity in certain
29 categories. So it's not uncommon to try and build
30 preference within the channel, because you want your product
31 to be promoted when it's sitting checked by Jal(?) with your

1 competitor, you want your share of the attention of your
2 Channel Partners down stream, they have considerable
3 influence over your own growth.

4 Simon just pointed out that I should remind the
5 Commission that the Channel Partners sell both LPG and
6 natural gas appliances, and in fact they're interchangeable.
7 Just by changing the jets on a stove, for instance, it can
8 be either LPG or CNG. So we have electricity, we have LPG
9 and we have natural gas appliances in the same outlets
10 checked by Jal(?), as I said. So, these programmes are a
11 common feature of other markets.

12 In introducing the Channel Partner programme our
13 objective was clear, to rebuild confidence amongst Channel
14 Partners, that's appliance suppliers and retailers, in the
15 future of the industry. The industry had lacked leadership
16 and the Channel members lacked confidence in its future. We
17 needed to re-engineer the Channel processes to lower the
18 costs within the industry and speed up procession of
19 connections for consumers. In short, making gas an easier
20 purchase.

21 We needed to create healthy growing downstream business
22 partners. We needed to ensure market coverage was adequate
23 so consumers could access their range of choices easily, and
24 we needed to provide a systematic means of reaching and
25 serving customers where they are and through the outlets
26 which they prefer to buy product. We needed to ensure a
27 cohesive promotion of natural gas as a fuel and to minimise
28 conflicting messages about it across the marketplace.

29 The Channel Partner Programme involves developing
30 relationships between Vector and selected partners in the
31 sales Channel. The Channel Partners are appliance

1 retailers, but as we touched on, are not solely natural gas
2 appliance retailers.

3 Formal Channel Partner agreements are entered into with
4 these other business partners.

5 The Channel Partner agreements allow the Channel Partner
6 to use the pure energy brand, as I mentioned. They provide
7 financial incentives for new connection to Vector's gas
8 network and for introducing additional natural gas load; for
9 example, a home may already be connected to gas, but uses
10 gas for only one purpose, such as cooking.

11 An incentive would be paid to the Channel Partner for
12 selling and connecting gas water heating to that home, for
13 instance. A portion of the financial incentives is paid
14 into a Partner Development Fund used for the promotion of
15 the Pure Energy brand and natural gas generically. There
16 are separate programmes for residential and commercial
17 Channel Partners, recognising the need for partners to focus
18 on the market segments they know best. The Channel Partner
19 programme provides a means through which Vector can
20 influence consumers' fuel choices, and programmes like these
21 are typical of competitive markets. As I mentioned, I've
22 worked in fast moving consumer goods and they are common
23 there.

24 In summary, Vector recognise the extent to which it
25 faced competition from other fuels. We recognise that we
26 were losing market share and we needed to do something about
27 it. We dedicated internal resources to support our
28 marketing campaign, and a Channel Partner programme. We put
29 in place a marketing team with account managers, Channel
30 Partner managers and creative people. Businesses facing
31 limited competition do not need to do this.

1 **CHAIR:** Can I just ask you, in terms of -- I don't know how long
2 you've had the programme in place, but has it been more
3 successful in one of those segments than the other;
4 residential versus commercial?

5 **MR CRAWFORD:** The programme's more developed in the residential
6 market. Certainly, it's produced the kinds of results that
7 we feel warrant carrying on with the programme and are
8 continuing to invest. There is a lot invested in marketing
9 in the gas industry, not just by ourselves but by Channel
10 Partners. But that investment in promoting gas as an energy
11 choice had declined somewhat because of a lack of confidence
12 of small business operators in downstream Channel Partners,
13 so our investment was, if you like, a catalyst to greater
14 confidence and greater investment in growing the market in
15 terms of residential connections.

16 **CHAIR:** So now it's -- if I've understood you right, you went
17 from declining connections to growth in both segments?

18 **MR CRAWFORD:** Yes, the programme's still developing in the
19 commercial sector. You heard from Bob Monk on the video
20 earlier, and Bob's one of our Channel Partners in that area.
21 There aren't as many partners out there in the commercial
22 sector, it's a much more specialised sector obviously. So,
23 companies such as his are fewer.

24 So, we have fewer partners, but we've also re-evaluated
25 the programme and changed it over time and continue to
26 evolve it and improve it where we can, and we get feedback
27 from the marketplace that we can enhance the programme and
28 deliver a better outcome. I should point out that whilst
29 we've improved our performance, I think we're reminded of
30 the fact that the LPG growth in the marketplace in the same
31 period has continued at a much higher rate than the growth

1 we've been getting, even with the programme that we've put
2 in place, so.

3 **MS BATES QC:** You might have given us this information, but I'll
4 ask it anyway. By volume and by revenue, can you give us
5 the percentage that's residential, and percentage that's --

6 **MR CRAWFORD:** Commercial/industrial?

7 **MS BATES QC:** Yeah.

8 **MR CRAWFORD:** We have that information; I don't have that at my
9 fingertips.

10 **MR VAN BRINK:** We've got information available, this is
11 obviously for our market segment only. The residential
12 connections is 93% of our network. In terms of volume it's
13 17%.

14 **MS BATES QC:** 17?

15 **MR VAN BRINK:** Correct.

16 **MS BATES QC:** So, mmm.

17 **MR CRAWFORD:** 7% of the market are industrial, but it's a flip
18 flop almost in terms of connections and volume.

19 **MS BATES QC:** Yeah, I suppose that is so. In terms of your
20 revenue profile, what percentage of the revenue comes from
21 industrial/commercial?

22 **MR VAN BRINK:** Probably about 56%.

23 **MS BATES QC:** Do you make any distinction for your own purposes
24 between commercial and industrial?

25 **MR CRAWFORD:** Yes, we do. They are quite different markets.

26 **MS BATES QC:** Yeah, that's what I thought, but can you just
27 elaborate on that a little bit, how you approach the two?

28 **MR CRAWFORD:** We -- I could characterise -- yeah, I could
29 characterise it by starting with the consumer around the
30 decision process that a consumer goes through is quite
31 different. John is actually going to talk about the

1 commercial/industrial market specifically.

2 **MS BATES QC:** Yeah, I was just trying to get an idea of your
3 profile before we got into that.

4 **MR CRAWFORD:** Sure.

5 **MS BATES QC:** Are you going to deal with industrial and
6 commercial separately?

7 **MR CRAWFORD:** Yes, so it's the next part of the presentation.

8 **MR SHEPHERD:** To clarify that, there's a distinction between
9 residential and commercial/industrial.

10 **MS BATES QC:** I am trying to work out whether you make a
11 distinction between industrial and commercial.

12 **MR CRAWFORD:** Sorry, we treat those as --

13 **MS BATES QC:** As the same?

14 **MR CRAWFORD:** -- as a market. There are segments within that
15 market -- however, we heard Bob Monk talking about what he
16 describes as segments or sectors, in commercial/industrial,
17 at the bottom end starts with sort of restaurants and
18 perhaps small commercial premise s that use a lot of hot
19 water for instance; obviously up to major industrial plants,
20 you know, horticulture, major uses of energy in terms of
21 production.

22 **MS BATES QC:** Does your company have many major users?

23 **MR CRAWFORD:** We'd have to be more specific, I suppose, in terms
24 of how we delineate those based on volume or size or, so --
25 yeah.

26 **MS BATES QC:** Why I'm interested is, I'm just wondering whether
27 the level of competition is different in the different
28 segments, and I'm getting the impression that there's a lot
29 in the residential area.

30 **MR CRAWFORD:** I think I'd characterise it by saying that the
31 competition is no less intense, but the nature of the

1 competition does differ. And, we heard from the video that
2 competition in the commercial/industrial sector, for
3 instance, both from a substitution perspective and from the
4 network point of view, other network providers, is intense.

5 In the residential market it is intense in terms of
6 product substitution, as we've tried to highlight, and in
7 fact there are competing networks in the Auckland region in
8 the residential marketplace as well; competing reticulated
9 natural gas networks in residential areas.

10 **MS BATES QC:** Just in terms of the LPG, am I right in assuming
11 that in residential quite a lot of that goes for barbecues
12 and latterly outdoor gas heaters and that sort of thing?

13 **MR CRAWFORD:** That's certainly true, but I think there is a
14 substantial amount in homes for kitchens, cooking, and I
15 think --

16 **MS BATES QC:** Where they don't want to connect up with you?

17 **MR CRAWFORD:** And the point was made --

18 **MS BATES QC:** I think I'm in that category.

19 **MR CRAWFORD:** I am too. People want the benefits of gas and
20 what it does in terms of cooking, but may already have an
21 electricity hot water cylinder and don't go down the path of
22 switching the whole house over to gas.

23 **MS BATES QC:** With the barbecues and outdoor heaters, am I right
24 in assuming you can't really compete with those because they
25 can get moved around?

26 **MR CRAWFORD:** No, for instance, the Viaduct Harbour in Auckland,
27 all the outdoor heating in those restaurants is reticulated.
28 So it's not uncommon if you build a house these days to
29 reticulate out to your outdoor areas.

30 **MS BATES QC:** Yeah, but you can't have the same flexibility of
31 movement, is the point I'm trying to get to.

1 **MR CRAWFORD:** No, you can't. You can put BayaNet connections
2 around in various areas, but you're right, you can't wheel
3 it sort of 6 inches to the left if the wind's blowing from
4 the wrong direction perhaps.

5 I think I'll hand over to John now who's going to cover
6 the commercial/industrial market.

7 **MR VAN BRINK:** Hopefully in doing so I'll answer some of those
8 questions you asked before; really focus on the
9 commercial/industrial segment of the gas market where, as
10 Brian said, competition is the same but the decision-making
11 process has a different impact on the way that consumers
12 look for choice and for gas.

13 Firstly in terms of defining the commercial/industrial
14 market in Auckland, the total businesses in Auckland number
15 some 42,000 approximately, of which we have 4,700
16 commercial/industrial connections. 2,000 of those are small
17 commercial, which would represent the hairdressing salons
18 where they use hot water. The remainder are generally a
19 commercial/industrial use with a specific number of users,
20 which I'll define a bit later on.

21 Our market share is 11%, which is lower than the
22 residential market in terms of the total businesses.
23 Competition in the industrial and the commercial sectors
24 comes from fuel substitution as well as the continued threat
25 of and from actual bypass. While physical bypass of a
26 distribution network would be expected to concentrate around
27 the transmission pipeline, and more specifically the gate
28 stations to our networks, large gas loads make laying of
29 pipes several kilometres from a gate station quite
30 attractive, and I will provide an example of that a little
31 bit later on.

1 Hence, as the transmission line cuts through the Vector
2 footprint, or our network from north to south, most of our
3 network's large commercial/industrial loads may be accessed
4 by other distributors that are under threat of bypass or are
5 experiencing an actual choice of gas connections from
6 another distributor as well as us.

7 I'll talk through the nature of the market and the
8 challenges we face and then provide a number of examples of
9 the competitive pressures facing the commercial and the
10 industrial market and show that these are not confined to
11 one part of our network. The examples are typical, they're
12 not exhaustive and we'd certainly welcome the opportunity to
13 cover this in more detail with the Commission at a later
14 stage if you so desire.

15 The commercial/industrial customers have access to a
16 number of energy choices. A number of examples are
17 presented here. Again the fuel choices, as seen on this
18 slide, they match those choices available to the residential
19 market. The users tend to be focused around heat processing
20 requirements, drying, cooking, space heating and also water
21 heating and steam racing.

22 Typical examples would be in hospitals where there's
23 cooking, but there's also incineration for health reasons.
24 There's horticultural heating for frost protection and
25 glasshouse heating. Obviously a manufacturer does process
26 heating, smelting and drying processes, and then there's the
27 hospitality industry.

28 Another example would be swimming pools where there's
29 opportunities to use electricity or gas. There's a pool in
30 the North Shore of Auckland which has a resistive electrode
31 for heating the water rather than just gas, so they use

1 electricity for heating the water. And commercial dry-
2 cleaning use water heating and a steam raising plant. An
3 example in Bob Monk's video clip, he mentioned the Stamford
4 Plaza where he was trying to introduce gas appliances which
5 raise steam, where, as I understand, electrode boilers were
6 used because they seemed to be a better fit at that stage.

7 In providing our product to industrial and commercial
8 consumers we face a number of challenges. The larger
9 industrial processors involve substantial capital costs for
10 obviously introducing of plant as well as connecting to the
11 gas network. Often businesses face competing demands for
12 investment dollars and up-front capital costs are also
13 influenced by the cost of laying pipes, which can be
14 expensive, especially in the volcanic areas in central
15 Auckland around Penrose. Commercial and industrial
16 customers are driven by cost imperatives; I'll touch on that
17 a little bit later on again.

18 Industrial processes, such as heat pump technology,
19 infrared and microwave drying, as well as increasing
20 efficiency of other fuel technologies, such as LPG and coal,
21 provide some real alternatives for businesses, and there are
22 several areas where Vector's pipeline runs alongside those
23 owned by other distributors.

24 The redetermination of the Maui Gas Field has reduced
25 allocations of lower gas to retailers and produced some
26 uncertainty in the marketplace. As gas price transition s
27 to a post-Maui state the industry perception is one of lack
28 of gas supply, and it's no longer possible to gain long-
29 term, that is, like 3 year contracts, for gas and customers
30 face a period of price uncertainty which makes it hard for
31 them to make decisions when investing in plant.

1 A number of larger industrial businesses are observed by
2 overseas corporates and their owners continually assess the
3 viability of these businesses as part of an international
4 portfolio of assets, and they frequently shift production
5 off-shore or to other plants or sell parts of their
6 businesses and move either to Australia or Asia. So the
7 effect of this is really that Vector competes in an
8 international energy supply market, not just a local one.

9 In order to compete successfully in commercial and
10 industrial markets, we have to influence consumer choice.
11 But whereas residential consumers choose on the basis of
12 lifestyle and affordability, the commercial and industrial
13 consumers make choices based on product suitability and
14 cost. And in order to help such decisions to be made,
15 Vector deals directly with a small number of large customers
16 to improve transparency of pricing and additionally to
17 strengthen our competitive position. It's relative not only
18 to other fuel substitutes but also to vertically integrated
19 retailers who retail on our network and also compete with us
20 in distribution services.

21 **CHAIR:** Can I just ask you a question. I mean, you've described
22 some of these things, for instance the up-front capital
23 costs as a challenge, and I can see why that is a hurdle you
24 have to get over. But would you agree, once you convince
25 somebody to take the jump, it's also a hurdle for them then
26 to switch away from you?

27 **MR VAN BRINK:** In some cases that hurdle is not all that great.
28 For example, switching to coal does actually produce fuel
29 savings, although there is obviously conversion costs. To
30 switch a 1 megawatt boiler from national gas to LPG is about
31 \$10,000. So, there are choices that can be made.

1 **CHAIR:** So, it's a higher cost to switch to gas than it is to
2 switch from gas to the other sources?

3 **MR VAN BRINK:** I would expect that it's probably very similar,
4 and it does depend very much on the businesses; you know,
5 the product cycle, the lifetime and also the length of time
6 it's used during the day for example.

7 As Brian mentioned, we've also developed a commercial
8 Channel Partner Programme, and it's along the lines of the
9 residential programme that was described earlier, but
10 tailored to the commercial channels, and that's to sell into
11 the business market. And again the video clip I referred to
12 here would be the one that we showed with Bob Monk from All
13 Gas Solutions relating his view of that market segment.

14 In the next few slides I'll take you through some
15 specific examples of competitive activity in different
16 commercial/industrial areas of Auckland. As I said before
17 the examples are not exhaustive and I have not covered all
18 areas. What I hope to give you, though, is an indicator of
19 the level and intensity of competition that Vector faces in
20 this sector and give you a steer on further inquiries that
21 you will need to make.

22 I want to note here that Vector does not wish to
23 identify some of the customers by name in this forum; you
24 would expect given the competitive environment, but we're
25 happy to do so under the confidential provision should you
26 require it.

27 The first example I want to give relates to the northern
28 boundary of our network footprint at Whangaparoa and Orewa.
29 The Whangaparoa/Orewa region has high commercial and
30 residential growth rates. Several years ago NGC, and at
31 that time Enerco, went head-to-head to construct pipelines

1 in the Orewa and Whangaparoa environments.

2 That was to supply a commercial load in the region and
3 then to use the commercial customer base as a springboard or
4 an entry growth to move into the high growth residential
5 market. Two distributors own pipelines that run the length
6 of the Whangaparaoa Peninsula down towards Gulf Harbour,
7 side by side down the same streets.

8 NGC's network is connected to the transmission line at
9 the Waitoki Gate Station. Vector's line is islanded
10 supplied by means of CNG tankers where are fed from our
11 Vector network in Albany. Enerco's intent was to grow the
12 network and then connect to the Auckland network once load
13 increased in Whangaparoa. That level of growth has not yet
14 eventuated, so we still operate an islanded network.

15 The next example covers the area of West Auckland,
16 Whenuapai. It is rural areas at the edge of our network.
17 Predominantly the industries there are flower growing,
18 horticulture and timber processing. Vector competes for
19 glasshouse load against other fuels.

20 Examples of competitive activity in the upper harbour
21 area, in one case we endeavoured to secure gas supply to a
22 pine pack wood processors. We were unsuccessful. Pine pack
23 continue to use wood waste for heating processes. In
24 another case we endeavored to secure gas supply to
25 Paremeremo Prison. We were unsuccessful. Paremoremo
26 continues to use coal.

27 In a third example a rose grower in the upper harbour
28 area was using coal, was converted to gas and supplied for
29 about 18 months as an isolated site ousting our CNG tankers.
30 This enabled the customer to benefit from using gas without
31 having to wait for a pipeline extension.

Vector

1 In the intervening time, Vector secured supply to new
2 glasshouse complex and also converted an orchid growing
3 operation from coal to gas which then provided the critical
4 gas to enable our network to be extended and connect all
5 three permanently to our network.

6 An example relating to the Auckland CBD; Vector
7 negotiated with Auckland District Health Board to convert
8 coal-fired boilers at Greenland and Auckland Hospitals to
9 natural gas. The Auckland District Health Board wanted also
10 to install a co-generation scheme which would significantly
11 increase the amount of gas used at this site.

12 As a result the site presented an opportunity for
13 network bypass, even though the nearest gate station to the
14 transmission line is some 10 kilometres away. The
15 competitive bid process included another bypass provider as
16 well as against other fuels, namely coal. The size of the
17 enlarged hospital with co-generation made this an ideal
18 anchor tenant for a bypass line, and Vector won the
19 contract. And we believe one factor in our success here was
20 the transparency of line charges we provided to the Hospital
21 Board.

22 I want to relate an example on the North Shore of
23 Auckland. An opportunity arose to service a new co-
24 generation scheme there with an industrial customer on
25 the -- in the area around the Wairau Valley. The company
26 involved was United States owned and this business formed a
27 satellite of a large multi-national company. Working with a
28 generator and a retailer and with the customer, Vector
29 helped establish a co-generation scheme at a time when the
30 company had to make a decision to invest in a new boiler.
31 So, this was a proposal we put through as part of a three-

1 party input, including the customer. The customer was also
2 contemplating relocating the business to another location
3 internationally, and the proposal needed to be
4 internationally competitive.

5 I want to provide an example around the Penrose
6 industrial hub in central Auckland. A large user of gas in
7 the Penrose industrial hub had its gas supply contract
8 expire earlier this year. The customer was looking at
9 expanding and required increased users of gas. Vector
10 competed against Nova Gas in this case, a vertically
11 integrated competitor, and we retained this customer and
12 grew the business.

13 The next example covers a site within the industrial
14 corridor which stretches in South Auckland in the Manukau
15 area from the airport through to WERI in East Tamaki.
16 Vector provided distribution services to a 50 TJ customer in
17 WERI. Contact Energy was the retailer using our network to
18 supply the customer, and sold the retail contract to Nova
19 Gas who operates a competing distribution network along the
20 same street but is also a retailer on our network.

21 The customer employed an energy consultant to seek new
22 gas supply through a tendering process as the existing
23 agreement was about to terminate, that was earlier this
24 year. Vector provided a line charge agreement, allowing
25 retailers to offer delivered contract proposals, supply
26 proposals.

27 **CHAIR:** Just go a little bit slower I'm afraid. Since I've
28 interrupted you, I will say to you, I would imagine you will
29 have quite a bit of financial analysis of what happened in
30 each of these cases, and the Commission would be quite
31 interested in some of that evidence, if you can make it

1 available to us. Obviously, it's confidential material, but
2 we can -- I think we can provide for that.

3 **MR VAN BRINK:** Okay. I think in this case in response to a
4 tender, as I mentioned, we put our line charge agreement in
5 place and allowed retailers to supply delivered price offers
6 to that customer. Nova Gas offered a bundled price in
7 competition and was successful, and this customer
8 disconnected from our network in July this year.

9 The final example I wanted to cover, the South Auckland
10 region between Papakura and Pukekohe. There are a number of
11 large hothouse operators in South Auckland. Vector competed
12 with NGC distribution for supply to one such site. In this
13 case NGC retailer was acting as a retailer both for NGC
14 distribution and for us and sought line charges from both
15 network operators.

16 NGC distribution acquired the site on a 10 year deal,
17 enabling them to extend their network and subsequently pick
18 up a large packing business, and also a tomato grower in the
19 vicinity. The total load involved that moved on to NGC's
20 business was some 300 TJ. That's over 10,000 houses worth
21 of load.

22 **CHAIR:** Can I just ask you; in these situations where you risk
23 someone either switching to another fuel source or switching
24 suppliers, you must be negotiating individual agreements in
25 terms of price and conditions; is that what you do in those
26 cases?

27 **MR VAN BRINK:** That's correct. We either negotiate directly
28 with a large customer and provide a pricing agreement, and
29 allow retailers to pick up those agreements, or we have
30 requests from retailers to provide a price for supply to a
31 customer.

1 **CHAIR:** What tends to be the price differential when you're in,
2 say, a more standard situation where there is no bypass
3 opportunity and one where you think you face a bypass risk?

4 **MR VAN BRINK:** It depends very much on the individual case-by-
5 case basis.

6 **CHAIR:** We heard from someone else today that it can be 20% and
7 more, would that be -- does that sound consistent with your
8 own?

9 **MR VAN BRINK:** No, I don't have any specific figures on that.
10 It really does depend very much on a number of decisions on
11 a site-by-site basis, which often includes other fuels as
12 well.

13 **CHAIR:** So, you don't have any set rules about how far you can
14 take your negotiations on price when you're facing a
15 possible bypass situation?

16 **MR VAN BRINK:** I think we look at what's -- I think what the
17 options are in each case. We certainly, we don't have set
18 rules that says operate this way in one area, this way in
19 another area. We really meet the market as a, I suppose on
20 a horses for courses basis, on a per customer basis; and as
21 I mentioned that often involves looking at other fuel
22 alternatives, as much as anything else.

23 I think these examples that I've given you, as I've
24 said, are not isolated examples, they're merely indications
25 of the competitive activities that we have in the industrial
26 and commercial sector in the Auckland area. We have key
27 account managers, business analysts engaged to work on
28 providing gas solutions through our Channel Partner and
29 also to our commercial/industrial consumers where required.
30 And we're certainly happy to assist you with answering
31 further inquiries in relation to this sort of competitive

1 activity and our responses.

2 **CHAIR:** In this area of the commercial and industrial customers,
3 can you tell me what percentage of your customers in that
4 grouping do you think are at risk of bypass or switching?

5 **MR VAN BRINK:** You're talking about switching to other networks
6 or potential networks, or other fuels?

7 **CHAIR:** Other fuels, sorry.

8 **MR VAN BRINK:** I don't really have that figure. I would say
9 that a fairly large proportion of those customers right
10 across from the small commercials right through the
11 industrials.

12 **CHAIR:** But the company's never estimated that.

13 **MR CRAWFORD:** I think one element of this is, given the
14 portability of LPG, we heard about the hothouse market, for
15 instance, and the fact that conversion from natural gas to
16 LPG is a relatively simple process, be it in residential or
17 industrial markets. It would be possible to argue that the
18 competitive threat in the industrial and commercial market,
19 and the easiest option or the -- for the consumer is the LPG
20 option, if they already have gas. So the threat of
21 switching to LPG is probably the predominant threat other
22 than bypass, and for that reason it's a very widespread
23 reality in the marketplace.

24 **CHAIR:** Let me try a different question. Of people in the
25 industrial and commercial -- customers in the commercial and
26 industrial segments, how many of them do you -- have you
27 negotiated company specific agreements with?

28 **MR VAN BRINK:** We have some 250, just over 250 site-specific
29 agreements, and that's right across our network.

30 **CHAIR:** Right, and how many commercial and industrial consumers
31 do you have?

1 **MR VAN BRINK:** We have 4,700.

2 **CHAIR:** I would have thought that the ones where you have a
3 site-specific agreement are the ones that are most likely to
4 be contestable. Would that be a fair comment to make?

5 **MR VAN BRINK:** That would be correct, contestable in all forms,
6 yes, yeah.

7 **CHAIR:** So, I wonder about the other -- I don't know how many it
8 was, I've forgotten the numbers -- but it must have been
9 about still number 4,000 that are on standard contracts?

10 **MR VAN BRINK:** They would also really be subject to competitive
11 pressures. I think Bob Monk mentioned in that video 67 odd
12 schools which were on coal. Pricing has to be pitched to be
13 able to convert those to gas if we want to grow the market.

14 **MS BATES QC:** Are your site-specific agreements mostly related
15 to high volume users?

16 **MR VAN BRINK:** They're the at the top end of the market
17 generally, yes, at the industrial end of the market. Sort
18 of Auckland Health Board example I gave, yeah.

19 **CHAIR:** Okay, please continue.

20 **MR VAN BRINK:** I think that finishes my part of the presentation
21 in the examples. I'll pass over to Simon.

22 **CHAIR:** I'll just check and see if there are further questions
23 for you before we move on.

24 **MS BEGG:** I just had one question on competition at the
25 household level. From your discussion it seems that
26 electricity is one of the main competing fuels. I just
27 wondered how much weight we could put on that as a
28 competitive constraint given Vector's ownership of
29 distribution, of gas distribution and electricity
30 distribution?

31 **MR CRAWFORD:** There's a couple of parts to the answer I think.

1 As hopefully we demonstrated, natural gas for most consumers
2 is viewed as a secondary energy source behind the primary
3 source of energy for their home, which is electricity.

4 In the niche, natural gas competes with LPG, so there's
5 sort of a hierarchy, if you like, that we've tried to
6 describe, competes with LPG, coal, diesel and solar. The
7 acquisition of the gas networks by Vector include the
8 delivery service for only one of those many substitutes
9 obviously.

10 With respect to electricity, regulation obviously
11 prevents us from raising our electricity distribution
12 prices; Ministerial direction requires us to offer a low
13 fixed line charge option, so our behaviour in these markets
14 is constrained as if we were operating in a competitive
15 environment.

16 I think ultimately I would come back to the consumer as
17 well and say that ultimately the choice of consumers, or the
18 freedom of consumer choice in our view is not impacted by
19 dual ownership of networks. Ultimately the power is in the
20 hands of the consumer to decide what forms of energy they
21 wish to have in their home, and I think that is, you know, a
22 fundamental of the way the market operates and the behaviour
23 in the market.

24 **MR ADAMS:** Do you have evidence of the number switching
25 increasing following a price increase or the sales of gas
26 appliances falling off following a price increase, is there
27 any evidence of that.

28 **MR CRAWFORD:** This is the residential market we're talking
29 about.

30 **MR ADAMS:** For both really, obviously appliances with respect to
31 the residential market, but do you typically get switching

1 at a greater rate by the commercial/industrial consumers
2 following a price increase?

3 **MR CRAWFORD:** Recognising the fact that retailers, energy
4 retailers ultimately determine the quantum of any price
5 increases to end-consumers, we haven't tracked whether
6 switching increases around those kinds of events. We've
7 heard earlier that certain energy retailers, let's say,
8 actively discourage customers, low volume customers. They
9 may choose to do that when they seek to connect, if they
10 want to connect to very low volume use like cooking but not
11 hot water. If they are already on the network, for
12 historical reasons they are already a customer of a
13 retailer, an option for a retailer is to, perhaps through
14 pricing, make it less attractive for small users of gas to
15 remain gas users, and actively therefore encourage them to
16 switch out of gas and back into electricity as an example.

17 **MR MACKENZIE:** I think one of the other issues that John and
18 Brian alluded to earlier with regards to, we don't have any
19 specific numbers, but certainly in some of the segments one
20 of the issues that we can see occurring is this concern over
21 the lack of Maui gas in the future there, and that's kind of
22 actually changing people's decisions about what kind of gas
23 it may use. LPG is not perceived to be in the same space,
24 plus also looking at the other technology solutions. So, no
25 specific numbers, but that's certainly a dynamic in the
26 market.

27 **MR CRAWFORD:** Just one further point: I think a lot of the
28 switching activity that may have occurred in the residential
29 market, it would be very hard to determine whether that
30 switching was because of price, as an example, or whether it
31 was because of convenience of dual billing by energy

1 retailers who now offer bundled billing. You can have your
2 electricity and gas billed from the one supplier in the one
3 bill obviously, and many people have switched suppliers of
4 gas to their current incumbent electricity energy provider;
5 purely for convenience they have to write one cheque rather
6 than two.

7 **CHAIR:** You haven't said anything today about transmission, and
8 I wonder if you would like to record any views about
9 transmission, and have you ever yourselves had disputes over
10 transmission charges?

11 **MR VAN BRINK:** The gas retailers pay for the transmission
12 throughput. Our transmission cost is limited to a couple of
13 locations where new gate stations were installed some years
14 ago. They're relatively minor costs. So, the impact of any
15 changes or application of transmission pricing doesn't
16 directly affect our distribution system. It affects the
17 consumer in terms of the delivered price, but that's passed
18 on through the retailers.

19 **CHAIR:** I understand that, but that must have an impact on your
20 ability to grow your business. Do you have any concern
21 about the transmission prices that are being passed through
22 to end-consumers? Do you have any view on whether it's
23 properly constrained.

24 **MR VAN BRINK:** I suppose off the top of my head the only view I
25 have is that the transmission prices in the Auckland region
26 have been fairly stable, with a throughput charges of about
27 \$58 per MDQ, and that covers the entire Auckland region. In
28 that we haven't seen any changes in transmission price, it
29 provides certainties in terms of a more predictable
30 delivered price for consumers. So I really don't have any
31 strong views.

1 **CHAIR:** Please proceed with the presentation, thank you.

2 **MR MACKENZIE:** In conclusion, demand for Vector's gas
3 distribution service is derived from consumer choice of
4 energy type and mode of delivery. Residential and
5 commercial/industrial consumers have a number of energy
6 choices for uses that involve natural gas. With gas energy
7 types, most appliances can be readily switched between LPG
8 and natural gas.

9 Vector competes with other gas distributors in most
10 areas. Vector's gas business is small, under-developed and
11 immature. Only 16% of Auckland households and businesses
12 use the service. Vector concludes competition is not
13 limited for gas distribution services in the Auckland
14 region.

15 With regards to the next steps, the first stage of the
16 Inquiry, we believe, must focus on whether competition is
17 limited. The inquiry should proceed further only in
18 relation to markets where competition is found to be
19 limited. The Commission needs to establish a robust process
20 to undertake this competition test, including engagement
21 with the industry. I'd like to thank you for your time this
22 afternoon, and we would be happy to provide further
23 experience and interface with the Commission as required,
24 thank you.

25 **CHAIR:** Thank you for that. I'd just like to see if we've got
26 some further questions, and I know that you did make some
27 legal submissions as well, and I'll just check with
28 Commissioner Bates if she wanted to pursue any of that?

29 **MS BATES QC:** No, I don't think we need to. It was the point
30 that you made about the wording of the Enabling Act, the one
31 that enables the Minister to make this Inquiry in limitation

1 to prices of goods and services. I think we understand the
2 argument. Do you think it makes any real difference to what
3 we can do in this Inquiry? Do you want to answer that?

4 **MS JONES:** We made the point because we really wanted to know
5 whether you felt there was any difference in fact between a
6 price control inquiry and a control inquiry.

7 **MS BATES QC:** Well, I think our view is that other things like
8 quality are intertwined with the whole question of --

9 **MS JONES:** Inherently part of price, yeah.

10 **MS BATES QC:** Yeah. But we have taken the point on board, and
11 thank you for drawing it to our attention, and we need to
12 consider whether we need to take any steps.

13 **MR WILSON:** I'm not sure this is a question, I'm just thinking,
14 part of your argument at least is that the amount of effort
15 that you put into marketing illustrates that it is actually
16 quite a competitive market that you're working in. I
17 just -- in my mind I was thinking back to 10 years ago when
18 the electricity companies were putting a lot of effort into
19 marketing, and part of that was to retain market share
20 against gas in fact, and I just wondered if, you know, you
21 could draw the same conclusion, that electricity lines
22 business at least in 1991 were in a highly competitive
23 market because of the amount of activity they were engaged
24 in in marketing, and the amount of money they were spending
25 on TV campaigns and so on?

26 **MR CRAWFORD:** I wasn't in the sector at that time. I was a
27 consumer, as I still am at this time, so I couldn't offer an
28 internal view of what electricity companies were thinking at
29 the time, and how they approached competition as they saw
30 it, or how they defined competition. You know, a common
31 sense view would, on my part, suggest that they clearly saw

1 gas as a threat to their business in the home. They saw it
2 eating into their market share in the home, if you like, or
3 the share of the energy wallet in the home and sought to
4 influence consumer decisions in very much the same way that,
5 where consumers have choice, they have decisions to make and
6 when presented with information about their options you have
7 the ability to influence those decisions. That's all I can
8 offer, I'm afraid.

9 **MR MACKENZIE:** Gareth, I think the other side from my
10 perspective would be, at that point in time the experience
11 that I had was that a lot of the effort was actually focused
12 on the retail side of the electricity businesses recognising
13 that, particularly I know in the Auckland situation there
14 was a view that a lot of the energy consumers in Auckland
15 from an electricity perspective were attractive to a lot of
16 other external retailers that were not in the traditional
17 footprint.

18 So, I think there was also -- certainly I know Mercury
19 had extensive marketing campaigns that were primarily
20 centred around electricity retail which was also
21 underpinning at that stage the move into generation schemes
22 such as Taranaki combined cycle, Southdown, the likes; so
23 there was quite a wider range of marketing effort in the
24 retail kind of electricity space primarily.

25 **MR STEPHEN:** I just want to pick up on a question that the Chair
26 raised earlier, and there have been a couple of comments you
27 made about the way in which you would suggest that the
28 Commission should approach the tests, particularly in s.52,
29 and I note in your written submissions you helpfully remind
30 us that we should approach a Part 4 Inquiry with an open
31 mind. And I just want to check that you're not suggesting

1 that, thus far we haven't been doing that. In other words,
2 that this submission of yours is a forward-looking one?

3 **MS JONES:** Can you just clarify whether -- I'm not quite sure
4 what the question is.

5 **MR STEPHEN:** All right, I'll rephrase it. Do you think that the
6 Commission has not thus far approached the Inquiry with an
7 open mind?

8 **MS JONES:** I think we've heard from the Commission, the
9 Commission have told us they have an open mind. I think
10 there was a concern that in some of the documentation that
11 we've seen that perhaps there may have been a preconceived
12 view based on earlier experiences in the merger context
13 about things like inter-fuel substitutability and bypass
14 competition.

15 We just wanted to be sure that in this context the
16 Commission sat back a bit and re-looked at it and didn't
17 necessarily rely on its earlier experiences or earlier
18 decisions as necessarily precedent for determining whether
19 or not there was competition in this marketplace. So, we're
20 not accusing the Commission of being close-minded.

21 **MR STEPHEN:** Thank you.

22 **CHAIR:** Okay, I think that completes the questions that we have
23 for you. I would like to thank you, Vector, for the
24 submission and I would note that it's very useful for us
25 early on in an Inquiry like this to get as much familiarity
26 as we can with a particular industry, and I know you've
27 taken some care to try to assist us in that, so we do
28 appreciate it, and it was good to have it at this particular
29 hearing, so once again I want to thank you for your
30 presentation.

31 Now I just am aware of the time, and we had not

1 completed the NGC submission with Professor Evans, and we
2 only have 20 minutes professor, so I suspect that's not a
3 sufficient amount of time, but I will be guided by your view
4 on that.

5 **MR BIELBY:** I think that's probably correct. We're in your
6 hands. If you want us to go forward we're happy to do so
7 but.

8 **CHAIR:** If it's not sufficient time, I don't think we'll do
9 justice to the presentation, so I think we should talk about
10 rescheduling that session, hopefully at some time tomorrow.
11 The early session we can't do unfortunately, and I don't
12 know what your availability is, but we can have a chat
13 afterwards, and what I'd like to say to other parties that
14 are interested is, as soon as we decide when to schedule
15 that we will put it on to our website so people later this
16 evening can find out when that session will be held.

17 So, are there any further questions today before I
18 adjourn the meeting for the day? [**No comments**]. I thank
19 you all, once again, and we'll adjourn the session for
20 today.

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Hearing adjourned at 5.25 pm

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Resuming Thursday, 4 September at 12.30 pm

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