

To be read in conjunction with
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**HEARD BEFORE DR R SOMERVILLE QC (CHAIR), MRS G BAUMANN,
MR W GARDINER AND DR R CHAPMAN, MEMBERS OF THE BOARD**

THURSDAY 2 JULY 2009

**HELD AT THE WELLINGTON CONVENTION CENTRE, SQUARE AFFAIRS
ROOM, 111 WAKEFIELD STREET, WELLINGTON**

HEARING OPENED [9.35am]

APPEARANCES

Mr B Armstrong, Todd Energy

Ms K Frew and Ms K Ross, Powerco

Mr J Boorman

Mr T Tutua-Nathan, Te Puni Kōkiri

Mr J Hassan and Mr R Turner, Meridian Energy Ltd

Audio file: 2July1

[9.35 am]

CHAIR: Well thanks very much Mr Armstrong, sorry for the delay. We've read your submission and thank you for that submission. We appreciate your help on this matter. We are very much in your hands whether you want to speak to it or read it through. We do have some questions and I also should let you know, as you are probably aware, you are being recorded so what you say will go on to the website.

MR ARMSTRONG: Yes, I realised that yesterday after a few loose comments at the water hearing.

CHAIR: Yes. Well it's interesting you have come downstairs to us.

MR ARMSTRONG: Thank you very much for the opportunity. At Todd Energy I am the Environmental Manager and I look after consenting and regulatory compliance in general and the various policy submissions. I have set out in the submission right at the front Todd Energy's interest in water and energy, you will see there that Todd's a fairly – it's a privately owned New Zealand company of which it has really diversified in its interests. It has significant oil and gas interests in Taranaki of course, but it also has significant hydro interests, which I have documented there and it is trying to diversify its electricity generation base via hydro, looking at wind projects even at marine turbine proposals, so we can see the trend and we're trying to adjust the business.

Now Todd, I'd just like really, I think rather than speak to the details, as I know you have read it, I would just like to hit some of the main points and I have made a few notes. If you don't mind I will read them.

Todd is generally supportive of policies which encourage the (inaudible) development of renewable electricity resources in New Zealand. As I say, we are a renewable generator and we understand the need to eventually transition to renewables and as we know, fossil fuels are finite.

However, we have always had concerns about what we see as a lack of balance in the New Zealand energy strategy, including the arbitrary 90% renewable electricity generation by 2025 target. It is widely acknowledged that the main drive behind that strategy is the goal of reducing greenhouse gas emissions and to that extent it is more of a climate change strategy than a balanced energy strategy, in our view. We note the current government announcement that they are going to review the strategy with the objectives, amongst other things, of placing greater emphasis on energy security and provision of least cost electricity.

We draw the Board's attention in section 3 of our submission to the findings of the Centre for Advanced Engineering New Zealand report and of comments of the Executive Director of the major electricity users in section 3, and just to quote Mr Matthes, I think you've already heard from the director of MEUG. At that stage, this is a year ago, now he was saying and part of the debate then was there should be a ban on thermal electricity generation. But he said at that time, "New Zealand's approach to saying no to base load gas and embracing weather dependent on new hydro and wind generation is foolhardy. Inevitably we will see electricity prices rising faster than they should and higher risk to security of supply". And that is very much in line with the Centre of Advanced Engineering's comments.

So really they're saying – they're signalling the potential implications of overzealous pursuit of renewables for both energy security and the cost of

electricity to consumers. Now clearly there's a balance has to be struck in the medium term, because it is quite clear that we need both. We note that New Zealand is moving towards pricing of carbon, with the primary objective of internalising climate change (inaudible) associated with the combustion of fossil fuel.

A secondary object or effect is to improve the economic viability or competitiveness of renewable electricity generation relative to other forms of electricity generation. Carbon pricing is an economic instrument.

Notwithstanding the likely pricing of carbon, Todd believes that for reasons advanced in section 3 of our submission there is a strong case for gas and electricity generation New Zealand for the foreseeable future.

We note that the key policy response of many countries to climate change is to transition from coal fired to gas fired electricity generation. And that's one of the reasons we so strongly oppose the total ban on thermal, we thought it was foolhardy, and thankfully that has been removed.

So globally, gas can be seen as a key strategic resource enabling transition to a more sustainable energy future. Now, the current government clearly shares that view. There is a work being undertaken MED and Treasury at the moment under the direction of Ministers aimed at maximising the discovery and use of New Zealand's natural resources, including gas resources to New Zealand's overall economic social well being. It is again this backdrop that we question the need for regulatory intervention in favour of renewable electricity generation.

In particular, in our submission we ask that the Board address two questions. First, it is appropriate to tilt the regulatory playing field in favour of a particular form of development, given the scheme and underlying

philosophy of the RMA? The previous government clearly thought that it is. And a section 32 analysis on page 4 and regulatory impact analysis indicate that it is. However, we have reservations about this and have detailed our reservations in our submission in section 4.1.

The basic thrust of our concern is that the integrity of the RMA, in particular the achievement of sustainable management purpose, appears to rely on the maintenance of a neutral stance by consent authorities in respect of the form or type of development that should be allowed to take place at a particular location. I might come back to that point later.

The second question, if it is not appropriate to tilt the regulatory playing field in that manner, are these efficient existing mechanisms or other initiatives that will ensure the overall laying or facilitating renewable electricity generation is approved?

Our conclusion in relation to that question is that there is in fact a strong argument, particularly if carbon is priced, that the better approach is to use non-regulatory measures, or at least light handed regulation to promote renewables - I prefer the word facilitate renewables myself - such measures being aimed at removing barriers to the development of renewable energy. So that renewables can compete on a level playing field with other sources of energy leaving it to the market to determine that the optimum mix of renewable and non-renewables having regard to real world considerations such as the locus of demand, energy security risks, carbon price risks, costs and effects on electricity prices. In this regard we note in section 4.2 of our submission that there are at least no less than eight such government initiatives aimed at facilitating renewable electricity generation.

If the NPS does proceed we ask the Board to give careful consideration to wording of the stated objective in the five proposed policies. We have made some suggestions and you will see that again we take issue with some of the section 32 analysis. We think it is particularly important to get the objective of the NPS right so that the intention is clear, unambiguous and consistent with the scheme of the RMA if that is possible.

Policies 1 and 2 are, in our view, quite simply confusing in their current form. We are strongly opposed to Policy 3 and we're supportive Policy 4 and 5.

I don't think I will go through it, but in our section 4.1 we devote a couple of pages to trying to answer the question of whether or not it is appropriate for a national NPS on renewable electricity generation under the RMA, and of course, in some ways it appears that the answer to that is a done deal because this process is continuing. But I have devoted a couple of pages to spelling out our reservations and some of the arguments may appear to amount to semantics, but I prefer to think that it doesn't, and that these are very real issues to be addressed. Thank you.

CHAIR: Thank you Mr Armstrong and thanks for raising those issues because they certainly are very timely as we struggle with this document.

[9.45am]

DR CHAPMAN: Thanks for your submission. I guess my only question in relation to the trend observed overseas towards gas – away from coal towards gas is would that trend not be taken to the next step should countries and companies within those countries be able to? In other words, isn't it rather the difficulties of developing renewables that tends to

stand in the way of otherwise companies and countries moving steadily in the direction of renewables?

MR ARMSTRONG: Yes, absolutely and I think there are economic considerations that come into it. I mean, people - it is becoming increasingly apparent that, you know, we are not a rich country. We don't have the luxury of, sort of, Rolls-Royce solutions, such as sort of, you know, expansive subsidisation of renewables simply because it feels good to have renewable electricity. I mean I think it is still the desire of the New Zealand public and the politic to deliver electricity at a cheap price. And we actually see gas as staying cheap for the foreseeable future. As I was saying, New Zealand is blessed by the sort 70% of its current electricity coming from renewables. Now, that can be seen by some people, "Well that is clearly not enough, we must move to 90, rapidly." Others will say, that is a historical blessing. The New Zealand public has already paid for it through the vast Ministry of Works investment projects, etc. Let's make use of a relatively cheap resource that's sitting there, ie gas to provide security of energy which is the intermittent renewable part of course, so let's get the mix right. Let's be thankful for our 70% renewable electricity, possibly made towards 80 if we can, but also recognise the strategic importance and value of that indigenous gas resource. That is the way I look at it and of course, you might say that would be the typical response of a company that has interests in fossil fuels, but as I say, we have interests in both and we see the significance of renewables. So I do think it is a balancing act.

MRS BAUMANN: Mr Armstrong, I hear what you're saying and I would like to put to you that all we've been called upon to do in respect of this NPS is just to deal with the ability of people wanting to use renewable resources to get projects away, not to decide which projects they want to keep away; namely thermal, renewable, nuclear, whatever. So it's really only a

planning approach rather than an allocative approach. Would you like to comment on that?

MR ARMSTRONG: Well, my reading of the intention of this, in fact if you read the detail of the section 32 analysis it seems to come from a position that we need to tilt that regulatory playing field to, as I say, to facilitate or promote renewables. In other words, there is a choice between investment money - if you have got investment money and you are thinking about where to put it, the suggestion seems to be, "Well hey, it's going to be easier from a regulatory perspective to put that money into renewables and go for it." And I suppose, you know, if that is society's intention, that we back renewable to the possible detriment of energy security and increase – and at a cheaper price for electricity then that's the answer, we should tilt that regulatory playing field. I simply don't know the answer to that myself. As I said I am here to represent the Todd position. and the Todd position is really, hey, let's have more balance in our energy strategy in New Zealand. Let's recognise that we need those fossil fuels in the interim, the gas to provide the security, and to try and keep downward pressure on electricity prices.

MRS BAUMANN: I mean if one were to put, take that out of the actual policies as written, take the 90% out, but look at the policies themselves about how the Resource Management Act and its decision makers grapple with allowing renewables to be approved, consented. Would you not see that that could be useful for people who do want to develop renewables?

MR ARMSTRONG: I think it is. But as I've said in my submissions, there is still philosophical issues. There are a lot of good developments out there, sustainable developments like aquaculture, solar energy, whatever, you could go on picking these winners and saying, "Good idea to promote those. Let's do it." But as I say in my submission, the scheme of the Act,

in particular part 2 section 5, “the purpose”, you can do things subject to certain caveats and they are all protected essentially in Part 2. In my memory, I mean even though I’ve gone into it a wee bit, I mean sure it sort of exhorts you to recognise the benefits, and that equals an effect of renewable energy. It does not actually go so far as to pick out certain forms of development and say that these are, in particular, wonderful. The simple reason is there is going to be a lot of people turning up at every hearing wishing to see an alternative outcome of that particular proposal. I shouldn’t even be saying this, but we have a Kaituna hydroelectric power scheme on our books we are about to go for consents. It would suit us terrifically to see these all go through. It would be weight to our argument, but standing back from it all and because we have diversified interests and we are trying to see the big picture of energy in New Zealand, we just do wonder about that sort of notion of picking winners in that sense.

MRS BAUMANN: Are you aware that we’ve heard evidence that currently it is significantly easier to get a consent for a thermal power station than a new renewable or an enhanced renewable?

MR ARMSTRONG: You know, I’d been very surprised at that. A lot of renewables have been consented in recent times and you know it - well you know, if someone said that then there may be some substance behind it which I am not aware, but I sort of feel that the tide of public opinion, if you like, is swinging in behind renewables and you can see it in the reaction in some of the conservation groups and the river recreationists. They actually realise that they are in a bit of a hard place because they want to protect those in-stream values, but they also recognise the benefit of renewables. So it is sort of like there is a softening of attitudes towards renewables. In some ways I feel that it would all unfold naturally if you did very little more to the RMA and you just get market forces prevail. Because corporates do listen to public sentiment. And they understand

that it is going to be increasingly easier to consent renewable projects I think, and increasingly harder to consent thermals I think.

MR GARDINER: How much gas is there left in the next two decades? What's your assessment of the gas resources that we have got in New Zealand, and particularly with the Todd Energy?

MR ARMSTRONG: I'm certainly no expert in that area, but I know that's been a contentious issue and I know that our managing director has made a number of public statements on that topic and along the lines if there is a lot more gas than what people think there is, again that could be seen as a strategic ploy perhaps by a gas producer. But I don't think that is correct. I think Todd is aware of the resources situation to perhaps do a lot – a higher degree, a more accurate degree than a lot of commentators. Even we felt that the MED has tended to underestimate the resources that are there and the managing director of Todd has recently made a number of bullish statements about the extent of the Mangahewa field which we are currently drilling, potentially another Maui, potentially linked up with the Pohokura field.

MRS BAUMANN: That's an offshore field, is it?

MR ARMSTRONG: Pohokura is just sitting offshore and if you come a bit inland you start getting into the Mangahewa field which is a sort of related structure. But you know, we had great success with the last well, Mangahewa III, and we've hooked that up to the McKee production station. So that goes straight off into the Maui pipeline and now we are now drilling three more wells in the near future.

MR GARDINER: I suppose strategically you would want to, even if there is significant reserves of gas, you'd want to look at other alternatives in case the forecasts are not as your managing director has indicated.

MR ARMSTRONG: Absolutely. I think that's the beauty of renewables, is it does continue to diversify the generation base. It adds that extra resilience in there. But I suppose the question is, is there a risk if you go too far too fast a), do you sort of almost cut off your nose to spite your face, and in other words you effectively, could potentially kill the gas industry. Some people would say that was a good thing. But if you did so, you might knock exploration on the head, investment money on the head from overseas and okay, you might be left with 80 or 90% renewables, but you might have a significant risk associated with that and in recent years it's only been the thermals that have saved New Zealand's bacon when it comes to winter blackouts.

[9.55am]

So I think there is a balance to be struck there and the only question I am really asking is, do you need to go it by regulation, do you need to promote renewables? If the answer is yes Todd will be totally accepting, and as I say in some case it will be quite pleased, it will add to our arguments for hydro developments.

DR CHAPMAN: Can I just follow up on the price of gas a little bit more. We were given a couple of figures by Contact the other day. 7 dollars a gigajoule or 10 dollars a gigajoule, as indicating possibilities, I guess, nothing more. What's your sense looking out over the next 15 years, you know, are we looking more at, you know, 7 dollars a gigajoule input prices to gas fired power stations or more like 10?

MR ARMSTRONG: I'm honestly not qualified to answer that question. I have seen various statements from within Todd and the people, they're people who should know and as I say, my understanding is, our strategic people, if you like, are saying basically that gas prices will gradually increase, but it won't be - I mean, you know, it won't be great upward pressure on gas prices. That's my understanding of their assessment. I mean there are a number of reasons which you'd probably be familiar with. But yeah, the other argument as we kept on making here is that if you add the price of carbon to gas that will be a further incentive so people will be looking at other options. And so that is why you are seeing the big state owned energy generators, sort of hanging their hat on renewables. They're saying, "Well, it's the way the government policies are going. It's the way the public expectation is. Let's go for it", and I guess Todd's is in a slightly different position. Todd's have been a New Zealand leader in developing the gas resources and the infrastructure. It has got a huge investment in it and they think it's a reasonable thing to continue with it for a couple of decades at least, you know, until you get a more resilient renewable based system.

DR CHAPMAN: What is your sense, if you can, of the likelihood of carbon prices? You just mentioned just making that wedge of difference, between the viability of a CCGT and say a wind turbine development; I mean something like \$23 dollars tonne, Contact's numbers suggest that you are starting to get comparable with wind and \$45 a tonne takes you up to - which is the other number they suggest, you know, gas really does price itself out.

MR ARMSTONG: I don't really think I should go on record saying anything about that, because I really know very little about the future pricing of gas and relative pricing.

CHAIR: Mr Armstrong, your project on the solar, what are you looking at in this sort of R&D in the future of solar?

MR ARMSTRONG: Well I think you are referring to the Todd purchase of Sola 60, a Taranaki based firm. To be candid, you know, there were issues there with Sola 60 once we'd partial ownership and then subsequently further ownership. We realised there was a need to make some adjustments to the product. There had been some criticism of some of the products coming out of Sola 60. I think Consumer magazine made a criticism. So Todd has put quite a substantial effort into upgrading the Sola 60 technology and products and my understanding and I have very little to do with Sola 60, in my role in Todd's, but in fact it's been rebranded as Nova, I think, Nova product. But I think - my understanding is that they made some significant improvements to the – it's basically a solar water heating device that we sell, largely and we've made some major improvements to it so the future is looking a lot better for it.

CHAIR: Yes, we have heard some evidence about the long term, well the future for solar photovoltaics, and so forth. Have you done any work in that area?

MR ARMSTRONG: We have certainly got one eye on what's happening in photovoltaics globally and we are tracking it and we have periodically people that put investment proposals to us. At the moment I think the feeling is that it's very much a wait and see exercise because the technology is improving rapidly, particularly in America. Obviously we need to wait until it becomes economically attractive. At the moment I understand that the technology is very expensive, so the return on it takes a long time in coming and so it's not really an attractive investment in New Zealand at the moment. But everyone acknowledges its potential.

CHAIR: Yes, and you mentioned marine. Can you expand on that also?

MR ARMSTRONG: I am just a little bit uncertain as to whether or not an announcement has been made about our objectives there, but can I just say that -

CHAIR: Would you like us to turn the record off on that?

MR ARMSTRONG: That would be good.

CHAIR: Yes.

MR ARMSTRONG: We do see significant potential in marine energy. We are tracking what is happening around the world. At the moment in New Zealand it looks as if the better investment might be in the odd one off tidal generation project; quite attractive because it's not so weather dependent, the tide comes in and out every day at a given period, so you know what your load factors are going to be. In the case of wave energy, of course, you have got experimentation going on with your devices and some are looking quite promising. But there are reservations about wave energy. Globally, people are having their problems on wave projects and there is always that long-term concern about how these devices are going to stand up to the battering of waves and marine salt corrosion and all the rest of it. So I think Todd's would like to see itself as, you know, being up there with other players in the development of renewable energy in the marine area.

MRS BAUMANN: Have you put your mind at all to how that is going to work under the Resource Management Act?

MR ARMSTRONG: What, marine energy?

MRS BAUMANN: Yes, consenting and all that labyrinth.

MR ARMSTRONG: Well we have just been through quite - Crest Energy has just been through a major consenting exercise for the Kaipara -

MRS BAUMANN: It's under appeals, isn't it?

MR ARMSTRONG: The appeal's just finished and it is all quite promising. I mean, there is a lot of criticism of the RMA and frankly someone who should have dealt with it since its inception in 1991, I actually don't have that big a problem, I mean maybe I've been lucky in the projects I have dealt with but, you know, sure it takes time and it is complex but the nature of society it's complex for a very good reason that we are wanting to weigh and balance a whole lot of things and give people every chance to say things. So I am not too worried. I mean up there, getting back to the Crest Energy one, I have been simply watching what's happening and to me, it looks as if the consenting process is going very well. There were four appeals. Two of them were very minor. There was a Māori group lodged an appeal on the basis that they were - I think fundamentally what they were doing by their own acknowledgement was to try and put a hold on proceedings while the foreshore and seabed issues were resolved, the ownership issues and that is the natural thing that one would do, because there is a very real possibility, as you know, of ownership diverting to Iwi groups in some parts of New Zealand and so they will therefore be in a position to charge coastal rentals and that sort of thing.

[10.05am]

But anyway, my understanding is that the Environment Court Judge was not particularly impressed with that line of argument and admonished their

lawyer, so at the appeal hearing that particular appeal appears to – there's been no decision yet, but it appears to have not fallen on receptive ears. DoC did not appeal, did not seek that the consent be declined, notwithstanding the presence of Maui dolphins in and out the harbour; Fisheries did not appeal notwithstanding the best snapper spawning and nursery area in New Zealand. This is at Kaipara Harbour I am talking about, in other words, there was a degree of reasoning prevailed because reports were done on all these issues and the effects, by competent people, and people generally accepted that this may not be such a bad thing, we're making use of a very significant - it is the best harbour and the biggest tidal compartment in New Zealand, we're making use of it for a good objective, renewable energy generation and hey, the experts tell us that if we're careful there won't be any adverse effects of significance on the ecological values, but in order to be sure we will have a consent condition requiring a three year monitoring program. I am quite actually impressed with the -now you go to the Kaituna scheme, the hydro scheme, now I have been involved in that for the last three years, we commissioned 14 consultants' reports on every conceivable aspect of the effects of the project; so a lot of investment money went into it. That's fair enough. Developers accept that. And it appears that it has paid off, because we've got experts who are prepared to stand up, put their hand on their heart and say this hydro scheme is not going to have a significant effect on X, Y, and Z. Certain effects have to be acknowledged, but at the end of the day it's the job of the people at the hearings committee to decide whether the benefits outweigh the costs.

CHAIR: With your experience of mixed forms of generation, have you had a look at pumped storage?

MR ARMSTRONG: Yes. I am aware that our electricity generation manager has looked at pumped storage stored as a potential option on our

Mangaohi hydro electric power scheme, which is a scheme behind Shannon, the dam being towards the bottom of the valley, but a very significant wind resource at the top. And the suggestion was that we could put some turbines in at the top and generate some energy to do pumped-storage, pumping water back from below the dam back up into the dam. I think it is still an option that is being looked at. So we are aware of the potential of pumped-storage. I don't think there is much going on in New Zealand at the moment.

CHAIR: Your concern about having a policy as a forcing instrument when it comes to a particular activity. I find that particularly interesting because of the reference in section 7 to electricity. Just following up on what Mrs Baumann said, we've got this business of local authorities telling us that they actually require some assistance or some guidance when it comes to establishing their district, and regional plans for hydro, but district for wind, because they are just not sure how to deal with the applications, particularly the cumulative effect aspects say around Palmerston North with wind farms, and even with the re-consenting of some hydro projects; just how far do they go with re-looking at the whole issue again. And this evidence is suggesting that they are actually finding that a thermal plant, which is close to the area of need, you can pick your site, rather than being bound by the renewable resource, wherever that is, and also the way the Supreme Court has interpreted the Resource Management Act in the sense of the greenhouse gas issue, that it is actually a more straightforward process than trying to deal with these larger renewables. So their evidence to us is not so much a tilting, but to try and make it a more even playing field in terms of their instruments. Would you have a view on that, from your own experience?

MR ARMSTRONG: Well as I said in my submission, I sort of feel in some ways because of section 7 (j) and another one in there, section 7, arguably the

decision making regulatory field is tilted in the way of renewables at the moment. In other words, it gives someone something to latch on to. If you are trying to do a renewables scheme, they say, "Hey, look in the Act. You shall have particular regard to the benefits of renewable energy." Now "for benefits" re positive effects, so I'm comfortable with that. That's about effects. You will have regard to the effects. So it's up to the applicant to demonstrate the positive effects arising from this. And you can allude to the fact that there's non-greenhouse gases if they want to. If it impresses anyone. You can allude to a whole lot of benefits of renewables.

So I don't know what they're talking about. If they have got someone saying to you, "Hey, we'd love to consent all the renewables." Well you really won't want anything to do with those gas-powered stations. If they are saying that, I'd suggest that that's just myopic, because, as I say, there is a strong case I think for certain gas fired electricity applications. Take co-generation. Look at Fonterra. Its operations are totally dependent upon gas-fired electricity generation from us. What are we going to do, just gut the biggest business in the country because we have got an aversion towards gas?

CHAIR: Well yes. The officials who gave evidence the first day of the Inquiry were at pains or one particular person was at pains to say that the section 32 isn't intended to say that it should penalise thermals. It's more to facilitate, to use your words basically, the renewables, where there is a regulatory block, if you like, as to processing and decision making. If that were the case, does that temper your submission a little?

MR ARMSTRONG: Well, no. Because I mean, that facilitation in the Act now, I think is about as far as we need to go in terms of, a balance, as I say, needs to be struck and also society's expectations is that we should be

facilitating renewables. It seems to make commonsense for the long run to facilitate renewables at this point in history. But all I'm saying is if you take it to its next step and have an NPS that tilts the playing field even further and puts up an objective which we're promoting a particular form of development, ie renewable, all we're saying really is it interferes in the market place. I know that a lot of people don't have any faith in the market place, but I think history would show you that when it comes to things like energy development, and allocations of energy and decisions about energy, that the market place is a far better arbiter than political intervention. You end up with growth distortions in the market place and probably more expensive electricity in the short term. In other words, that comment I made about, you know, leaving it to the market and I referred to take into account real world considerations such as the locus in demand, energy security risks, carbon price, costs and effects; all very pertinent things to investors. And that's why they have an aversion towards this type of intervention, but as I say, having said that, it is very much a matter of judgment. And that is what you guys are here for, to hear the full weight of the argument.

CHAIR: Yes, now. In your modelling, where you have got a mix of generation facilities, you mentioned before 90% may not be the number, 80% might be the number, have you actually looked at through to 2025, have you looked at an optimal mix as far as gas supply is concerned?

MR ARMSTRONG: An optimal mixing of (inaudible) generation?

CHAIR: Of whether a 20% use of thermal or gas would be optimal?

MR ARMSTRONG: No, because again, I think that's assuming that we have some magic telescope into the future, we don't. I mean market conditions,

societal conditions could change over the next couple of decades and so incentives to make investment decisions – incentives will change.

[10.15am]

So that is why in many ways I think people like us prefer to leave it to the market because it realises that the market factors in a variety of considerations in a sort of evolutionary sense. So you can't kind of second guess it now. It may sound a bit surprising to you, but I don't think we do too much strategic analysis of that sort because we realise there are all sorts of other players in the market and we can talk about percentages, but what they do is up to them sort of thing. Todd's is primarily a gas supplier. It's not out there doing a whole heap of gas-fired power stations. There has been recent talk of Todd doing a gas-fired power station in Taranaki, you may have seen it. But that is only talk and suggestion. Our managing director made a comment that it was an option to make Mangahewa Gas beneficially.

DR CHAPMAN: Just one last thought. Contact stated just recently to us that they had gone out to test the market for a gas supplier for a significant thermal development and really didn't get the sort of response that they felt was sufficient to guarantee, I guess, at the right price, to support the station. Do you have any comment on that?

MR ARMSTRONG: Not really, other than to say that I am aware that the managing director of Todd has a completely different point of view which he's emphasised on many occasions. There is a running difference of opinion, if you like, between the CEO of Contact and the managing director of Todd's on that issue. Games get played in public announcements, as you know, and people are playing games. There are reasons why someone might say, that hey, you know people by their

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announcements may try to manipulate the prices of gas and what have
you.

CHAIR: Well thank you very much. And if there is anything further you wish to
add, or let us know about it, just pass it onto Miss Beruldsen. Thank you.

CHAIR: Now, Powerco. Ms Frew?

MS FREW: Yes, I'm Karen and this is Catherine Ross.

CHAIR: Thank you for your submissions. We've looked at them and we are very much in your hands as to how you wish to present your case. We will have some questions. If you would be good enough, if Ms Ross wants to add anything, if she could just identify yourself for the record because we are recording everything. So we are in your hands.

MS FREW: Thank you. I've got that presentation. I'll just run through the slides a bit if that is okay. Powerco would like to thank you for the opportunity to address the Board Of Inquiry for this proposed National Policy Statement on Renewable Generation. My name is Karen Frew and I am the technical regulation manager at Powerco and with me today is Catherine Ross from Minter Ellison who has provided some support for us. Just a bit of a background about Powerco. We're the second largest electricity and gas distributor in New Zealand. We've got approximately 400 consumers connected to our network which cover the lower part of the North Island and Bay of Plenty and Coromandel areas. We own and operate about 30,000 kilometres of lines and pipes. Powerco also has a sister company called Powerco Transmission Services which is in the business of connecting new renewable generation either directly to the national grid or embedded within the distribution networks.

Next page, just a diagram which I'm quite sure you're familiar with, illustrating the electricity sector and various parts to it. You can see in this that the generation, renewable or otherwise, can be connected either directly to the grid or through a distribution network.

Powerco is pleased to have made the submission. In general terms we support the vision and the targets of the New Zealand Energy Strategy and have an interest in promoting renewable electricity generation. Our submission focussed on the elements of that National Policy Statement which interface with or impact on the distribution of electricity.

There are a number of more technical impacts that increasing renewable generation will have on both distribution and transmission networks. These impacts include planning and designing network augmentation to allow for the intermittent nature of some of our renewable generation, providing for connections from remote locations, and supporting any development of island networks.

Powerco's comments on the objective of the NPS hinge around the targets set in the NPS and NZES. The New Zealand Energy Strategy is currently under review by the National Government and although they appear to support the target, they should consider it should not be at the expense of the security of supply. There is no doubt that this target of 90% will be extremely challenging to achieve.

In order to achieve the target, all parties contributing to the delivery of that renewable electricity generation need recognition and regulatory support where appropriate. The role of transmission is recognised through the Electricity Commission's project, Transmission to Enable Renewables and also through the National Policy Statement for Electricity Transmission.

The existing regulatory framework does not overtly recognise or support the role of distribution networks. There is currently in place a National Policy Statement on Electricity Transmission. However, that only applies to assets owned and operated by Transpower.

We consider that the National Policy Statement on renewable generation is an opportunity to address the anomaly with regards to distribution networks. However, in saying that, the National Policy Statement on renewables would be a clumsy way of levelling the playing field for transmission assets, assets owned by other parties and Transpower.

Next page, on the objective. Our concerns with the proposed objectives, is that including the 90% target in the proposed National Policy Statement potentially blurs the boundaries between energy planning and resource management decision making. We would not like to see the Environment Court put in a position of weighing out the precise contribution a particular renewable electricity generation proposal would make to the delivery of that 90% target. It would require the Court to hear detailed evidence on the performance of the electricity system and potentially consider the impacts of new generation on matters such as frequency keeping and reserves market and security levels. These matters appropriately fall within the Electricity Commission's jurisdiction and the operation of the electricity market.

Policy 1: In order to achieve that 90% target, all efforts, large and small, need to be recognised and encouraged. Powerco supports the proposal to recognise the benefits of renewable electricity generation at any scale. To do otherwise would create regulatory framework which potentially favours large scale renewable generation ahead of small scale projects. This policy statement is problematic in that it tells an incomplete story. Renewable electricity generation can maintain or increase security of supply by diversifying the type and/or location of electricity generation. But it is often intermittent and does not always bring increased security of supply.

[10.25am]

MS ROSS: I'm just wanting to add that that is referring to wanting to amend Policy 1 bullet point 2 and it's on the notes, but just suggesting that rather than saying that renewable energy maintains or increases security supply, restating that to say that it has a role as a contributor to security supply.

CHAIR: Yes, thank you.

MS FREW: On Policy 2, which acknowledge the practical constraints, the policy as drafted does not recognise the potential difficulties associated with building new electricity distribution assets to connect to renewable electricity generation. Extensions to the national grid have the support of that electricity transmission National Policy Statement, but there is no equivalent support for local distribution assets or new transmission assets built by parties other than Transpower. So in saying that, Powerco suggested a new clause 5 where the location of new electricity distribution assets should be considered as part of those constraints.

And on the last page on Policy 5, Powerco supports Policy 5 but would like to see the role of electricity distribution network specifically recognised. Developing distributed renewable generation is dependent on developing the distribution networks that connect to it. The proposed National Policy Statement does not overtly recognise that. So what we have proposed is adding words at the end of Policy 5 to include the extension or upgrade of electricity distribution networks.

That's about my presentation. Are there any questions?

CHAIR: Yes, thank you very much Ms Frew. We do have some.

MRS BAUMANN: Just looking at your proposal for Policy 2 which is really the crux of your submission, and your interest really. We have received submissions on this topic from other parties as you'd expect and are grappling with how we would respond. We haven't had your suggestion, this one, is the first one we've had of that ilk. We've had other ideas. Do you think that's sufficient for your needs? Just as it's recognised as a constraint, that the location of the distribution is sufficient?

MS FREW: I think it would give us that a way of being considered which at the moment there is nothing to do that.

MRS BAUMANN: Yeah. I appreciate that.

MS FREW: And it certainly goes a long way towards that. I'm not sure if you got anything to add.

MS ROSS: I guess it does, as Karen said, it goes towards it; it maybe that something more could be done. Policy 5 which deals with the small scale generation makes a more positive statement on that.

MRS BAUMANN: Yeah.

MS ROSS: And I'm sure Powerco would be open to something that was more overt, but extended beyond this (inaudible) generation.

MRS BAUMANN: You do say that it's a slightly clumsy way of dealing with what really should have perhaps been within the ambit of the Transmission NPS.

MS ROSS: The point we were making there is it would be clumsy in here to say that you supported - or that it included transmission assets other than

those owned by Transpower. So you'd still have a gap; really, our view is that you need to amend the National Policy on Electricity Transmission to include all transmission assets rather than those just owned by Transpower. But the distribution assets could equally fall here and it would fit better here.

MRS BAUMANN: Yeah, and we maybe into arcane boundary issues, whether it's actually transmission or distribution with your island networks which as a lawyer, even I get a bit confused.

MS ROSS: And I guess on that we would like to see the NPS on Transmission amended to include any owners, but in saying that this Policy Statement is meant towards distribution having recognition and that would be a huge step in our direction from what we do.

CHAIR: If I could follow on as a supplementary, would it be possible to include a definition then as to what distribution, to overcome this interface in this report? That may be something Ms Ross can think about and get back to Ms Beruldsen on.

MS FREW: So we could talk about something like – we could define distribution assets and then talk about perhaps transmission spur lines which we're connecting to renewable generation to the grid but weren't owned by Transpower.

MRS BAUMANN: Yes. We have to decide whether we want to also include the islanded ones or not.

MS ROSS: Yeah.

CHAIR: Professor Chapman reminds me that we've got a definition of local electricity distribution network, whether that is sufficient?

MS ROSS: That wouldn't cover the spur lines.

MRS BAUMANN: That's really the only point I wanted to see whether we could go even further to clarify this.

MS FREW: If we could have a think about that and come back with a definition which did -

MRS BAUMANN: And you may want to look at submissions from other parties that have come up with definitions or approaches. I think the major generators have covered that issue, I can't think who else, somebody else too.

MS FREW: Vector?

MRS BAUMANN: No, Vector haven't.

CHAIR: Meridian today are coming back with suggested wording on this very point, as well.

MR GARDINER: Yes, I have an issue round NPS Policy 5 where you suggest an amendment of including the extension or upgrading of the electricity distribution networks, wouldn't you add "where necessary" given that the intent of NPS 5 is about the isolated communities, Northland, East Coast, who may need small scale generation, and actually might be at the end of the line; and when anything degrades and the lights go off, they go off in those areas, and so they might need an independent source of electricity generation which might not actually be hooked up to the transmission

lines, and I'm just seeing whether that would be your amendment including the extension or upgrading of distribution networks - might need to put a "where necessary", have you got any comment on that?

MS FREW: Sounds reasonable to me. I don't think. It's reasonable, it doesn't have a huge impact. I don't think – well we wouldn't look at doing it if we didn't need to do it.

MRS BAUMANN: Thinking about small scale generation, is Powerco looking at any distributed generation? Do you have any generation at the moment?

MS FREW: Yeah, we are trialling a remote access power scheme, in the middle of the North Island. It has more to do with the 2013 (inaudible) that requires on remote lines, so we are looking at that and we are looking at opportunities in that area.

CHAIR: Would that be embedded for that area particularly?

MS FREW: That sort of application is probably more not part of the network in the end. The idea is looking at the un-economics or the economics of the line and decide whether we put in generation or lines, or both, whichever would support that.

MRS BAUMANN: I think it is the kind of issue Mr Gardiner is interested in, the economics of long lines and full supply generation.

MS FREW: Which is certainly all being looked at into the continuance of supply at the moment.

MRS BAUMANN: And what kind of generation is that you're looking at?

MS FREW: At that place we have done a lot of energy efficiency improvements with trying to use gas more to get as much of the peak load off and then what is left we've got some solar for it, it's a very remote wool shed, solar power to keep it ticking through the year and then on the peak times we have got diesel generation because there was no other resource available. So it is not renewable. But looking at the overall scheme, what the actual consumer needs is part of what we're looking at.

MRS BAUMANN: Do you know of any barriers from district plans, consenting processes, to pursuing that kind of distribution - costs, plans, goals, do you have any comment based on that?

[10.35am]

MS ROSS: Yes, and the experience we've had in respect of the One Plan with Horizons Regional Council. They're keen to address the issues and to make those processes easy but they don't know how. We've had some discussions with them about what say, micro-generation looks like and how you might address that in plans. And what would be ideal is to have, when you put in those systems, to have a one consent process so that rather than going through getting five different consents say, for installing a micro-hydro and associated assets, to have one consent and I would have thought to have - because it's not an area that councils do have a lot of expertise in, to have some standards which apply across the country would be really useful.

MS FREW: And it's the reason we've supported having small scale generation in here included as part of the NPS because those small scale plants do have a contribution to make and it would be useful it be signalled at a national level before councils (inaudible).

CHAIR: It's a question of with your work, what's the degree of detail that you've got to when it comes to a suggestion for the plan change?

MS FREW: I think that's an attachment on the submission isn't it? I think it was the attachment at the end of the submission is what we suggested to Horizons for their review.

CHAIR: So you haven't gone further than what's in there?

MS FREW: No.

DR CHAPMAN: I was going to pursue that a little bit more. Is that a consequence of remote schemes needing different sort of pipes and energy to work together?

MS FREW: It's things like needing, if you have a micro hydro plant you put in and you need to have a range of consents, so for the actual – for the take; for the plant, you know, the physical assets. You need to go to the regional and district council and it's a lot more complicated and expensive than you would hope it would be. And it makes some of those projects uneconomic.

CHAIR: So Policy 5 then, which is the one we're talking about. Have you a mood today on the question of using a mega wattage threshold, rather than an effects threshold, for those small projects? 4 megawatts is an arbitrary sort of figure.

MS FREW: 4 megawatts I guess, from our point of view is a reasonable size that will be embedded on our network, so we didn't comment on that thinking that it was a reasonable size for a distributed scale generation and that is

why – I think that’s what you are trying to get at with that policy so we thought, that’s reasonable. It’s sitting not a micro hydro

MS ROSS: I would have thought it was reasonably difficult to put an environmental threshold on it, because there are so many different effects. Depending on – like if you’ve got the effects of wind, micro hydro, and solar are all different. So I would have thought – it is arbitrary, but it may be easier.

CHAIR: The only way to do it.

MS ROSS: Yes.

CHAIR: We have had submissions that it should be 10 megawatts and then contrary submissions saying well if you had 10 megawatts you could have a whole series of 10 megawatt wind farms all being dealt with as a restricted discretionary activity or controlled activity which could have significant environmental effects. So I would be interested to know with the Horizons approach that you’ve taken, whether you’ve got down to drafting any suggested rules or methods? Are you attempting to do that, give them something that they could - rather than at a policy level, some methods as to activity status?

MS FREW: It’s not something we that we’ve done but maybe it’s something that Powerco could look at.

CHAIR: I think it would be really helpful, because it’s the very point that we’ve got, they would like some guidance and some submitters have suggested we should be prescriptive in the direction we give local authorities when it comes to that guidance. So we’re struck with the same issues.

MS FREW: Yeah, I would've - Powerco I'm sure could work on some things, but it's actually, it's quite a big project to do that, to get it right.

CHAIR: Yes, it is more of a legal instrument and the methods within plans with its assessment criteria, activity status, policy response, or you were referring to some sort of omnibus consent which I find quite interesting, legally. Sorry about the homework, but it would really be helpful and if you could give that information to Miss Beruldsen and once we've looked at it we may get back to you. Thank you very much. You have been very helpful.

CHAIR: Mr. Boorman, your turn; do come forward. Mr Boorman, thank you for your submission. You have raised some concerns that others have as well when it comes to the policy response and what the implications might be for ecology and so forth. We are very much in your hands whether you wish to repeat what you have written here or wish to expand on that. But you are being recorded.

MR BOORMAN: Yes, I just wanted to repeat my - I have two concerns. One is climate change and I appreciate that renewable energy electricity generation is very important for reducing our country's, and our world's carbon emissions to avoid coal-fired power stations and things like that. But my other concern is for biodiversity and in world conservation terms New Zealand is one of the 25 hot spots in the world for special and threatened biodiversity on the planet. So, New Zealand does really need to protect its biodiversity. So far we have failed to produce a National Policy Statement on Biodiversity. Before the last general elections a National Policy Statement was promised for 2011, I think, but I'm not sure if that is still on the books now that we got a new government. But yeah - so my concern is, as you've probably already heard, is for situations such as Mokihinui River, that is proposed to be dammed by Meridian Energy; and I think that given extinction is forever and the specialness of our native biodiversity that projects such as the Mokihinui issue should not be allowed to go ahead despite the benefits of renewable electricity generation.

So, yeah, I just wanted to remind you. I think there was some talk about this proposed National Policy Statement and reversibility versus irreversibility and you know, if you drown a river valley, a large river valley such as Mokihinui that has irreversible effects on biodiversity, so because of that irreversibility I think such things should not go ahead.

So I don't have specific proposals as to how to word the National Policy Statement to stop such irreversible effects, but I encourage you and remind you to take that into account when you are considering in making your decisions.

CHAIR: Well yes, thank you. We did have submissions from Forest and Bird about that project as well, so you can see their response to that, it's is on the website. So it might be interesting for you to look at that and see what they said about that. But it is very much supplement to what you are saying. The other matter is that we've also had submissions about the need to make sure a policy statement of the type we're dealing with doesn't attempt to override the matters in section 6 of the Resource Management Act which deals with biodiversity issues under 6(c) and we're conscious of that. And also, we have been asked to include or to recommend, to direct even, local authorities to include criteria in plans concerning assessment matters which would include biodiversity, landscape, cultural matters and all those sorts of things. And we're grappling with whether the protection is already there in the statute or not. So the matters you've raised are at the forefront of our considerations and we are grateful to you for taking time to make this submission.

[10.45am]

MR GARDINER: I want to acknowledgement the sentiments in your very short statement and I don't think they need to be overemphasised because I think the point is made very clearly and I certainly acknowledge them and I receive them and I don't have a question about them because they're pretty explicit.

MRS BAUMANN: Same for me, thank you.

DR CHAPMAN: Yes, thanks Mr Boorman for coming to talk to us on this. Now we've heard quite a lot of submissions against irreversibility, obviously Policy 3. There is quite a strong feeling out there, I guess you'd have to say that's a difficult policy to retain in the NPS. If that were to go - not be retained, you clearly have concerns about irreversible development such as hydro on the Mokihinui River. Is there some other form of wording or other remedy, if you like, elsewhere in the NPS, that would, you know, could be strengthened? Some wording you might like to give thought to on how that could be redressed if Policy 3 were not be retained?

MR BOORMAN: No, I don't have any suggestions, sorry.

DR CHAPMAN: Okay.

MRS BAUMANN: Perhaps I could help you just on one point. We have heard amongst some submitters that that issue of the long-standing nature of the effects, ie, reversibility is something that is going to be considered anyway. Are you impressed by that argument?

MR BOORMAN: Yes. Yeah, I guess I just have to trust that section 6(c) will be given due weight.

MRS BAUMANN: Without this clear direction that the current policy's directives on reversibility or otherwise. Because that is what some people are saying, do away with that because it will be on the table anyway, in a slightly different way, but it will be part of the decision mix.

MR BOORMAN: I guess, in my mind, is that the size of the effects, you know, large river versus a small river, that the significance of the impact and perhaps these things - and the reversibility, are not specifically addressed

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in section 6 (c). So I would be more comforted if they were specifically addressed in the National Policy Statement.

CHAIR: Well it is an interesting point you make because we have a National Policy Statement on coastal with the 6(a). We don't have a National Policy Statement on landscape or on biodiversity or on cultural matters or on historic heritage, so of all the section 6 matters we only have one, which is the Coastal Policy Statement. Have you had a look just for your own interest in the area of biodiversity, the Draft Policy Statement was out years ago on biodiversity.

MR BOORMAN: I have looked at that and I'm sad it hasn't come to fruition.

CHAIR: So that was the sort of policy statement though that you would have been very supportive of, that draft?

MR BOORMAN: Yeah, I was most interested in trying to protect biodiversity on private lands, 30% of the country is protected, but that is mostly high altitude alpine land. Low altitude forests and wetlands, they're not protected and it's that biodiversity that needs to be protected as well.

CHAIR: Well we have heard evidence about how biodiversity was the reason the local authority declined the wind farm at Mount Cass. So that is something you might like to look at. And there are also some Environment Court cases on the criteria you apply with biodiversity which are worth looking at as well. We are very conscious of the points of balancing section 7 matters with section 6. Thank you so much.

ADJOURNED

[10.55am]

RESUMED [11.45 am]

Audio file: 2July2

CHAIR: Yes thank you very much for coming along. We've appreciated the submission and we're at the stage too with this hearing where we are coming to the end of it so it's opportune that you are presenting now because we'll have some questions for you. You probably know the panel. You know Mr Gardiner, Mrs Bauman, Professor Chapman and I'm Royden Somerville. So we've very much in your hands how you wish to present, but you are being recorded so everything you say will go up on the website. So if you could just proceed. Thank you very much.

MR TUTUA-NATHAN: (Speaking in Māori). Thank you Dr Royden for giving us the opportunity to speak to this issue. My name is Tikitu Tutua-Nathan. I'm chief analyst and acting manager of our natural resources team at the Te Puni Kōkiri. We've been invited to provide a submission that looks at some of the issues raised by Māori but also additional matters that haven't quite been covered by the submissions.

In light of that I really want to turn to page 4, to focus more on the additional matters. I take it that the Board's read the previous section so I don't want to take up added time. You will have heard submissions previous by Māori submitters so what I propose to do today is go to section (b) on page 4 and just talk about issues that Māori have raised around renewable electricity generation but also those Māori that are actively involved in electricity generation and in partnerships with some of the key developers.

So in terms of the submission, Te Puni Kōkiri has identified a number of matters that it considers that the Board of Inquiry should be aware of. The

first one is that Māori perspectives on renewable electricity generation, that was in the earlier part of the paper, and second the Māori commercial involvement in renewable electricity generation.

In terms of one, Māori are generally supportive of renewable electricity generation and is consistent with Teo Māori. However, this is as long as it does not result in environmental or cultural damage. In particular some larger scale renewable electricity generation facilities such as hydro dams and wind farms can significantly impact on the Māori, that's the life essence, of natural resources, sites of significance, Taonga, those are treasures, wahi tapu, or sacred places and other matters of importance to Māori. In saying this Māori have supported and been commercially involved in large scale generation projects where these do not have adverse impacts and have been appropriately designed and located. There are a number of relevant recent decisions relating to new wind farms that demonstrate that Māori will support large scale developments and where these are appropriately designed and located and where there has been suitable and adequate consultation and engaging as part of the development process.

For example, both Project West Wind, and that's in Makara, and Mill Creek wind farms on the Wellington west coast were supported by the local Iwi. In both cases the applicants had undertaken extensive consultation with the relevant Iwi. The Iwi had undertaken cultural impact assessments and the applicants had made necessary amendments to meet Iwi concerns.

In the recent Unison Networks decision which has been considered and declined twice by the Environment Court. The Environment Court upheld Iwi concerns regarding a new wind farm on the wake of Te Waka recognising the significant adverse impact the wind farm would have on

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the relationship of Māori, with Te Waka under section 6(e) of the Resource Management Act. And Te Waka is in the Hawke's Bay, behind Napier.

At a smaller scale, a number of small Māori communities have been working with Crown research institutes to investigate the use and implement local electricity generation both as distributed generation and also as stand alone power systems. An example of these projects include, a research project partnership between Ngāti Porou Hauora and Industrial Research Limited. And NIWA's work with Ngāti Turamakina at Waihi and Taupo, that's we were talking about earlier, over the Waihi Hill and Te Rarawa at Waitoa in the Northland.

NIWA also conducted a desktop study of energy use and needs and created and package of options (inaudible) marae and that's located near Waitomo in the Waikato region, or Maniapoto region, I should say.

[11.50 am]

Māori, as developers, in renewable electricity generation. A number of Māori already see the development opportunities associated with renewable electricity generation and many already have significant presence in renewable electricity generation. Some examples of (inaudible) gained Resource Consent approval in September 2006 for commercial scale for 40 megawatt wind farm comprising 42 wind turbines on remote iron sand mining site on the west coast of the North Island near Kawhia. The Resource Consent was appealed by the Department of Conservation and is yet to be heard by the Environment Court. (Inaudible) has also been doing some investigation into the development of biofuels as a commercial venture. The biofuels component is linked to the carbon emissions process under the

Climate Change whereby you could have alternative fuels to reduce the level of carbon emissions.

The Tuaropaki Power Company that operates two geothermal power stations at Mokai near Taupo, is 75 percent owned by the Tuaropaki Trust and 25 percent owned by Mighty River Power. The two power stations comprise one 55 megawatt power station and one 40 megawatt power station. The generation process involves a reinjection of used geothermal fluid of the deep geothermal aquifer to minimise the impact on existing geothermal features and natural ecosystems. Just a comment there on reinjection. Reinjection of fluids back into the ground is seen by a number of you as a more acceptable approach to sustainable management because it puts the water and the waste back into the ground. The test for reinjection is whether or not it would affect the field in terms of generation, but in terms of a renewable source there is high potential.

DR CHAPMAN: Yes I understand, that's more acceptable in terms of the impact - less impact in terms of reinjecting then putting the waste into water on the surface?

MR TUTUA-NATHAN: That's right.

DR CHAPMAN: Is that the main concern of that?

MR TUTUA-NATHAN: The issue there is that the waste is seen to be absorbed by the whenua of the land and its all filtering back down into the water aquifers possibly to recharge and be reused as a renewable source of energy.

DR CHAPMAN: Rather than affecting the mohe of the stream or the surface?

MR TUTUA-NATHAN: That's right. Although you will have issues there with natural degradation from geothermal fluids flowing into it, via natural occasion or - but reinjection is seen as a useful tool to mitigate those impacts.

Mighty River Power also have a 33 megawatt geothermal power station at Rotokawa near Taupo which the company owns and operates in partnership with Tauhara North Number 2 Trust. There is also the 100 megawatt geothermal power station at Kawerau which is a partnership with the Putauaki Trust and Ngāti Tuwharetoa Settlement Trust. The new 132 megawatt Nga Awa Purua geothermal plant expected to be operational at the end of 2002 and is another partnership between Mighty River Power and the Tauhara Number 2 Trust.

There is a 25 megawatt Ngawha geothermal power station and it was constructed as a joint venture between Top Energy and the Tai Tokerau Māori Trust Board. Taheke 8C and Ruahine Kuharua Incorporations have a commercial partnership with Bay of Plenty Energy for a proposed hydro scheme on the Kaituna River that would generate 13.5 megawatts of electricity. That's enough to supply around 10,000 homes. Taheke 8C and Ruahine Kuharua Incorporations own and manage the farm land that will provide access and land for the schemes canal, power station and transmission line.

Te Puni Kōkiri is also where that Iwi claimants through a part of the central North Island collective are investigating their rights to the significant geothermal resources that lie beneath the forest lands that they put claim to last year.

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Investigations are currently underway on the feasibility of wind electricity generation within the Ngai Tahu rohe. We don't have further details on either of those, but they will become more apparent in the near future.

So in conclusion, Māori are concerned that elevating the status of renewable electricity generation to a matter of national significance without appropriate weighting being given to environmental and cultural matters including the Treaty of Waitangi, could lead to significant adverse effects on the environment, particularly on Taonga and their roles as kaitiaki.

Māori are generally supportive of renewable electricity generation and a number of Māori are already actively involved in renewable electricity generation at a range of scales and see the opportunities that it presents culturally, socially, environmentally and economically. Māori generally seek to ensure that there is an appropriate balance between economic development and environmental protection and that renewable electricity generation does not occur at the expense of the environment.

So I suppose what Te Puni Kōkiri is presenting today is that there are a number of cultural concerns relating to the entering into renewable energy, but in saying that there is also a large body of Māori that are prepared to look at being involved in the economic opportunity approach so long as it's undertaken in a sustainable manner and that Māori are actually looking and working in partnership with the companies to achieve that. So there's a balance between cultural and environmental protection with economic opportunity. And it's bringing the balance together that Māori are seeking or appear to be seeking.

CHAIR: Thank you very much Mr Tutua-Nathan.

MR GARDINER: Thank you. (Speaking in Māori). My question is the tension between the commercial drive that Iwi are demonstrating right now, in particular, CNI, and what potential it has to override some of the requirements of the Resource Management Act in the interests of commercial convenience. As we are aware, over the past 15, 16, 17, 18 years of the Resource Management Act, Māori have actively engaged in the process to put a discipline on concerns. Do you see any issues around the potential tension between the Resource Management Act, the NPS, and the desire of Iwi to chart their course economically forward with geothermal and other things, and particularly geothermal?

MR TUTUA-NATHAN: I think what's coming through the submissions received was that there is a recognition that Māori want to be involved in decision making at consent levels and there is a tension between the development side as well as those Iwi and hapu who want to protect the cultural substance and integrity of their resources because the cultural integrity is also linked to the mana of those people so you have the customary kaitiaki process as well as the kaitiaki for economic opportunity.

There is no simple answer to that. It is an issue that Māori have been involved with through the resource consenting process where the Resource Management Act provides an opportunity under Part 2 issues for them to engage in that process. There's currently a review of the Resource Management Act being considered as we speak which you will be fully aware of. And Māori are certainly asking for greater input into decision making processes in terms of the management of those resources.

In terms of tension, there is certainly an issue between those Iwi who have the resources to be actively engaged in development and also the issue for Māori who may not have the capacity and capability to engage in the

resource and consenting order planning process to be more specific, because it's engagement in the planning process is probably more of a priority than being engaged in the resource consent process, because at the planning stages is where you can set some of the priorities and the rules that will lead to how you interact with the consent stage. I'm not sure if I'm actually hitting the numbers you pushed there.

MR GARDINER: No, no, I just noted a potential tension and just wanted to raise that as an issue for consideration given that these discussions are recorded and I think we need to raise these kinds of issues. One of the policies within the NPS is Policy 5 which looks at small scale, isolated communities and providing the opportunity for them to develop electricity generation, like Ngāti Porou, (inaudible) eastern extremities, Tai Tokerau, those kinds of areas. Does Tutiki have a view about that?

[12.00 pm]

MR TUTUA-NATHAN: Te Puni Kōkiri's strategic outcome is Māori succeeding as Māori and for us if Māori want you to enter into opportunity like that, we see that as only positive because it enables them to empower themselves to be involved in either a commercial activity or a cultural balancing activity as well. By cultural balancing I mean they will need to decide amongst themselves whether or not they want to enter into that type of arrangement in terms of electricity generation and hopefully they will engage and consult with all of their associated hapu before they come to a decision. But additional to that is that there are some Iwi that are more capable than others in terms of the resourcing. So there will always be some hapu and Iwi that may not have that. When I say about capability, it's a skill basis to actually get involved in the process and the capacity to do that.

MR GARDINER: Which brings me to my third and final question, which is one of the things I've noticed on these kinds of Boards of Inquiry and policy evaluation and future intentions of governance is that Māori input's very limited so in this particular case, as you know, we had a submission from Ngai Tahu, one from Tainui, one from Kahungunu at the tail end of the Maungaharuru Tangitu Incorporated proposition which was a major submission. Given that we are moving into a kind of refreshing review in the policy, is there a way that Te Puni Kōkiri has a role in encouraging people in processes of these kinds or - what's the mechanism that would see greater involvement, because there is - I haven't looked at some of the technical issues and some of my colleagues might do that, which do affect Māori as consumers, let alone anything else.

MR TUTUA-NATHAN: Well Te Puni Kōkiri is acting in conjunction with the other agencies. The Ministry for the Environment is the lead agency in this one. And like all things we can all improve and especially in terms of the communication of the call for submissions. So in that case I think, yes there is always scope for improvement. Interesting for us that those Iwi that have been actively involved in the electricity generation development haven't come forward as they might have, so there may be a communication issue, but as I tried to highlight in today's submission is that Māori across the board in a number of areas are actively engaged.

MRS BAUMANN: I just was looking at your conclusion on page 6, "Elevating the status to renewable electricity generation without appropriate weighting given to cultural, including the Treaty of Waitangi." That submission results - it's on the basis that we do have section 8 of the Resource Management Act, do you feel that that section 8 is not sufficient to ensure that principles of the Treaty must in all cases taken into account without reference in the National Policy Statement?

MR TUTUA-NATHAN: I have a preference to read section 8 with the other Part 2 provisions as well so it's not just in isolation. When you take into account the principles of the Treaty there are other - like section 6(c), so there are other components of Part 2 that can cover that. I suspect that when Māori were - a number of Māori will make this call that it can be strengthened and with all things there is the possibility of strengthening it, but for the agencies who are operating under that legislation that is appropriate in terms of taking into account those concerns. Now how we change it, I don't think there's any call by Government to change that provision, but I've just noted that as a concern that Māori have raised. Taking into account the principles of the Treaty does cover off a number of issues but it may not be as strong as some Iwi would prefer.

MRS BAUMANN: Because, I mean, we've been invited to include that in the National Policy Statement but if we include everything that is a matter of law anyway, it's going to be a very long statement. Just wondering whether section 6 and section 8 is sufficient than whether there should be more recognition in the policy itself?

MR TUTUA-NATHAN: Well at this stage in terms of the legislation, it's sufficient for the needs at this stage, but Māori are obviously seeking more.

MRS BAUMANN: Okay. I wasn't aware of this, on your page 5 there's just a matter of detail, this desktop study of energy use and needs in respect of the marae in Maniapoto's area. Do you know about the conclusions of that, are they - anything we should know about?

MR TUTUA-NATHAN: Unfortunately I haven't seen the details of that. There was an issue that was raised by our contractors, but I can certainly follow up.

MRS BAUMANN: It's just that if those ideas are going to have barriers against them through the Resource Management Act or if we can in any way nudge it, and again I think this is in our Policy 5 area by the sound of it, just maybe, it's a little case study and you never know what it may highlight.

MR TUTUA-NATHAN: All right.

MRS BAUMANN: Because we are looking at the, say, consenting costs for stand alone, small scale and whether we should make recommendations in that area or at least deem to it in some way or other and I think that hooks on to what Mr Gardiner was saying about small scale community developments. Otherwise I have no other questions.

DR CHAPMAN: Just to pick up that last point, I would be very interested in whether you can come back to us on that question of the consenting costs, of energy use and electricity development projects. We heard an interesting submission yesterday from Mr Cox, Grant Cox, Bioenergy Association I think it was, and we heard again from Powerco this morning that often remote or small scale projects that involve more than one sort of energy development or use, may place significant consenting costs and so to follow up on that earlier point, we're very interested in examples of where those costs may be acting as barriers, particularly in remote areas or small scale communities.

A specific question I have following on from that is, we've been grappling with this question of the (inaudible) of the term 'electricity' because often the extraction or the production of electricity goes along with the use of heat, or the availability of heat and often perhaps for Māori needs in particular, cooking, bathing all those sort of things, heat is very useful and it's a question of how that's made available efficiently with the production

of electricity, whether co-generation arrangements, for example, may be efficient. Do you have any view on whether - well one of the issues we're grappling with is whether, perhaps in the Preamble or in one of the policies we might indicate support for the efficient use of energy along with the development of electricity. Do you think that makes sense essentially?

MR TUTUA-NATHAN: There is a useful example of the Tuaropaki Power Trust where they have their geothermal power station but they also have quite a large greenhouse development linked to the use of the additional heat. So there's kind of a co-management process going on.

[12.10 pm]

DR CHAPMAN: Is that something you think we should try and encourage explicitly in the NPS?

MR TUTUA-NATHAN: That's another positive addition, if you like. I'm not too sure whether I can comment enough as to whether or not it should go in without conversing with our departmental colleagues but if you're looking at efficiency uses, it's something that's appropriate for the Board to look at.

DR CHAPMAN: Yes, it's a question of - section 7(b)(a) refers to the efficient use of, under the RMA, of the efficient use of energy and so there is a provision there that we could hook into, but it's really a question of whether we're pushing at the margins of the NPS in a useful way or whether we're straying into -

MR TUTUA-NATHAN: That's why I think I've made my comment, it's appropriate for the Board to look at, it's a bit difficult for me to make the comment without that.

DR CHAPMAN: Yes, okay.

MR TUTUA-NATHAN: But in terms of Te (inaudible) Māori approach, the focus may not be just on one goal, there may be other goals that you can bring together and utilising another aspect of the resource as good management. I look back to my days in the Tuwharetoa area where there was a hot pool and a simple thing, there was a hot pool and then there's the river, and all they did was dig a little channel, put a little stopper in and open the channel up to let the cold water come into the super hot pool and it cooled it down. So that had nothing to do with electricity but it had everything to do with the cultural use of that resource. And it may not answer your issue, but at least we're aware that in the Kawerau area they have a hot pool facility and it comes off from their geothermal developments or using the water.

DR CHAPMAN: And is that used for bathing and -

MR TUTUA-NATHAN: It was. I haven't been there for quite a few years, but at that time. That may have been just reusing the natural resources, and not so much from the geothermal power station itself. But having alternate uses.

CHAIR: We've heard evidence about the challenges, if you like, of getting power to remote areas, and the issue long term about the level of sustainability in those areas, self sustainability and Mr Gardiner's questions about Policy 5 related to that, these Crown resources that you - studies, I'm particularly interested to know, and any information you get for us, whether they have actually severed from the lines, I mean it could be completely stand alone in a sense of using a little bit of hydro, little bit of solar, little bit of wind, perhaps some diesel back up or whatever, but it's the degree of

independence if you like within these desktop studies. The reason we raise it is that we actually haven't had submissions from the CRI's which I'm really sorry about, because they're looking at the very issues that we're interested in. So that would be helpful if we could look at that. The other thing is, do you know whether this desktop study to do with the marae, is that to look at it's solar for it's hot water, is that -

MR TUTUA-NATHAN: I'm not aware of the details of that study. But I'll certainly find out.

CHAIR: The other thing we'd be interested to know, if it's within your knowledge and in your database, is whether or not any of the groups who have made submissions to us, or any other groups, have actually put up suggested provisions, policies, rules, methods, for local authority instruments when it comes to promoting their projects? That would be helpful and the reason for that is that we're looking at just how prescriptive this policy direction should be in terms of the local authority instruments and if we're going to include matters you've raised, whether somebody has done some drafting in place.

MR TUTUA-NATHAN: I'm aware that Ngai Tahu have been actively involved in planning processes with local authorities, so there is certainly (inaudible) those documents and -

CHAIR: Yes, we have asked for a copy of the plan of those but we're particularly interested in some of these geothermal ones. We've heard evidence about the Environment Waikato's plan change to accommodate geothermal and we would be particularly interested to know whether there's any of the groups involved in these developments that believe that those plan provisions go far enough or whether it needs to be further.

To be read in conjunction with
the tabled evidence/statement

MR TUTUA-NATHAN: All right. That might be something I'd need to follow up with our other colleagues as well.

CHAIR: Absolutely, yes. And there's no (inaudible) time wise, but when you do get a chance if you could send it Ms Beruldsen, that information. So Mr Tutua-Nathan, thank you very much for your submission and for taking the time to come along, and we're grateful for the way you've summarised the involvement of Iwi and groups in the projects and we have certainly taken onboard what you had to say. So many thanks.

MR TUTUA-NATHAN: Thank you.

ADJOURNED [12.15 pm]

RESUMED [2.00 pm]

Audio file: 2July3

CHAIR: Welcome back Mr Hassan.

MR HASSAN: Thanks Mr Chairman.

CHAIR: And thank you very much for your material and the work your client's gone to. We look forward to hearing your submissions.

MR HASSAN: Thanks Mr Chairman. Good afternoon Board. Ms Beruldsen. Mr Chairman, I'll just get underway with the submissions and just to say that, I'll try to wrap up on the various matters that had come up in the hearing and are in addition to the Memorandum of Counsel which I'll take a look through work through at some point.

And really the essence of Meridian's case is presented, as I've summarised here first of all that is, an effective National Policy Statement is important and timely and needed for strategic Policy direction, as I've noted there, protecting the existing renewable generation base, substantially increasing investment in new generation is vital to New Zealand's wellbeing. What the NPS is necessary for is to give effective direction and guidance to decision makers. And I make the point there, "Resource consent processes are part of that but also vitally so are plans and Policy statements."

Much of Meridian's submissions and evidence was focused around how to make this NPS effective because the starting point is not effective. And the key elements of that is as we were presented through the different witnesses, it needs to identify correctly the benefits of renewable

generation. And there emphasising the substantial existing renewable generation assets. As well as large scale new generation projects. So, those two components of the mix and we'll come back to the first point later when it comes to the Big Four which have such influence in terms of security of supply.

It has to go further than just doing that, as we emphasised. It has to give that Policy direction as to how you deal with those benefits as against conflicting Part 2 considerations. Particularly, if local effects and costs because there are trade-offs necessary if one is to use and develop renewable generation resources by their nature.

The third component is the emphasis and particularly came through from Ms Dawson's evidence as a planner, that the RMA is not a no-effects statute. And it is sometimes necessary, as it was said, for there to be a tolerance by communities of adverse effects of a project. Obviously after you've taken all steps you can take to avoid remedy and mitigating and that point was also made. But at the end of the day there may have to be tolerance in order for benefits, regional and national, to be realised.

Fourthly, to be effective it needs to be clear in what it sets. Realistic and measurable in terms of timelines for implementation through changes to Policy statements and plans. Related to that was the point we made about the need for expedition in processing consent applications. That is, relevant to the delivery of sustainable management. Sustainable management's not just about outcomes it's also about process and timely process.

And the last point, and this is something we do come back to in the submissions, and came through with questions from the Board, is the need for this National Policy Statement to sit in tandem with and work with

related Policy statements. In particular, the Proposed Freshwater Statement, there's issues of timing which I'll come to on that. And of course, the now operative Policy Statement on Transmission.

And finally, Meridian's case was, despite its significant failings, the Proposed National Policy Statement is certainly capable of being amended. So that will effective delivery on its intended purpose and assist to achieve the sustainable management purpose of the Act. And Ms Dawson's detailed evidence demonstrates that.

If I could now just take the panel to the memorandum with counsel. I won't go through it in detail but just so much as to give you orientation for your reading of this. I apologise first for the fact that it doesn't have a table of contents which might have been helpful. But in the time available we ran out of time. But we have tabulated the appendices, of which there are quite a few. Giving it quite a bulk as seems to be the norm for anything under the RMA.

So, first of all there are a number of points. There were questions as to clarifying assumptions about certain matters by way of a tabular representation of that. And so, clarifying the assumptions in Figure 1 of the evidence of Ms Moss, addressing when carbon pricing will commence, whether a rising price for carbon is assumed and whether cost of storage and clean up has been included for nuclear generation. So that, under the introduction, was the first section of the memorandum with counsel. Even further information is sought regarding evidence of Raewyn Moss, starting with Figure 1 and carbon pricing and various subheadings that I've just taken you through. And then the request for a tabular representation so that you can actually do the sums. It's all set out there in terms of the different components. You note the letters, particularly in the second column, "E for Existing, UC for Under Construction, P for Proposed." And

then, setting that out in terms of averaging generation maximum capacity and generation capacity in household equivalents, third column.

It picks up and responds to the submissions from others concerning Meridian's operations at Manupouri and a particular discharge is at Doubtful Sound, if I can find that. You'll see on page 5 the commencement of that, response to evidence from other submitters on the 11th of June. Starting with the Doubtful Sound issue, the ecological effects of Doubtful Sound.

And then going on from that to talk about the statements the Honourable David Parker. It was actually, of course, not presented to the Board, it was simply tabled by way of information through the Otago Fish and Game Counsel representative, as Mr Chairman noted. But those matters are addressed in paragraph 2.9. I should note that in the preparation of the memorandum of counsel, as you would anticipate in these sorts of areas we consulted with the expert witnesses, Mr Truesdale, Ms Dawson and also Ms Moss. So, although it is a memorandum of counsel, it's not evidence as such, it is a Counsel informed by those witnesses.

Mr Truesdale's evidence, in regard to that. Firstly, it gives further detail in relation to his Figure 19, as to the proportions for demand growth and for thermal replacement. If you go to page 8, Figure 19 and you'll the graphical representations which have been prepared with Mr Truesdale assistance. Figures 1, 2 and 3. And then going onto the topic of demand side management, as to the likelihood of projects contributing towards a 19,000 gigawatt hours for renewable energy developments required by 2030.

Then, dealing with long run marginal cost of solar generation and marine generation options as to the likely uptake of solar energy generation and likely price part. And you might recall Mr Truesdale qualifying himself saying, he knew about the examples in Germany but not Japan so, that comes back to the German illustrations not those from Japan.

He also provides a response on the suitability of solar generation in New Zealand which is under the next heading, "Additional responses to questions." Whether wind and hydro work best if they are in a particular region. Whether the rapidly changing technology for the generation of electricity has a role in the debate about relative reversibilities, so there's some views expressed about that.

And Meridian's views on the development of a qualified no-go zone for renewable electricity generation proposals, expressing caution on that approach. And in particular, finishing on that vast paragraph 65 before the conclusion about that. And in this respect Meridian does not consider that no-go zone prompts the development or operation of renewable generation. Rather it seeks to limit development of such activities.

[2.10 pm]

To some extent the material from the Scottish study, which is included in here, is of some interest for you. Obviously, there are practical difficulties in trying to do this. Bearing in mind that the (inaudible) information can be available and when that can be available.

So, then we have a list of the appendices that are referenced in that covering memorandum and you'll see the different references to the (inaudible) there which I won't go through but they're listed in paragraph 5 and the tabs correspond to those numbers.

So, I next want to take you to some specific questions, I think there are about three or so, made of Counsel during the course of the hearing on different topics. And the first one concerned water allocation and the roles of the Proposed National Policy Statement and the Proposed Freshwater National Policy Statement and I've clustered these together because they do relate.

Firstly, the questions as to how the roles for the Freshwater National Policy Statement and one on Renewable Electricity Generation should interrelate. And especially with regard to section 31(f)(a), of the RMA which Mr Chairman brought to my attention.

Secondly, how the Board ought to address the relative timing of the commencement on the two Proposed National Policy Statements given that interrelationship. So that's how I've understood those two matters. Taking that first one and section 31(f)(a) in their respective roles of the statements, and the key I think to answering that first question is Ms Dawson's explanation that water allocation issues need to be dealt with at a sub-catchment level. Can't have one rule fits all, within particular catchment's different allocation preferences operate. It's clearly the case that the demands for water are not the same throughout New Zealand. It is at this particular catchment and sub-catchment level that the particular matter's relevant to allocation of water between consumptive and non-consumptive uses are best identified and determined.

And interestingly, I found that that's actually reflected in the draft (inaudible) of section 31(f)(a) and in particular, those commencing words qualifying 'if appropriate' showing an intention to leave discretion to Councils as to whether to establish allocation rules and if so, what those rules will provide for in terms of allocation preferences.

I note in a footnote that there's a parallel reflection of that in section 67.5 and that's about the content of plans and it expresses an obligation that the plan record how a Regional Council has allocated a natural resource under section 31(f)(a), if the Council has done so.

Therefore, it's more appropriate that the National Policy Statement to give general Policy direction concerning - sorry, that's not very well phrased that first sentence. What I meant to say is that, it is appropriate for a National Policy Statement to give direction concerning section 31(f)(a), so it's a first point. And I haven't expanded this too much but it's quite clearly the case. Plans are to give effect to the purpose of the Act, Policy Statements are as well. They're both instruments under the Act. I went through that in my opening submissions. And so therefore, it's clear that they have a role in directing as to functions under 31(f)(a) particularly as they relate to rule making and therefore, plans.

The Proposed Freshwater National Policy Statement can deal with the subject of allocation preferences in a global way rather than specific to renewable. And in that manner, can give directions to Councils as to how to apply a catchment by catchment approach. So that would suggest that in terms of two instruments that's where we should see relevant Policy directions on Section 31(f)(a) in a broad sense.

That doesn't exclude though, the role of a renewables NPS can play. So coming to that and what role it should play in regard to section 31(f)(a). In Meridian's submission the important complementary role of the renewables National Policy Statement is to give recognition to the national significance which certain freshwater resources can have for the use and development of renewable energy and the associated importance of protecting those resources.

In answer to the Board's inquiries concerning any specific matters that may pertain to section 31(f)(a), Meridian's evidence highlights the significance of the Big Four existing hydro power schemes, Waitiki, Manupouri, Waikato and Clutha. And they together generation approximately 90 percent, and I'm going to make a correction here, 90 percent of New Zealand's current hydro electricity generation, not renewable. That's in the evidence and it's illustrated in the evidence of Mr Truesdale, that's where that comes from.

Bearing that in mind, any erosion of allocations from those physical resources would have national implication. Obviously, there are impacts on smaller assets but not to the same extent individually, you might say, that each of those schemes has in their own right. And so, each of these schemes together with the natural resources upon which they rely would warrant particular recognition as being national significant for New Zealand's social, economic and cultural wellbeing.

So, in terms of the Board inquiring into those matters of Meridian at that hearing that would be a response to that question. And so, if the Board were considering some specific Policy recognition for the purposes of section 31(f)(a), the possible refinement of the drafting recommended through Ms Dawson could be explicit reference to this matter. For example, by way of an addition to Policy 2(a)(roman numeral one).

Now, unhelpfully, I haven't tracked what would be additional there but I can quickly show you that. So if I take the Board to the tracked change suggested redraft provided through Ms Dawson. And Ms Dawson's evidence was that there should be in addition to the Policy Statement of a Policy 2(a), and that was under a heading acknowledging the particular realities of achieving New Zealand's target for electricity generation from

renewable resources. She took the Board through that. And if we look down the red line version to the first item, (roman numeral one), after the word 'resource', which I've repeated in this, what I've added follows, if you wanted to mark it after the comma, in particular the Waitaki, Manupouri, Waikato and Clutha hydro electric power schemes. And then I've bracketed reference including through the exercise of functions under section 31(f)(a) and obviously whether that degree of precision is required is a matter for the Board as is of course, the question of whether this should go in or not. But it certainly does flag that the functions under section 31(f)(a) are a relevant component of that recognition of those particular resources of national significance.

So, that would complete the response we would have on the question of how the renewables NPS could relate to in terms of Section 31(f)(a). But then there is a related question of which, in terms of timing of commencement of the two statements, what our views would be on that. Although the Renewables NPS and Freshwater NPS are clearly, strongly interrelated, for example, in so far as section 31(f)(a) is concerned. Meridian submits that this does not itself dictate that both commence together. As Meridian has noted, the Renewables NPS is also very strongly related to the now operative National Policy Statement on Electricity Transmission and the Policy intent of the Transmission National Policy Statement cannot be fully realised until the companion Renewables National Policy Statement is also operative.

And that fact itself suggests any delay to the commencement of the Renewables NPS should be minimised. But it would not have been necessary or desirable to suspend the commencement of the Transmission NPS for that reason. And the same logic extends to the relationship of the Renewables NPS to the freshwater one.

[2.20 pm]

As to which should come first into force. Meridian submits that there is stronger logic that that be the Renewables NPS. Now, this will assist in giving fuller effect to the Transmission NPS, as I've noted, so that's one rationale to which relates. And bearing in mind, the Councils now have that operative direction before them and are now seeking to respond to it. So, it would help them complete their picture on that. Further, much of the Renewables NPS can be given full effect regardless of the timing of commencement of the Freshwater NPS.

It would be inappropriate to link the commencement of the Renewables NPS to an NPS that may potentially take some time to come into force or may be decided that it will not come into force at all. I mean, that is a matter first of all, for that Board to consider and recommend upon for the Minister to make decisions about in due course. So this Renewables NPS should be decided and commenced on its own merits.

There was a related issue I picked from questioning which I put under the heading, "How the Renewables NPS Should Address Cross Boundary Matters." But my recollection was the Board inquired as to how a National Policy Statement for renewable electricity generation should guide and direct Councils to consider cross boundary consequences of decisions. Such as, decisions in relation to section 31(f)(a). Mr Chairman, I hope I haven't misquoted you, I think you gave the example of where water could supply hydro generation scheme on land outside regional boundaries, at least that's how I took it. The fact that renewable generation resources are often very remote from the communities upon which rely upon them, there's a further emphasis on that issue. In other words, it's the nature of renewable generation as is noted, it's remote from supply. So people in

Auckland have District Plan issues in relation to Regional Plan decisions in made in Waitaki.

So, both of those examples emphasis the importance role a Renewables NPS has for encouraging effective, I would say, effective national integrated management, if I could put that in there. Effective national integrated management across district and regional boundaries as a matter of national significance. The fact that Regional Plans are generally not compulsory does not itself mean that a National Policy Statement is less capable of encouraging integrated management.

Firstly, the discretion Councils have on whether to make a Regional Plan, for example, in regard to allocation preferences and section 31(f)(a) is qualified by section 55(3) RMA, which directs that Councils must also take any other action that is specified in a National Policy Statement. So Meridian submits on the basis of that phrase that a National Policy Statement could effective direct a Council to make a Regional Plan.

Secondly, a National Policy Statement can make directions which Regional Policy Statements must give effect to. And Regional Policy Statements can include methods, and methods can include making plans. So, as compulsory regional documents, Regional Policy Statements are intended to achieve integrated management of the natural and physical resources of the whole region, it says there, and I would submit are a means by which National Policy Statements can direct plan making. In other words, just expand on that a bit. Make directions as to the methods that the Regional Policy Statement will include in response to the National Policy Statement i.e. plans.

I now turn to another topic, and that is Section 7(b)(a), the efficiency of the end use of energy. The Board requested that Meridian commented on the

relevance, if any, of Section 7(b)(a), to the Board's consideration of the Proposed National Policy Statement. And I've set that out in full in paragraph 25, the operative words 'the efficiency of the end use of energy'.

Now, this is where I take you to the only addition to the case book which I've handed up through Ms Beruldsen and I've put a felt tip liner on page 11,041. Quoted it in full there and perhaps just read it out. "The Government's intention when explicitly providing for efficient use of energy in section 7 of the Resource Management Act relates to efficiencies in the use or application of energy rather than efficiencies in the initial conversion processes. For example, when planning land use activities and roading networks. Accordingly, the Government supports the clarification provided by the Committee in narrowing the consideration to end use." So that's from Hansard and what it emphasises is the intent of Section 7(b)(a) is not to stray into generation, it's about end use.

So, the focus of section 7(b)(a) is therefore, on the efficiency of consumption of energy, not it's generation. Of course that contrasts with section 7(j). As such it's submitted that section 7(b)(a) does not have any particular relevance to the framing of the Proposed National Policy Statement as this statement is intended to be confined to addressing renewable generation.

Of course demand side management relates to section 7(b)(a) to some extent and Mr Truesdale's evidence addressed DSM in some detail. Bearing in mind that a realistic perspective on the influence of DSM is relevant to judging how much additional generation capacity will be needed. But also appreciating, Mr Truesdale points out, that it's very difficult to forecast future energy use.

It's only in that indirect sense fully accounted for in the evidence of Mr Truesdale that section 7(b)(a) has any relevance to the consideration of the Proposed National Policy Statement.

For completeness it's noted that one Environment Court case concerning a renewable generation project, as Genesis Awhitu Peninsula Wind Farm Proposal did consider section 7(b)(a) to be a factor weighing in favour a project. However, this case is really the exception proving the soundness of Meridian's submission. The decision records why section 7(b)(a) then had relevance and in highlighted text, "Electricity would be supplied directly in the local network at point of demand." As Meridian evidence demonstrates, the fact that Awhitu is capable of that means it only reflects a minority of renewable energy projects which are located close to actual demand.

And by contrast, in its later decision concerning the Unison Wind Farm Proposal in Hawke's Bay, the Court stated that it would not place great weight upon arguments that the wind farm proposal would enhance the efficient end use of energy. And I'd submit respectfully in regard to both of these decisions, not just the latter one, that that view is more in line with the intent of section 7(b)(a) which is the end use of energy rather than the generation of energy.

As Meridian's evidence explains, renewable generation by its nature is often located remote from demand and sometimes remote from existing transmission, as I've noted, wind and so forth. Only economics (inaudible) located therefore the citing of renewable generation far from load is not driven by economics but by resource availability. And that fact is recognised in a range of Policy and other responses including the transmission to enable renewable energy project initiating by the

Electricity Commission and also the Transmission NPS, The latter being of course more relevant here.

The Proposed National Policy Statement must be framed according to that practical reality if it is to respond correctly to section 7 (i) and (j) to fulfil its statutory purpose of stating objectives in Policy for matters of national significance relevant to achieving the purpose of the Act.

Finally, there was a set of the other matters, these are beyond the specific three or so questions but were nevertheless important issues raised with the witnesses. In addition to those starting first with the appropriateness of maintaining the 90 percent target. That was raised in questioning particularly of Mr Truesdale and Mr Truesdale explained why that targeted remains appropriate, having regard to the New Zealand Energy Strategy. That point is also reinforced, I think helpfully for the Board, through Ms Ryder's evidence for the Ministry of Economic Development. And as to the review of that strategy and its relevancy to the Proposed National Policy Statement I quote her, "Review of the NZES, this will refocus the NZES on security of supply and economic development. No change is expected to the 90 percent renewable electricity target."

Ms Dawson noted in reply to questions that it's important that the National Policy Statement sets a properly measurably target. And it would seriously prejudice the effectiveness of the National Policy Statement to have that blurred such as by removing reference to 90 percent. In particular, that would make it far more difficult to monitor the effectiveness of the proposed NPS' objectives and policies.

[2.30 pm]

In any case, it is submitted that this target is a matter that sits squarely within the realm of Government Policy. If the Government wants to, it can effect a change to the New Zealand Energy Strategy Policy Regime. Although there's no indication that it intends to do so as Ms Ryder explains. Nevertheless, were it to do that, it would clearly open to the Minister to change this aspect of the Proposed National Policy Statement, firstly, that's available even in this process towards making it operative under section 52(1) or in review and change once it's operative under section 53.

And in that first reference I was looking at subsection 1 of section 52 where it says the Minister must consider a report and any recommendation made to him or her by a Board of Inquiry under section 51 and then may, but need not make any changes to the Proposed National Policy Statement that he or she thinks fit. It's a broad discretion, I'm not saying it's a complete discretion, it's just broad. And I think it's certainly broad enough for the Minister should the Minister see a need to change because of a change in Government Policy. But the first submission is the best evidence before this Board from relevant officials is that that is not on the agenda.

CHAIR: In 46.1(a) (inaudible).

MR HASSAN: Sorry sir what was that, section (inaudible)

CHAIR: It was just that under section 53, if there were a change in Policy and - I was just looking at one would facilitate that change, whether one has to go back through the whole procedure. Whether we're going to be called back into service.

MR HASSAN: I think there are two tracks to run down under 46(a) and that's a result of the 2005 amendment. The fast track option is available, I think. Which allows the Minister some discretion as to be really - I think a process that does the things in one, two and three with an element of greater discretion as to how much of a process that will be.

CHAIR: Thank you.

MR HASSAN: So turning to the next topic about should the National Policy Statement encourage small scale local supply, Commissioner Gardiner referred to the benefits of small remote communities such as on the North Island East Coast, from my notes. Remote from the transmission network where they could gain from policies enabling small scale electricity generation. And I'll just remind the panel that Ms Dawson explains that Meridian does not oppose suitable Policy recognition in the National Policy Statement of small scale and that example is a helpful one in this respect for this and for that reason part of her evidence was to suggest a revised Policy 4 that just simply carries into that Policy the words that are already in the proposed statement in the stand alone Policy, as I've said in the italicised section there, that quote there. "Enabling activities associated with a development and operation of small and community scale distributed renewable electricity generation."

In essence those were the same as put those in Policy 5 at present but unlike that Policy 5, the proposed revised Policy does not give undue emphasis to small and community scale renewable generation at the expense of large scale types of renewable generation. As Ms Moss emphasised, it's important that the Renewables NPS does not favour one form of renewable generation over another as the more options that are ruled out the greater the overall cost will be of meeting the necessary demand. And I'll finish there with Mr Truesdale's evidence which really

explains the importance of large scale generation. In other words, the realistic perspective which we would encourage the Board to take on this.

Where we are in New Zealand is that we must have encouragement of large scale generation so that we can meet our needs. And we already do that and, of course, the Big Four stand out in that regard. But so does the need to develop new large scale generation of some significant extent.

Information on the value of renewable resources in Regional Policy Statements and plans. This is, as I've noted before, covered in the Memorandum of Counsel in response to the inputs from the experts. And just to supplement, that I make some further points about the value otherwise of using a District Plan to provide accessible information about areas of good wind resource rather than renewable resources. And as I said before that Meridian does see very little overall value in doing that. In terms of the wind resource Councils do not have the detailed data for such information or have any assured reliability. Wind developers will always gather their own site data before committing to a project and therefore such an approach could not have value to them.

Given the concerns with the data being relied upon and the fact that there is no guarantee that a wind developer will look to develop those identified sites, it does not give any real signal to people looking to develop in those areas by the purposes that they should be aware of the potential of a wind farm. Therefore Meridian considers that using a Regional Policy Statement or plan to provide accessible information about wind resource or other renewable resources will be of little value to the community developers and renewable electricity generators. So that was in response to the inquiry about whether it just be useful as a proxy to put some information that could be updated by reference to. And the problem is the

accuracy and quality of that data and just what people can assume from it. Meridian would caution against encouraging that approach in plans.

A quick point on the relationship to the Transmission National Policy Statement which I just flag. I've already dealt with the obvious relevance of this interconnection. But just bring to the Boards attention how that was reflected and what was put to the Board and that was the addition of paragraph 6 to revised Policy 4 referring there to facilitating the connection of renewable electricity generation activities to the local electricity distribution network and or the national grid. Reminding the Committee that the Transmission NPS deals with only so much of that grid. It doesn't deal with that component that a generator would have to connect into the grid or indeed into the local distribution network. And that's the gap that does need to be filled by this NPS.

Finally on these other matters I just want to gently touch on the scope of inquiry and the purpose of the National Policy Statement. And respectfully reiterate our submission made in opening as to the statutory purpose of the Boards inquiry and of the National Policy Statement in particular those opening submissions noted the fact is relevant for inquiry under section 51 and the ultimate statutory purpose of the National Policy Statement is a National Policy Instrument under the RMA as set out in section 45.

So, sorry I've just jumped the tracks a bit here. First of all the purpose of that National Policy Instrument is set out in section 45 to state objectives and policies of national significance that are relevant to achieving the purpose of the Act. And that contrasts with the statutory purpose of a National Environmental Standard as a regulatory, rather than Policy instruments. So there are two ideas that I'm just reminding you of there because both are relevant to the points I'm about to make.

The first aspect of the Boards inquiries that I just flag was the broad ranging nature of some questioning on some aspects of economics and the bearing that they have on investment choices and electricity generation. And relating to that I guess are the inquiries concerning section 7(b)(a) which I've addressed earlier. And just simply to reemphasise the observations that were made that economic factors and their bearing on the choices that are made as to whether to go with or site another renewable generation project or not in any particular place, those are not concerns of an RMA decision maker. They are of course important for individual generators to weigh, bearing in mind that the electricity market is a competitive market rather than a central planning model.

The relative economics of renewable energy projects will change over time and as developers bear the risk of investment decision, they need to be able to make decisions as to the viability of renewable energy projects. And while a resource consent being granted for a renewable energy project is enabling, it doesn't necessarily mean that the development will in fact be built. The developer will still need to make an assessment as to the economic viability of the project according to the market and demand. In the case of transmission investment this is subject to some oversight, that being by the Electricity Commission. And the reason for that being, Transpower, by contrast, energy companies is a natural monopoly. However it's not the province of the RMA decision maker to seek to direct or control the electricity market including investment choices through the RMA.

[2.40 pm]

The purpose of the National Policy Statement as I've said is to give effective direction and guidance to RMA decision makers in relation to

resource consent processes in a relation to making an amendment of Regional Policy Statements and Regional and District Plans.

Second matter, just to touch upon briefly, is inquiries made as to whether the National Policy Statement ought to specify uniform standards or policies directing such standards be made on matters such as separation, distances, heights and other performance standards, for example, wind farms. The Memorandum of Counsel as I said, records the planning reasons why such an approach is not desirable. The additional point noted by Counsel is that this would confuse the true purpose of the National Policy Statement as a Policy rather than regulatory instrument.

Now as I said, Counsel makes those submissions appreciating that they probably express the obvious and mindful that the Boards inquiries in these matters may simply reflect early context setting. Bearing in mind that the hearing of Meridian submission was earlier in the Boards inquiries.

Mr Chairman and members, just to wrap up, an effective National Policy Statement on renewable generation is necessary and timely, if not overdue. Significant amendments are needed to the Proposed National Policy Statement for that purpose but can readily be made as Ms Dawson has explained. Meridian's happy to assist the Board in any further way as it forms its views for the purpose of it's report and recommendation. In particular Meridian would welcome further opportunity to respond to any draft report or recommendation if the Board considers that a useful step. In subject to those comments Meridian asks that the Board recommend to the Minister that he puts forward to the Governor General and Counsel a Renewables NPS amended in the manner recommended by Ms Dawson.

CHAIR: Thank you very much Mr Hassan we are very grateful for your submissions, your memorandum and the instrument query. We do have some matters arising out of this material and (inaudible). But (inaudible) perhaps invite the panel members, the Board members to ask questions (inaudible).

Perhaps if I start. One thing that I'm very interested in, and it may be that Meridian hasn't done it, but when it comes to the cost of development whether it's a wind or hydro the percentage of the development cost, typically, which involves consenting costs, is there a rough number that you could put together? And the second question is, if there is a percentage, your judgement, would that amount be less if an NPS were given effect (inaudible) the local instruments?

MR HASSAN: I think I can deal with the latter one but I might just -

CHAIR: Yes.

MR HASSAN: And if I could do this -

CHAIR: Please.

MR HASSAN: I've introduced (inaudible) Mr Turner. Mr Richard Turner from Meridian. And I should have done this earlier. It's very rude of me not to have done that. I apologise to both Richard and Barbara Dean (ph). Barbara's assisted me with preparing these submissions so I ought to have done that right from the beginning.

CHAIR: Thank you. Welcome. And Mr Turner or Ms Dean if you wish to add anything, can you come to the lectern and just identify yourselves. So we can get it on the record. Now Mr Turner just on the first question, we're

conscious that there's international literature about sort of rough percentages of cost for consenting with a major project and we'd be interested in your comments about that.

MR HASSAN: Mr Turner's explained that there may be some information that he may be able to come back with but it could be quite limited. In other words, it won't provide a full picture of those costs. There may be some comments that can be made about payment if they relate to a consenting plan. But perhaps the second part of the question is also quite relevant to this though and that is one of the difficulties obviously in calculating that and coming up with any sort of uniform answer on average is that that's part of the problem. We don't actually have a situation in New Zealand where you can say one set of planning regimes is going to be reasonable, or any sort of measurable set of costs, vis-à-vis (inaudible) because each of them is in such an uncoordinated and unintegrated state on these issues that require direction.

Some of the costs, no doubt in process relate to inadequacies in planning processes and so forth that have come out of the evidence. Where councils are at in their planning processes, what they've given emphasis to, all generates costs. So, I suppose in making a comment about whether the National Policy Statement could genuinely help that, I would have to say it ought to, because an effective National Policy Statement ought to provide much more effective direction for where Councils should be heading, and priorities that they should be applying themselves to, and ought to, most importantly, give direction to how Councils should deal with the hard choices, without that national guidance. So, it's hard to put a figure on it, but I suppose all you can really say is right from the beginning of the Act there is the intention that there'll be national Policy direction and guidance given to achieve sustainable management outcomes where the Government sees the need for that.

MR TURNER: As Mr Hassan's introduced, my name's Richard Turner and I'm the Planning Manager with Meridian, so my role's mainly around Regional and District Planning documents, and responding to these types of National Policy Statements. My experience has been a lot with the formation of Regional and District Plans, and how they apply to renewable energy projects, both existing and where Meridian has development aspirations. In many cases, the cost that we're incurring from a Policy development perspective is in engagement with Council staff and in the development of relief in our submissions on Regional and District Plans, to have effective objectives and policies and rules around existing renewable infrastructure, and proposed renewable infrastructure.

So, in the last year, and one of those examples has been an appendage to the memorandum, wherein, a submitter and an appellant on the combined Wairarapa District Plan, which had some provisions around the provision of utilities, Meridian went through an exercise of drafting its own version of what provisions would be appropriate in that district around renewable energy. And so the cost that we're incurring in that process is around the planning expertise and drafting those provisions, the liaison with the Councils, the attendance of hearing, and the mediation of that appeal. And the other example is in Wellington City, where last year we were an appellant on Plan Change 32 and 33, which is two plan changes concerning the renewable energy provisions for the Wellington City Plan, and also the identification of important ridgelines and hilltops within the city. And we were an appellant in that process, because we have development interests within this district, and we spent four days in the Environment Court, arguing the merits, or how renewable energy should be appropriately recognised within those ridgeline and hilltop areas.

CHAIR: And Mr Turner, does that mean that the Board were to adopt your recommendations for the Policy statement that the types of policies, objectives or policies that you're promoting in the local authority instruments could occur?

[2.50 pm]

MR TURNER: I think it would remove some of that early debate we have with Council staff as to how to - currently the debate at moment is how do we give effect to section 7(j), and often there's a lot of tension with Council staff as to how that is achieved. We have our own view, and it's probably a more extensive number of objectives and policies than what Council staff would normally seek to incorporate, and often they simply get added into the network utility chapters. Let me see, there's some probably subtle differences with what we're seeking, and network utilities generally. So, there is cost to Meridian in that process, and we would suggest, that this Renewables NPS were amended in accordance with what Ms Dawson has recommended, would provide some greater direction to local authorities to say, "This is what your Regional and District Planning documents should be having, objectives and policies and rules on."

CHAIR: With your recommendations to those, I won't say the Wairarapa one, did you recommend in provisions, policies and so forth, did you also recommend rules as to activity status?

MR TURNER: In that circumstance, renewable energy facilities in the combined Wairarapa District and with obviously a land use component, so it's the same as managing the likes of the wind farms. Wind farms and renewable energy facilities were a discretionary activity throughout the district already. What we were seeking in our appeal on the combined Wairarapa plan, was suitable recognition of the resources that the

Wairarapa region - it's the combined Wairarapa District Plan, so it's the three District Councils, but suitable recognition of the renewable energy resources within that district. So there we were seeking relief around amendments to the rural zone, to acknowledge the wind resource, and that potentially there, the rural area would be the area whereby these facilities may be located.

And then in the chapter of the plan that dealt with network utilities and energy, as it was called, essentially we sought separation out of a discussion around network utilities, from the discussion on energy. So we were seeking some sort of Preamble text around what's going on with renewable energy and why it's important and what it could potentially mean in this district. So an acknowledgement of the issues around renewable energy, and then new policies around recognising the benefits of maybe local, regional and national, and that was also seeking to enable appropriate development within the district, so addressing the reverse sensitivity issues. So, I guess we would say there was, in our appeal, and what has now gone to the Court for sign off, was a level of sophistication in that District Plan around renewable energy that wasn't there previously.

I would suggest that what's gone to the Court, for the combined Wairarapa District Plan, is probably the most comprehensive objectives and Policy framework in a District Plan in New Zealand around renewable energy, or wind. There's others, I mean Wellington City went through an earlier exercise that was held appeal last year, but I don't believe it's as comprehensive, assuming it gets signed off, as what the combined Wairarapa would have. Porirua is going through its own exercise at the moment, and those would be the three that I'm most familiar, which have essentially sought to address section 7(j), in a meaningful way, through a plan change, or a second generation plan process.

CHAIR: So is it fair to say that if your policies were accepted, your amendments -

MR TURNER: On the Wairarapa Plan, or on the NPS?

CHAIR: On the NPS, that the Wairarapa Plan is a good indication of what could be achieved at a local authority level?

MR TURNER: I believe so. I think the Wairarapa example would be consistent with what we've sought on the NPS.

DR CHAPMAN: And that would have benefits in terms of expediting, planning and consent?

MR TURNER: I mean, in Wairarapa, it's still a discretionary activity it's entirely appropriate. What it does do is give some guidance to applicants, decision makers and submitters in the processing of these applications. Firstly, in the assessment of these applications, because there is a list of assessment criteria not exclusive, but there is a list of assessment criteria around things that should be looked at for. So as an applicant, that would be your starting point around, "Well these are the things we need to address, and what else is there?" And then for the decision makers there's matters to consider, there's a Policy framework that guides their decision making also which would, we believe, improve the general understanding of how these things should be processed. Because often they are, in many cases, they can be processed in a vacuum of suitable Policy around the appropriateness of these activities.

CHAIR: Thank you. Now just before you go, have you had a look at the Environment Waikato's Plan?

MR TURNER: Variation 6?

CHAIR: Yes.

MR TURNER: Meridian's actually an appellant on Variation 6. So, yes I'm more than familiar with it.

CHAIR: Right. And also, you may not have had an interest in it, but the geothermal chapter, did you have anything to do with that?

MR TURNER: I had an interest in the geothermal chapter in a previous life, when I was employed by TrustPower.

CHAIR: Oh right, well I'm not going to ask you to speak to your particular employer, but what I would like to say to you is that we've had evidence from Environment Waikato, but now that that's been signed off or they've bought into it, the geothermal one, that that's something that an NPS should try and facilitate, that sort of outcome, in say, the right area, where there may be some other geothermal. Do you have a view on that? Is that the endpoint that you'd want to get to with geothermal?

MR TURNER: I'm struggling to think what they're seeking, that it's encouraged? That it's zoned?

CHAIR: That was a zoning approach, and they believe that that is a good endpoint in regional planning terms for that renewable resource. And that the NPS should make sure that that's the sort of thing that's encouraged.

MR TURNER: For other types of renewable resources?

CHAIR: Well, in that case, they're talking just geothermal, and so that's why I mentioned geothermal resources perhaps on the next Regional Council's area, (inaudible) Horizon's area.

MR TURNER: I think the other resources are actually in the Bay of Plenty. In my view the geothermal - and we approached the document with Environment Waikato, and the resources is there in many cases, it's obvious, and the other interesting element with geothermal is until recently a lot of the data was owned by the Government from earlier explorations in the 50's, 60's, 70's, so the data on the relative values of those geothermal resources was centrally held with a reasonable degree of detail, given the amount of fore-testing that had been done. So I think the geothermal resources of the Waikato are probably a relatively unique circumstance, and we wouldn't suggest that that approach, as we've reiterated throughout, we wouldn't suggest that that approach that's been adopted in the Waikato could be adopted for other types of renewable resources.

CHAIR: That's helpful. Now, just returning for a moment to wind. When it comes to other districts, where the plans are settled, and I'm thinking of say, Queenstown Lakes District, where there's landscape classifications and settlement criteria set out. Is that sort of approach of assistance to you, as far as certainty is concerned?

MR TURNER: In terms of where the landscape values have been defined?

CHAIR: Yes. Where the local authority has defined those landscape values without issues of what goes within those landscapes.

[3.00 pm]

MR TURNER: Well, I mean, we have no particular interest in the Queenstown Lakes District. And I'm only familiar with it by third party reference and that's about it. I understand there is a fairly high degree of zone, or mapping, or zoning of outstanding landscapes, amenity landscapes etc. As a prospective developer of new forms of generation where there has been extensive processes that identify outstanding landscapes, community landscapes, significant indigenous vegetation, and any other key values, then that identification of those values in plans is always useful, because if you start as a developer who have a number of potential proposals that you're considering. And the first exercise you can normally do is to do a sort of a preliminary assessment around what is a District Plan, is it a non-complying activity, or discretionary activity, is there any outstanding landscapes on the site, are there any archaeological sites on the site. And that's sort of the first sweep that we'd do. So any mapping of the landscape values in a District Plan is entirely useful.

I mean obviously you always run the risk, if it's not an outstanding landscape that through the consenting process, it will be deemed that it actually is one. And I think the Mount Cass Wind Farm in North Canterbury is a classic recent example where the District Plan didn't identify it as an outstanding natural feature or landscape, but on closer examination, it was deemed by the decision makers that it actually was a section 6(b) landscape or feature. So you always run that risk but if those values are mapped then you can go in with some degree of certainty, not complete certainty but they've got some certainty around what the issues are at play, and what the section 6 and 7 matters at play will be if you are to lodge an application.

CHAIR: In the Wairarapa one, what suggestions did you make as far as cumulative effects consent, for managing those in a wind farm context?

MR TURNER: Our appeal didn't touch on the Policy framework around management of landscape values. There's a separate chapter. The important thing with the combined Wairarapa District Plan is that the amendments that we have sought and that have been agreed with Council under section 2.7.4 (inaudible) on the network, utilities and energy chapter, and the rural chapter, that does not mean that when assessing an application for a wind farm in that district you would only reference in any utilities, or any energy chapter, then all the provisions of the District Plan would still apply. All the objectives and policies would still apply, so we haven't advocated a stand alone chapter for the management of these facilities. So the provisions around outstanding landscapes and the management of the effects on those landscape values, we didn't seek any amendment to those policies, and off the top of my head, I can't recall what the policies around management of landscape values and cumulative effects are in the combined Wairarapa District Plan.

I'm aware that there's Policy framework being put up in the Proposed One Plan in Horizons, chapter 7, on landscapes, and that's at the RPS level. The RPS section of the One Plan is seeking to develop Policy around the management of cumulative effects on their regionally outstanding landscape features. And the officer's report on that has recommended a Policy, and I stand to be corrected, but it's something along the lines of "Avoids significant adverse cumulative effects, on regionally outstanding landscapes."

CHAIR: It doesn't give you any more than that?

MR TURNER: That's helpful, and in the hearing of that on Monday, we hadn't disputed that Policy reference, but in saying that it still has been contentious. Whether that gives suitable direction, I don't know.

CHAIR: The other one that's, just getting away from wind shortly to hydro. In your experience, has the Waitaki Plan achieved what you'd like to see in a planning context for all the major river system your projects are on?

MR TURNER: As a catchment plan?

CHAIR: Yes

MR TURNER: Having a separate plan for the Waitaki Catchment does have value. The objectives and policies in that plan are specific to managing the nuances and unique features of that catchment, being a significant hydro catchment and unique characteristics, in terms of the connectedness of ground water to surface water etc. So rather than having, I guess more generic policies that the Proposed Natural Resources Regional Plan for Canterbury, which is essentially seeking to develop two different policies and rules for the entire Canterbury region, minus one or two individual catchments, having a catchment plan for the Waitaki has allowed for there to be objectives and policies that are focussed on the issues relevant to that particular catchment. So I certainly see merit in that approach.

CHAIR: The issue I suppose is whether or not a National Policy Statement, the type we're dealing with, should encourage that sort of thing. Particularly where you've got a river system that flanks other regions as well.

MR TURNER: Yeah, I guess the question - and I'd whet my response to that, dependant on how that was seeking to provide for that approach. We see value in the Waitaki catchment having its own plan. I guess to see if it is in contrast, the Manapouri catchment, which is the other major hydro infrastructure we own, that's governed by the Southland Freshwater Plan,

and I think that's now an operative plan. That is less definitive around issues around full allocation and around the issue of whether there is any additional water that can be extracted. What that plan has done is simply said that, beyond the permitted thresholds, any take of water in the Waiau Catchment, which Manapouri is in, is a non-complying activity, so it's leaving the question unanswered around is further water takes in that catchment, that would potentially deprive the hydro facility, it's leaving that question for another day.

CHAIR: So it doesn't have any policies to guide the decision maker in respect of renewable electricity?

MR TURNER: Oh no, it does, and that's another example where Meridian's gone through an appeal process on a planning document to seek greater recognition of that hydro resource. It does recognise that the Waiau Catchment is a unique catchment in that it's, given the hydro resource and it recognises the benefits that the Manapouri Power Scheme provides, and there's Policy around recognising the benefits to be derived from renewable energy, when considering applications that the take can use water etc, but it doesn't make any definitive statements around whether further water takes are appropriate or not. Whereas obviously in the Waitaki Catchment, it has been determined that it is fully allocated, and that the allocation framework that has been set up was on the basis of when Meridian's consents expire.

CHAIR: Well maybe that's (inaudible) for your company, but thinking of the Waikato system or the Clutha, although the Clutha's always in Otago, isn't it?

MR TURNER: Yes.

CHAIR: I just think you've all got different Regional Councils involved.

MR TURNER: Are you suggesting where a hydro scheme straddles two regions?

CHAIR: Yes, whether or not a combined catchment plan for the whole scheme should be facilitated by the NPS or whether or not - or that option should be allowed for.

MR TURNER: My understanding is that there's only one major hydro scheme that straddles two regions, and that's the Tongariro Power Scheme. Manapouri is in Southland, Clutha is Otago, Waitaki is Canterbury.

[3.10 pm]

CHAIR: (Inaudible)

MR TURNER: There's one catchment plan. Waikato is obviously all in the Waikato, and even from my previous employment, all the hydro facilities that TrustPower owns, I would be 95 percent confident that they're all within one region. So, I don't know if it's a problem that needs solving.

CHAIR: Yes, but the reason I mention it is that we've got the way you've done it in Southland, which has basically worked through the Regional Plan. And then we've got the Waitaki Catchment Plan, which is a more focussed plan or instrument, and it's a question of whether the NPS should indicate or expedite one or the other or perhaps it just (inaudible).

MR TURNER: I'd probably defer to Mr Hassan.

CHAIR: All right.

MR TURNER: If there's any sort of further questions on the planning and Meridian's interest in plans and how we go about that process then I'd certainly be able to answer any additional questions.

CHAIR: I've just got one further question before I ask the panel members. And that is, when it comes to the Wairarapa Plan, is there a landscape overlay as well or a zone in that plan?

MR TURNER: Outstanding landscapes have been identified in that District Plan.

CHAIR: They have been identified.

MR TURNER: So there's a separate range - if you were developing a wind farm under the combined Wairarapa District Plan, and it was on an outstanding landscape, the outstanding landscape objectives and policies would apply just as much as -

CHAIR: It is still a discretionary activity within those areas.

MR TURNER: It's my understanding that a wind farm is a discretionary activity within the Wairarapa District throughout. Same in Wellington City, wind farms are a discretionary activity throughout the rural zone, regardless of whether they fall within the ridgeline and hilltop overlay which is essentially the - it's an amenity landscape value, so in those cases it's a discretionary activity. Whilst it's not discretionary throughout, it's discretionary throughout the rural area, whereas, I think the same approach is in the Wairarapa, it's discretionary throughout the rural zone.

CHAIR: So the Policy 4 point that Mr Hassan raises, and Ms Dawson did too, about not requiring local authorities to identify areas for say, wind

resource, doesn't mean that you would necessarily oppose local authorities indicating where their outstanding natural landscapes are to give some certainty when it comes to planning for renewable electricity.

MR TURNER: Meridian has participated in a couple of planning processes that involved identification of outstanding landscapes and the company position around mapping of planning frameworks and outstanding landscapes and significant indigenous vegetation etc, is that it is entirely appropriate and important that those things be mapped on District Planning maps, so that there is an element, not certainty, but there is an element of certainty for the developers, for all parties around, "What are the values in this district, and where are they?" The determination as to what's appropriate on those sites or whether a wind farm is appropriate on those sites is another level of discussion, but in terms of supporting the identification of outstanding landscapes and features in District Plans and Regional Policy Statements etc, we are supportive of that approach provided they are identifying them in accordance with established criteria in place.

CHAIR: Thank you Mr Turner.

MR TURNER: Thank you.

CHAIR: Very helpful.

MR HASSAN: Just to pick up on a couple of matters there. One, the cumulative effect issue, just to come back to that, perhaps just to express a little bit of a caution on that one. 'Cos it's outstanding natural features and landscapes which is just what Mr Turner's been describing, of course, that is a matter which is identified in Section 6. But the reference to avoiding cumulative effects doesn't appear anywhere in Part 2 and I would express

some caution therefore in a Policy statement that would suggest that that be given any sort of particular value.

Of course when the circumstance arises at a local level, cumulative effects will be given their due weight. But for a National Policy Statement to say something positive about relevance of cumulative effects could pose a danger, which was flagged in evidence, as to some communities saying, "We've done our fair share." Which may not necessarily be consistent with achieving national significance outcomes and dressing it up as a response to cumulative effects direction or seeing it as that.

So, I'll just express that caution and perhaps say that it wouldn't be appropriate to have a Policy statement that gave any particular weight to cumulative effects as an issue. I've had a quick scan through (inaudible) on my way through that and I see there was one case, and I found it on the way, that said that cumulative effects may mean that any further intensification of an existing use is inconsistent with the Act.

CHAIR: Can I just thank you for raising that. We have had some submissions from local authorities saying that, "It's all too hard, give us some help with managing the effects of these projects." And I understand in your submission and I suspect you are making the submission that it's not something that we should be looking at.

MR HASSAN: Yes.

CHAIR: However, I'm also conscious of the fact that the Project Hayes decision might have something to say about cumulative effects 'cos that was an issue there, was it not, with the Mahinerangi and the Project Hayes. So whether the Court does or not but there may something that comes out of that which means there's no need for us to think about it.

MR HASSAN: I suppose another way of looking at it is when you look at the word cumulative effect, really it's only really a subset of a number of subsets with a definition of a word in the Act is 'cumulative effects'. Not necessarily good or bad, depending on value judgment.

CHAIR: Yes, it's all this business about scale and so forth that - I'm not saying we necessarily want to get into this but it's just that we have had submissions regardless of scale, intensity, duration or frequency of effect. Because it's those words and how we apply those, (inaudible) over time in combination of other effects regardless of (inaudible).

MR HASSAN: Yes, I suppose that signals that having known that the draft of that word personally.

CHAIR: Intimately.

MR HASSAN: The purpose of the definition of 'effect' in the Act is to make sure that word has got such comprehensive coverage that no one can misunderstand the word as being - I don't even have to mention it. The other thing I should perhaps just make - I think the point's already been made and I think it is a really important one though. About this issue of costs and whether a National Policy Statement would truly make a difference to costs.

[3.20 pm]

I mean, I think the Board's in a very strong position to take a view that is certainly the case. That National Policy Statement leadership, Policy direction, will most certainly contribute hugely, if it's effective, to a reduction in cost. And Mr Turner signalled again as to why that was, and

this came through in the evidence time and time again, which is, where the problems centre themselves is very much at that local plan making level.

The example of Plan Change 32, 33 I'm familiar with. And there are - Judge Thompson's pointing out the obvious in making that statement in the Court making that statement in their decision, as to the obvious values there. But of course, community Councils - interestingly, isn't it, that the bill that's current before Select Committee targeted this area of plan making as an area of cost?

Now, we obviously can't second guess the Select Committee. But clearly, a National Policy Statement can, if it's effective, really help in making plans start in the right frame of reference from the beginning. Because the makers of those plans are given the direction to do that and therefore they lead their communities in the right direction nationally. And therefore, they reduce the potential for conflict in the equation at the earliest stage. And therefore, they reduce the potential for process and the need to go to rounds. And to have the Court, time and time again, have to be the promoter of resource management outcomes on behalf of communities because it's too difficult for Councils to get through those conflicts without the right Policy leadership. Which often has to be beyond their frame of reference because then they can say, "While the Policy has directed us in that way, sorry Joe Bloggs, I know that you've got a concern about this or that but we have to give effect to this National Policy Statement."

So, you can take a very strong view I think on that, that while it might not be down to a precise number it will certainly make a difference to a reduction of costs under the RMA to be an effective Policy Statement. May take a while to get in though.

CHAIR: And Mr Hassan, is it therefore your submission on behalf of Meridian that if you're amendments were picked up that that would inevitably lead to a reduction of costs?

MR HASSAN: Yes it is.

CHAIR: Now, could I just ask, on the 90 percent. If the local authority hasn't got anything in its plans and the decision maker is looking for guidance from this NPS at a local level and we've got a 90 percent target as an objective in a statutory instrument. What can a local decision maker do with that or is that something that can only really be dealt with in a valuable way by the Environment Court which would have a national perspective of how close we're getting to 90 percent or not? How do you see the 90 percent helping?

MR HASSAN: Well, if you take a witness, such as Mr Truesdale and/or an expert such as Mr Truesdale, who may not necessarily be a witness but maybe a consultant or advisor to Councils in preparation of their plans, in forming of section 32 process and so forth. There is a person who can help give more of a global reference to where things are by reference to a 90 percent target nationally. It is obviously a difficult thing to bring down to the local district level and say for instance, what does that mean here, right now, but nevertheless - the Environment Court certainly. But I would also add the role of experts who do know these things, who know enough about the bigger picture to give that guidance locally.

I mean, the alternative of having nothing at all becomes fairly undesirable because effectively no one would know whether they had actually achieved what they were trying to achieve or not. Whereas, if there is a reference embedded in the Energy Strategy by which relative experts can give guidance, that would be what I would say. That really, one of the

keys to successful streamlining of RMA processes is to give greater ability for technical expert leadership in planning. And if experts can guide by reference to a 90 percent target and say, yes, well - and that means, locally in my opinion there are certain things that really need to happen in terms of resource development. I think that's helpful.

DR CHAPMAN: Can I follow that up? It wouldn't necessarily imply that a local decision maker would be obligated in any way to form a judgment in one direction simply in order to hit a particular target, would it?

MR HASSAN: Not in a direct regulatory sense. Although, it would give the Council an onus, I think, of listening to informed expert judgement about whether particular choices being made at that Policy level were actually going to impede the ability to achieve that over time. I mean, it will be a case of expert judgement that informed. So, I don't think it leaves the Councils off the hook to do nothing. On the other hand obviously it doesn't actually give them any form of quota.

CHAIR: Right. You couldn't get a position, could you, where the Council said, "Well we judge that we can hit the 90 percent if everybody else in their districts runs with the current proposals. We don't need to. We're still complying with the policy." It's stretching the argument perhaps but as it's an instrument, if they've got to give effect to it?

MR HASSAN: I suppose, bear in mind, this sits with other means of central intervention as well. And the other thing to not to forgot is that it's also an instrument of direction and empowerment for Government and the Minister. For instance, in the choices that could be made if there was genuine concern about that sort of approach about plan call-in.

CHAIR: Yes. That's why it's been crossing our minds, that it maybe that this would fail the call-ins where somebody can look at it on a national perspective. The Environment Court could look at implications. It's a national body, if you like, rather than the local commissioners trying to deal with it.

MR HASSAN: It's certainly something which provides a marker for - and if there was concern and monitoring. And monitoring the performance of Councils under the Act which started to develop a concern at the time, then obviously a concern that globally they were contributing to a failure to give effect of the National Policy Statement, there is that other means of intervention. And of course, the National Policy Statement then gives the Board of Inquiry some clear ability to apply national integration, integrating management approach to these issues.

DR CHAPMAN: I have some questions arising out of two things, let me take them in order. Major electricity users group submission, I don't know if you've got that on hand.

MR HASSAN: I don't actually.

CHAIR: We could get you a copy.

DR CHAPMAN: It's written on, but.

MR HASSAN: Do you mind if I just spend a bit of time on that?

DR CHAPMAN: Of course. My question really relates to the submission that Mr Matthes was making. Essentially along the lines that we didn't need an NPS, that essentially the market could generate enough generation whether that be thermal or renewable and that there was no case really.

Particularly he did have some reservations relating to the 90 percent argument and so on. But there was no case essentially for favouring one particular sort of generation over another.

MR HASSAN: Yes.

DR CHAPMAN: So, I'd appreciate your comments on that.

MR HASSAN: I suppose that one comment would be made that of course with due respect to Mr Matthes' his view is at odds with the Government Policy position. And section 45 gives the prerogative, as I submitted in oath, for the Government to determine what matters were of national significance. Firstly, in a proposed statement and then subject to the Board's analysis of issues and report and recommendations on all the broad matters you have to consider.

To then make an informed judgment as to whether that value judgement initially made by Government, according to its prerogative rather than Mr Matthes should be followed through. So, that's how I would answer that, then of course people that would think it would be a better environment if we didn't have electricity would have another view. But that is a value judgment made by a private individual, in this case a submitter. Which doesn't have the same status as the prerogative of the Minister in making a choice to deal with renewable generation as an important priority.

[3.30 pm]

Apart from that I suppose there's evidence, and Mr Truesdale who's an expert, would say he would totally disagree with that view. And would say that the reality is if we don't live in a world where we have to turn the lights

on and off according to a central plan model, at regular intervals, we need to, and must, develop our renewable generation resources as a matter of security of supply.

DR CHAPMAN: Now, we've had a somewhat similar submission from Todd Energy this morning. Mr Armstrong raised the question of, and I can give you this in just a second, whether it's appropriate to tilt the regulatory playing field, as he put it, in favour of a particular form of development given the scheme and underlying philosophy of the RMA. And we put to him, just by way of context, we put to him the proposition that we'd heard from other submitters that in fact it was easier to consent thermals than renewables on whole. He was surprised at that, if I'm not conveying that incorrectly. But nevertheless, was concerned about the question of tilting of the regulatory playing field. Do you have any comment on that?

MR HASSAN: Yes, if I just have a quick look at it. Yeah, I do have an initial comment but if I can just - I suppose the starting point I'd say is, if that was the case the RMA would not authorise Councils to have plans at all or Policy statements. It would simply be an Act to allow all decision makers to make their decisions according to Part 2 of the Act. And the reason I say that is, every time a Council invents an objective or policy it tilts the playing field. The Act is not a level playing field and never has been a level playing field. It's about dealing with conflicting considerations according to value sets and empowering certain individuals with that status to lead on for how those objectives and policies are set.

And part of the original design of the Act, relevant to Part 2, as section 45 directly says, was the prerogative of the Minister, with the guidance with the Board of Inquiry, to do that. To tilt the playing field in accordance with favoured value sets as is required in order to achieve the purpose of the

Act and the way the Act intends under section 5. So I think that perspective isn't actually right and never has been.

DR CHAPMAN: So, could you extend that to say it's within the purpose of the Act, I guess, to do or plans to give priority or advantage to particular sorts of generation, in this context?

MR HASSAN: Well, you can look at that, I think, in two ways. One is you can look at it according to the evidence about the security of supply and other reasons. And the nature of the resources we have and the value you should ascribe to them simply because of their nature, renewable generation and its value has a certain relevance, as Mr Truesdale's given, simply on the basis of the nature of that resource. If I could take that point a bit further for a minute, there's nothing in Part 2 of the Act referring to the national significance of a state highway network. But in at least two or three cases, Volcanic Cones is one, and I had these in the submissions, Takamori (ph) Trustee is another. The High Court endorsed the approach of the Environment Court on the evidence describing them to be of national significance by nature. So that is there.

And then of course, unlike a state highway we have renewable generation singled out under section 7(j) and the companion section 7(i), of course, in regard to climate change because of the nature of the resource is such that it will contribute favourably to New Zealand being able to meet its climate change obligations. Again, there isn't a level playing field in policy, there never has been, and if you look at that dimension of climate change in 7(i) in itself, of course that's a policy response to an international obligations in as much as it's a scientific response.

DR CHAPMAN: Just to pursue that a little further, were the response to that be that national policy, for example, in the form the emissions trading

scheme, has already provided for the greenhouse gas issue or problem. Would there be a reasonable argument that policy mechanism in itself does not fully deal to the need for renewables. And therefore, there is nevertheless priority to be afforded to renewables?

MR HASSAN: Yes and you see that comes back to this, eyebrow raising about the ability, great ease, of granting consents for thermal. And my perspective on that would be different because from a legal perspective with that ETS regime there's an expressed prohibition written into the Act against taking account of the greenhouse gas consequences of thermal. In other words, that can never surface whether as a national or international significant issue against any thermal proposal.

And then added to that, essentially the factual nature of a thermal plant, admittedly, there'll be issues, quite clearly there will be issues to grapple with. Air quality is clearly one but technology is there in regard to that and so are standards either at a local level or a national standard level to set the benchmarks on how to comply with those things. And then there is the greater flexibility in regard to the citing of those facilities. Because you can cite them much closer to demand and with greater flexibility than you can renewable generation where efficiently you have to go to where the resource is and then transmit the electricity to the point of demand.

So, yes, that's why Meridian does say quite strongly that the missing element that is overdue is a national policy direction to enable renewable generation to be given the weight it needs to be given under the RMA by contrast to thermal.

DR CHAPMAN: That's very helpful thanks.

CHAIR: Mr Hassan, we have been getting some conflicting evidence, which you would expect, on the issue of whether there is a need for further large hydro if the wind potential were to occur, this is by 2025, where there would be sufficient hydro within the current system to deal with thermal, nuclear, whatever providing there was major development of wind. Now, that's Mr - and I say that's not Mr Truesdale's evidence but that's the evidence that was given by another party. Do you want to get back to Mr Truesdale on that and see whether - we haven't been able to work out what the answer to that is. Can you help us with that?

MR HASSAN: Yes, if I could convey that.

CHAIR: This is assuming that -

MRS BAUMANN: All the demands can be taken up, can be provided through wind but, with the intermittency of wind, whether there's currently enough hydro to support that wind in 2025, is a bald expression of it.

CHAIR: Sorry, and complete development of existing geothermal for base load.

MRS BAUMANN: Yeah, base load geothermal but I mean, it's more that intermittency, I think, with wind.

MR HASSAN: Would it be possible to have reference to the statement of evidence (inaudible)?

CHAIR: Yes, if you look at the record for the Wind Association which was yesterday and the day before.

MR HASSAN: Yes.

MRS BAUMANN: It may be a day or two before it goes up on the site.

CHAIR: But you could get back to us on that? 'Cos that really was Mr Truesdale's area of expertise.

MR HASSAN: Yes. If we could Mr Chairman and we'd just follow up any inquiries with Ms Beruldsen and if we find that difficult to find that, we'll track it down.

CHAIR: That ratio is what we'd be particularly interested in.

MR HASSAN: Yes. And just a submission of a statement in writing from Mr Truesdale.

CHAIR: That would be fine. If he wants to speak to it, let us know and we'd be happy. Mr Hassan, thank you very much for doing this for us, coming back with all this information and thank you to your support team. And we'll get through this. It's pretty obvious that we haven't had a chance to be quite honest with you.

MR HASSAN: Thanks Mr Chairman.

ADJOURNED [3.40 pm]