INPUT METHODOLOGIES

ELECTRICITY TRANSMISSION WORKSHOP

3 MARCH 2010

[8.32 am]

CHAIR: Good morning ladies and gentlemen. We'd like to welcome you to day 2 of the Commission's workshop on electricity transmission. For the benefit of the parties who were not at the workshop on the first day, I'm Anthony Merritt, Manager of Electricity and Gas for the Regulation branch of the Commission, and I'm Chair of this workshop.

With me are members of the Commission who will be making the decisions required to fulfil the Commission's responsibility under Part 4 of the Commerce Act. They are Commission Chair, Dr Mark Berry, Commissioner Sue Begg, Associate Commissioner David Caygill and Associate Commissioner Pat Duignan. Commissioner Peter Taylor will not be participating during the workshop, but will have access to the transcript to inform his deliberations for electricity transmission services.

Commission staff are also assisting during this workshop. With me are Alex Sim, Paul Melville and Bronwyn Ward. Bill Heaps of Strata Energy has joined the table and will be assisting the Commission today. A number of Commission staff are also on the adjoining table.

Turning to the procedure for this workshop I have just a few points that I made on the first day of the workshop that I wish to run through again for the benefits of the parties that did not attend yesterday. The workshop is intended to focus on areas where the Commission wants to test and deepen its understanding of issues relating to the regulation of Transpower.

The workshop is not an opportunity for parties to question the Commission. The reason for this is that the Commission's thinking is still evolving and it is important that the parties' views are expressed in the context of this continuing decision process. However, during the process of the workshop various elements of the Commission's Emerging Views will be being described more fully, and if for the purpose of discussion it's necessary for participants to seek clarification regarding these matters such requests for clarification are welcome.

The appropriate point for the Commission to set out its full reasons in response to submissions is in the Draft Determination due for release in June 2010. There is then a full submission round open to all parties at that time. In saying that, however, I hope that the way that matters progress today provides an opportunity for some dialogue between Commissioners, Commission staff and submitters. And I would like informality advanced to the extent that it is possible.

While the workshop is focused on particular areas we wish to explore further, the fact that we may not refer to other issues in our questioning does not mean that we have reached a final view on any matter. The workshop is simply focussed on issues where the Commission considers it will be assisted by further explanation and discussion.

Commission members are approaching all matters relating to its functions under Part 4 with an open and independent mind, and I do stress we are in the evolving stage right up to the point of writing the Draft Determination. And as I mentioned before we fully take into account all submissions in response to our Draft Decisions.

While this workshop provides an opportunity for views to be discussed, we would like to reiterate that the various rounds of written submissions remain the principal avenue by which the Commission seeks and receives interested parties' views. Please recognise the importance of the written material you present throughout the consultation process and a need for your written submissions to set out your positions in a comprehensive way.

We appreciate that those representatives on the panel may not be able to answer all questions posed. If necessary participants should feel free to defer to other representatives that they may have in attendance either by joining the table if we have some seats available or by use of the microphone at the back of the table.

I remind you that the workshop is not adversarial and no party will have the right to ask questions of any party during the proceedings unless requested to do so by the Commission. Our understanding is that all independent experts have signed the letter

confirming that they have read the code of conduct for expert witnesses in the High Court Rules and agree to abide by these when speaking at the workshop.

As you'll see the workshop proceedings are being recorded. Microphones are available at the tables for the speakers. We also have a microphone on a stand located behind the participants' tables. Please speak into the microphone when making a presentation or answering questions, and identify yourself and the organisation you are representing. Please speak clearly and slowly so the stenographer does not have problems with the transcript.

Transcripts of the workshops will be available so all parties are able to revisit the discussions that took place at any time. Following the workshop, parties have the opportunity to make further submissions. These submissions are due two weeks from the date on which the workshop transcript is published on the Commission website.

The agenda is flexible and we may need to make changes as we progress. Commissioners will not be available during the breaks. Tea and coffee will be available during the morning and afternoon breaks. The workshop room is open during the breaks but will not be secure during the day. If we have to evacuate the building please do so through the doors down the stairs and we'll meet outside the hotel.

Any questions on procedure, agenda or any administrative matters please see Alex Sim, the Commission's contact. I understand that parties have been asked whether there's a need to discuss any confidential material in closed sessions today and that there is no such need. If there is a differing view please let me know.

We don't have any spaces at the table but we have a number of new people here, so - we have one space available so if anyone wants to join please do so. Since we have a number of new people, for the record could you please identify yourself and who you represent.

MS PROCTER: Siobhan Procter, Transpower.

MR STRANGE: Patrick Strange, Transpower.

MR FLETCHER: Richard Fletcher, Transpower.

MR DEVINE: Kieran Devine, Transpower.

MR SIMPSON: Bob Simpson, Transpower.

MR SCOTT: John Scott, Kema Consulting Limited.

MS YORK: Merryn York from Powerlink, Queensland.

MR MATTHES: Ralph Matthes from Major Electricity Users Group.

MR WALL: Ashley Wall, Genesis Energy.

MR PARRY: Ross Parry, Genesis Energy.

CHAIR: Thank you. Right, today's agenda is focused on matters relating to new investment contracts which we deferred from yesterday and capital expenditure. So let's make a start. I'd ask Bronwyn Ward of the Commission to lead the discussion on new investment contracts. Bronwyn.

REGULATED SERVICES - NEW INVESTMENT AGREEMENTS

MS WARD: The Commission's preliminary view put out in June last year on new investment contracts was that they are a regulated service, but that the Commission shouldn't interpose itself between Transpower and its contract counterparties provided certain conditions are met around workable competition.

The response to that in the submissions was mixed. Transpower indicated it didn't consider new investment contracts to be a regulated service on the basis that they are only a contract for the provision of assets, although the operating and maintenance costs relating to those contracts are within the regulated costs. Other parties suggested that there was some room for improvement in the process, negotiating process, but that they didn't consider the revenues should be included in the maximum allowable revenue provided the conditions around workable competition and so on were met.

What we wanted to start with here was a question for Transpower regarding whether or not they consider new investment contracts contribute to the provision of a regulated service, and from that go on just to look at some of the issues that have come up around process and that sort of thing.

MR FLETCHER: Okay, thanks Bronwyn, can I take that? I think just to clarify, Bronwyn, I think we do agree, I think maybe there was a little misinterpretation in the way that we expressed it. We do believe that services under new investment agreements are regulated services under the Act. Our point was made in relation to the fact that we believe that they should be excluded from the price quality path, as the Commission believes, and also the information disclosure framework, subject to the counterparties of the agreements with Transpower agreeing in writing that the terms and the conditions are reasonable etc, as is the current requirement.

So I thought what the best way to do is to take each of the Commission's

observations in terms of process and areas where they thought there may be potential for additional regulatory oversight and just talk through each of those on a couple of slides and perhaps if you could put the first slide up.

I think just as a general comment before I start, last year we undertook quite a comprehensive bit of consultation with our customers on how we could improve the new investment agreement and the contract and the process itself and that resulted, towards the end of 2009, in a revised - a new new investment agreement, which we need to think of a snappier name for I think. But that actually I think addresses - I'll go through this, I think you'll see that this addresses most of the concerns of the Commission and perhaps we can discuss that after or not once I've been through it.

So if I take each of them in turn. One of the concerns of the Commission was trying to understand what the controls on cost overruns and what penalties there were for late delivery, so what tensions there were on Transpower under these contracts in those two areas. The revised investment agreement has introduced a flexible range of charging options. For example, a fixed price option is available, cost overrun reporting and mitigation plans are a part of the requirement for us to report to customers. So if there's a fixed price it's a fixed price and if there's an overrun that's at Transpower's risk.

There are customer termination options if they choose that option, and that will kick in after a variance, if we go over the budget by over 5 percent for example. And there are revised liquidated damage provisions for delays. So I think perhaps what I need to do is forward a copy of this to the Commission with some background information that was part of our submission and I'll do that certainly.

The second point was the option for the customers to opt for provisions of the default transmission agreements. The revised NIA aligns more closely with the default provisions of the default transmission agreements. It cross-references the same liability provisions, force majeure, asset information requirements on Transpower to provide to the Commission and service level provisions. So I think there is very close alignment between the two contracts.

The new investment agreement, one of the concerns was what WACC Transpower used to calculate charges in the new investment agreements and the new agreement requires us to use the regulated WACC which will be determined through the input methodology process.

Perhaps if we could just move on to the next slide please. This is more general

comment from the Commission around assurances around targeted least costs, planning and delivery, and the commercial information which is available to customers throughout the process.

As part of the process there a number of colleagues in the audience who are involved in this process on a day-to-day basis who can provide more details if required. We do sit down with the customers as part of the process, understand their requirements in detail, and then we produce a formal high level options report for the customer, which is then followed by a solution study report which looks at the options in the same way as we do internally for our own capital project, non-customer related projects.

I should make the point, because we'll probably come on to this later when we start talking about the capital approvals process, it's exactly the same internal planning, procurement, delivery, process which we apply to customer projects as we do to non-customer projects, and our internal processes are subject to the least cost challenge by the Commission as part of its regulation of our other capex.

The final point was about the degree of current regulatory oversight by the EC being specifically focused on quality and not price. I just put a few points down here, just to note that NIAs must comply with the grid reliability standards, and most of the assets under these contracts are connection assets and typically they're non-core grid.

So in that respect they need to comply with the grid reliability standards and the investments must be economic, i.e. justified by a grid investment test. So we do apply a grid investment test to these projects. Siobhan can perhaps add to that if necessary.

And then if as a result of the new asset or the new investment there's going to be an increase of reliability above the GRS then there's a process under the EGRs we need to certify to the Electricity Commission, and presumably in future the Electricity Authority, that all end-users have been consulted, all affected end-users have been consulted appropriately. And if there's a decrease resulting from the new investment agreement below the GRS then the EC must satisfy itself that there's no material impacts on designated transmission customers.

So there's a degree of oversight there in terms of the option and the impact of that option, and the contract itself, I think, addresses most of the Commission's concern.

MS WARD: Okay, from there I guess we can move on to comments from other parties as to their views on the new investment contracts, whether or not they think the process would benefit from maybe the type of framework they have in Australia, things like, you know,

having a set negotiation framework, arbitration arrangements and those sorts of things. Does anyone have any comments on that?

MR MATTHES: Ralph Matthes, Major Electricity Users Group. It's good to hear that the new investment contract has been finalised. We've been asking to see a copy of the final for some months. We were involved in the negotiations at the end of 2008. There were then two written submission rounds in February and April 2009 and we've been waiting since that date to find out the outcome.

Most of what's been presented here isn't a surprise to me, that's where I thought we'd got to in April 2009. It's a big improvement over the previous new investment agreement. It certainly does give more options to the counterparties looking at either a fixed contract or some sort of other flexible arrangement.

The main concern that I recall we had at that stage was the use of the Transpower regulated WACC. I think in the Commission's summary of Transpower's comments on this it talks about basically the arrangements being like a finance deal, and to me that sort of tracked a different cost of capital than the regulated WACC.

Just to give you another example, we were discussing this with Transpower a year ago, they were using the regulated WACC as at 2008 and the risk-free rate at that stage was very very high. We argue that if someone entered into a new investment agreement in 2009 when the risk-free rate had collapsed then the WACC should use the new risk-free rate, not the prior one. So those issues are still sort of lurking around.

I think that just raises the question that at the end of the day Transpower does dictate the terms of these contracts and I'd be very interested in some sort of approach to mediation or arbitration to find a solution where there's an impasse in reaching agreement on things like cost of capital.

CHAIR: Do Commissioners have any questions? **[No comments]**

MR SALMON: Hello, Greg Salmon from Meridian Energy. Just a general comment is the initiatives that Transpower have put in place for the new investment agreement are a good step forward. The key to it, though, is that it needs to become a competitive process and setting up the contract sets up a type of contract that essentially could be competitive in the open market. And the next step is to look towards making the process more contestable with other potential providers basically submitting as well for the work.

The other thing is that Meridian has been involved in dealing with interconnection assets and there's additional complexities around how that could be made competitive as

well.

MS WARD: Do you think maybe you'd want to look at a different kind of process for different kinds of new investment contracts? I understand that some of the types of new investments are competitive, or there are multiple parties offering those, but for other services which involve Transpower substations I think are less contestable.

MR SALMON: Yeah, I mean our view is that the construction work now, we're moving towards where I think there is a certain amount of competitive potential there. But with regard to the next step of the ownership and operation, that's another question as well that I think kind of needs to be thought about as well, in that as far as I understand there's no reason why there can't be other participants owning and operating even interconnected grids.

MR HEAPS: Greg, I was wondering, could you maybe just give us a summary of what you consider the current barriers are, why that isn't happening at the moment?

MR SALMON: Well to be fair the problem with the interconnected grid is that the processes haven't really been challenged yet and, well, we've asked questions with regard to this and we're still working through a process but we'd like to be clear on what the options are. I'm not sure where Transpower sits on this officially, that's something that I'd be quite interested to hear.

CHAIR: Transpower, do you have any comments on that?

MR STRANGE: I think it will require - we'll take it all on board and probably submit. Just having been on both sides of the process from lines companies etc, and we can sit here as economists and talk about competition; when you actually get down to the details you're often talking about a transformer going in somewhere to match three other transformers, and we're actually running a fleet. And I mean when you go to a lines company, and the price pressure on Transpower when we used to do it was very high. And they all wanted a custom one and, you know, one that was just 52 MVA and a certain fault rating because that was the cheapest solution to them.

But we're actually running a fleet and running spares against disasters and all sorts of things, and we're actually working very closely with them now to say well no - because we have to stand behind that transformer, it's not actually a finance deal when you think through the details.

So we can sit here and talk about the theoretics of a lot of these NIAs that open to competition and anybody should own. And in principle, you know, we're happy with

that, but you've got to realise that 99 out of 100 of them aren't like that, they're actually equipment provided as part of a fleet and there's huge value with providing a sort of standard fleet with interchangeability, and that's part of the service that the lines companies usually get out of the new investment contracts.

So we will reply in writing, but it's not quite as simple as we stand up here and say. And having been on both sides of it the price tension, I mean it's all open, the work's all bid outside etc. I actually think we've made some good improvements but from both lines companies and transmission company's point of view it's a pretty effective process. I'd be pretty reluctant to see what's basically working get another layer of regulatory intervention. But we will respond.

MS WARD: Do the other parties want to comment on whether or not the revenue should be included or excluded in the maximum allowable revenue?

MR MATTHES: We agree with Transpower that it should be regulated, but in terms of the maximum allowable revenue should be excluded.

CAPITAL EXPENDITURE CATEGORIES

CHAIR: Okay, is there any more questions or comments? Right, thank you. The rest of the day we're going to be focused on capital expenditure. You'll note from the agenda that we have three statements first up and Commissioners and Commission staff may take the opportunity to ask questions of the presenters after each statement.

For the rest of the workshop the process will generally be that Bill Heaps of Strata will make presentations on the various components of the Commission's proposed approach on capital expenditure. Then either Commissioners, Commission staff or Bill will lead a discussion after each presentation.

Before we start, participants should know that Cabinet has agreed to a number of changes to the governance of the electricity market. These changes included the role of the Electricity Commission in approving Transpower grid upgrade proposals being transferred to the Commerce Commission from 1 October this year, and the Commerce Commission setting an input methodology for Transpower's grid upgrade plans and capital expenditure proposals by 1 October 2011.

While this workshop does not deal with the transfer of responsibilities directly, the Commission will ensure that any points made that relate to the Commission's role in the

transfer of responsibilities will be considered by the Commission going forward.

Right, can I now ask for Kieran Devine to make a statement on behalf of Transpower.

MR DEVINE: Yes, good morning, I'd like to introduce myself. Kieran Devine from Transpower. I'm currently the General Manager System Operations, although as of 5 o'clock last Friday night I was seconded as the General Manager of Grid Performance responsible for about 80 percent of the expenditure that we're going to discuss today, excluding effectively the large projects.

I'd like to basically outline in a little bit of detail where we've come from and where in this particular area we expect to be by the time that the regulations that we're talking about will take effect. I apologise that I only have paper copies and I'll just wait until everybody gets one because I modified it last night using a later version of the software which has thrown the technology into a bit of a spin.

If we could move to the second slide headed grid expenditure. This is a very high level summary of the grid expenditure in the capex over the last effectively four, four and a half years. We start in 2007 with down the left-hand side non-Part F with both the approved and then the actual, and then we've listed what is in essence the unplanned expenditure that occurred in the year which actually is a part of the actual.

So if we take 2007, actual is $50 million, unplanned 8, so the actual planned part was 42. As you can see in this area we are at the present time relatively highly variable. So we were 6 under-expenditure for 07/08, we're of the order of 27 under for 08/09 and we're of the order of 14 above for 09/10. Interesting enough if you add them all up across the three years we're almost exactly, I think it was 98 percent expenditure, but on an individual year basis we show quite a lot of variability.

A large part of the reason for that is that the bottom line, the Part F project, and you can see that we're ramping up our major project expenditure quite rapidly; we expect in the 11/12 year to be at $700 million roughly. So in the 07/08 year we were relatively under-spent. Again a little less in the 08/09 on the Part F. We expect to be relatively close this year within a couple of percent.

I have stood in this job previously, or a similar job previously and I went back to my old records. I was there for three end of year periods. And interesting enough the capital and opex in those years were very tightly controlled and we were within a few percent across all those three years.

What I'd like to do is just briefly outline what we're doing to get back to that very tight planning control. So basically we've had a relatively bottom-up process, relatively reactive process over the previous years as we've gone through the development of a major re-investment programme having not substantially invested for the best part of 15 years.

So we've introduced a whole series of management structures over the last 12 months, mainly over the last nine to six months. We've introduced some quite extensive asset management strategies and I've listed some of those there. About half those are actually completed and signed off, the other half are in late stages of either development or are awaiting final signature.

We've substantially improved our project management structures and that, I think, in the performance that we expect this year in our Part F proposals there's indication that that's starting to take hold and deliver results. We've substantially upgraded our procurement processes and that is also showing rewards at the moment. To ensure that we don't lose track of this we've introduced a standardised cost estimation system that provides both quite a lot of standardised pricing but also forward projection. It allows us better estimations of future work that we may be undertaking.

We have a major integrated planning initiative and this is to correct the relatively piecemeal bottom-up processes that were adequate in earlier years but clearly not adequate nowadays, and it's reasonably early stages although it's starting to show some results. We expect this over the next 12 months to actually really take hold and make quite a reasonably substantive difference.

We've added a decidedly more formalised ability to capture the lessons that we're learning as we go through this change process, and that's proving quite effective particularly in bringing in a broader number of people into the processes that we're changing, and that's able to allow us to capture stuff reasonably quickly and distribute it amongst a broader range of our staff as we go forward.

The last one is, I think, quite important in that we've broadened the range of the challenge that project approval processes go through. And if you look at the expenditures for the actual forecast, non-Part F stuff for the forthcoming years 10/11 and 11/12 you'll see quite a big discrepancy. That is about to go through a fairly substantive review because clearly that discrepancy is in a management sense less than appropriate. So these additional challenge and approval processes should actually improve our performance

over time.

The reason for outlining this material is that the regulations that we're discussing today are to come into effect effectively in two years time, and we would particularly ask in the decision-making process in setting those regulations that the trend of improvement that we're showing and we're indicating that our management practises are in place to improve, that the regulations are set on where we expect to be in two years not with some historical snapshot in time where we have been. So with that I will close and ask for questions.

CHAIR: Do Commissioners have any questions at this stage?

MS BEGG: Yeah, just the variance from forecasts, that's a year ahead forecast is it, that's what it's been in the past? Obviously we'll be moving to a longer period of forecasting. I just wondered, these improvement activities, to what extent you think they're going to address more than the year ahead issues.

MR DEVINE: No, they're specifically designed to deal with the three year process that we're moving into, that's the whole plan, thrust of the idea, yes.

CHAIR: Do Commission staff have any questions at this stage? Bill.

MR HEAPS: Could I just ask, looking at your slide 2 on the unplanned, obviously we're seeing a change from 8, 50 and 20 percent, but noting that we're actually changing from an under-spend to an over-spend, forecast over-spend position. It's still changing going up 8, 15, 20 percent, so that sort of shows more unplanned projects coming in. I just wonder if you could give us the main reasons that you see it for that shift, what's driving that?

MR DEVINE: First of all they're not percentages, Bill, they're dollars.

MR HEAPS: They are dollars, okay.

MR DEVINE: The note on the bottom hopefully -

MR HEAPS: I worked out the percentages underneath, so it is more, it's actually 16, yeah.

MR DEVINE: One of the principal reasons that, and noting that I stand half a step back from this at the moment, is that a lot of the project activity, major project activity work is turning up a lot of unexpected outcomes. And perhaps I can give a good example at the moment that we're having to deal with, is that we're replacing some towers in Lake Karapiro as part of the rowing world cup approvals. We had a relatively, with hindsight, interesting investigation of the underground foundations for those towers in the lake.

When we've actually gone in and looked seriously at the work we're looking at probably four to five times increase in cost from effectively what was to be a relatively

minor piece of work into what is going to be a reasonably large major capital piece of work. So we're finding a lot of material that perhaps has been hidden in the past and we're having to deal with in essence reaction to a lot of this work.

We actually have the numbers, which I don't have in front of me, but the numbers of those projects are quite large. If I remember correctly there's 250, 300 projects. But they're actually in themselves quite minor, collectively add up to reasonable sums of money, but they tend to be in reaction to stuff we're finding as we go through and do other work. Which is quite normal in this business, it hasn't changed in our working careers.

MR HEAPS: So would you say that one of the major benefits of the improvements that you went through on the third slide is going to be improvement in planning accuracy and maybe lowering of unplanned work?

MR DEVINE: That's the objective is to plan ahead, have a good understanding of both the dollars and the resources required, and be able to control it far better than we've done in the past. There's no question that's the whole thrust of the work that's been put in place today by, in essence, my predecessors. And that's what we ask, is that when the regulations are set they're set on where we expect to be, and that's obviously a value judgment people will have to make. But we'd find it very inefficient if the regulations were set on some snapshot of the past where we know we're not acting or performing as well as we can.

CHAIR: No more questions? **[No comments]** Thank you. Can I call on John Scott to make a statement from Kema.

MR SCOTT: Good morning, thank you very much and thank you for a few days away from the British winter as well. Just by way of introduction, I'd like to offer, if I may, a kind of high level perspective. I haven't come along with a kind of quantified analysis for optimum regulation, but I would like to offer, if I can, a perspective having worn different hats over the last 20 years both as a Regulator and within a network company.

The first slide, just to set the scene, shows my background. I'm currently with a consulting company, Kema, Dutch consultancy, very much involved with forward strategies for networks; smart grids and smart metering and so on, and that's both in Europe and into America. I had six years with Ofgem, the British Gas and Electricity Regulator, as their Technical Director. But before that my career was as a kind of wires person in the lines companies and the transmission company national grid where I was Director of Engineering and also Manager of the National Control Centre for a while.

And before stepping into the slides it just struck me that the issues you're grappling with here are really fundamental to your national infrastructure and it stretches a lot further than Transpower. This is about kind of New Zealand well-being and such things as inward investment. So it's kind of very important, I believe, to take the longer term view rather than purely trying to optimise a short-term position.

So if I may go on to the first slide. Bear with me, they're very simple comments but, you know, I think the overarching goal of a regulatory framework is at the end of the day best value for customers. You can embellish that in different ways but it's best value for customers, they're going to pay for the investment.

But for looking into both the short-term and the long-term and with assets that last perhaps 40, 50 or 60 years, long-term is really quite a problem for this sector. This is an issue that we see internationally. So there's a need to try, of course, to find stable regulatory processes, otherwise there is always hesitation with investment which we're struggling with in the UK at the moment.

So with a stable framework new investment is encouraged, companies should be rewarded for good decision-making, especially where there's uncertainty, and a desire to minimise regulatory cost and indeed regulatory risk. And this is something that Ofgem has grappled with and looked to restructure itself from time to time, because it's always easy to accumulate more responsibilities, in my observation as a Regulator, and a need to continually be moving things on if possible.

So there isn't a simple formula, the bottom bullet point there's no easy set of requirements, but important to be alert to the risks and the changes appearing in the sector. And I would like to touch on that, if I may, about what I'm seeing internationally and what I expect you will find as the kind of challenges for New Zealand as well.

The third slide is a national grid view that I'd like to bring if I may. The national grid network has many similarities to yourselves, heavily loaded, a growing need for investment, and that investment is both for renewal of assets and changing demands, and that's not only load growth but a change of generation types and patterns causing additional flows, and in some cases very demanding variability of flows, for example, with wind and tidal generation sources appearing.

So the challenge for the transmission companies, I think, is to plan and renew assets ahead of failure, whereas in simplistic terms I think distribution companies could very often have a credible strategy which is replace on failure. And that's quite difficult

because an asset that's 30 or 40 years old, it doesn't have a meter on the side saying how much life is left in it. And this is an area of increasing sophistication in asset management to anticipate and change assets in a timely way.

Clearly good asset management in all its forms is a whole professional discipline in its own right internationally at the moment and good planning goes without saying. But of course plans are only plans, inevitably imperfect, and I think it's a fair statement, if the planners in the room will bear with me, to say that the job of a planner is to minimise how wrong they are, and that is the nature of complex industrial systems.

My last point on that slide is to try and recognise why these changes arise, why planning is not perfect. And that is, changes arise from what you might call known unknowns and unknown unknowns. And known unknowns cover matters such as we know the weather is critical for outdoor work and that's hard to plan for.

But on the other hand you get unknown unknowns, perhaps rather like the one Kieran mentioned where something is discovered when you arrive on site. And I remember a major programme of work in national grid, on day one work started in the substation and it was found that the roof was full of asbestos, you know, everything changes, all plans off until the work is rephased.

Just moving, if I may, to my time in Ofgem. I think Ofgem in broad terms really tries to focus on company outputs rather than inputs, and they've developed further in that way in the last two or three years since I left with their recent distribution company price control. And what it's trying to do, and this will be very familiar, I'm sure, to the regulatory parties here, is trying to get the regulated companies to take the decisions rather than be in a position where the decisions come back to the Regulator.

And the reasons for that I've put on the slide, the first is that at the end of the day there is a huge information asymmetry. The Regulator is both disadvantaged but also in the position of simply not having the best information. The company is the body that's at the coal face, as it were, and should be in the best position to make the trade-offs and the decisions.

But the reason for not wanting to go in the other direction is that if the decisions come back to the Regulator, what is really happening is that the risks are then being taken or managed by the Regulator. And again I can give you an example. I recall from my time at Ofgem where one of the distribution companies found that a very common piece of their equipment, 11 kV I think, a distribution company had developed a catastrophic

failure mode and regrettably it caused a fatality.

So they wanted to go ahead with an urgent programme of changing all these circuit breakers which was probably the right management decision, however, that wasn't in their agreed price control allowance. And they came back to the Regulator and said "what don't you want us to do?" Of the previous agreed work. Not that it was agreed item by item but there was a package of work. And the answer really was "company, you are in the same position as any commercial organisation, you know, you can't suddenly create new income because you've got a new problem and please go back and look at your risks, rephase your work and balance out the risks, the old risks and the new risks".

In other words getting the companies to be accountable, to use their funding in the best way and not look to the Regulator, as it were, to make the difficult decisions. And the effect of doing that is on the last sub-bullet point there, which is I believe companies being much more proactive, lets the companies think through their solutions.

But I should, before I move on from there, say that Ofgem very much are realists, they know that there are perverse incentives at work here. There's the possibility of gaming structures and systems. And the main safety net on behalf of customers for Ofgem is retrospective review, is probing what has been done, how good the rationale is, the kind of audit trail, good asset management decisions. And if Ofgem isn't convinced it will either claw back or adjust boundaries and glide paths in the future.

Those mechanisms are there and Ofgem tends to use specialist consultants at each price reset time to skim across a whole range of work and drill down into a limited subset of the activities undertaken into the period and that's over five years worth of work.

Okay, some observations, if I may, from the UK, recent activities taking place. We now see extremely large projects coming through beyond the traditional sort of scale of projects that has existed for the last even 10 or 15 years where I think many sectors around the world have been in a kind of incremental development phase. There hasn't been a lot of change on grids.

But now that incremental investment is giving way to a new scale of challenges, but more than just a new scale, a need for fresh thinking, okay. There are new challenges which the old solutions will not be very effective at meeting. And because there are new challenges out there the manufacturers and the technologists are bringing forward new technologies, new techniques, so that the world ahead is one of increasing investment but also technical challenge, risk management for innovation, and of course at times

commercial challenge and innovation needed as well.

Just to note that in the UK over the last six years now Ofgem has focused on encouraging effective innovation in regulated companies and has put in place specific innovation incentives, and in the last regulatory reset they've built on that and extended them in a number of ways, and they do leave the companies to make the decision on where sort of research and development funding should go, or where innovative projects should go, but they require transparency of that activity and a kind of self-regulating process.

And lastly, I think it's important to seek this position where the Regulator is trying to transfer responsibilities to the companies, especially once things start becoming well established. And the reason for that is the agenda is just taking off all the time and, in my view, it's much more important that the Regulator should be looking at the new strategic challenges than fine-tuning yesterday's problems to a very very fine degree.

And those kind of challenges I've put at the bottom of the slide here. I think they probably apply to yourselves to one degree or another. But low carbon economy, electric vehicles perhaps the big game change for our sector globally, variable power sources, off-shore regimes in the UK, microgeneration at household level, home automation, smart metering, demand management, climate mitigation and so on.

And I haven't put it on the slide but if I might make an observation having been involved with New Zealand over the last few years, I believe you have the additional factor of a very highly loaded grid. And as I look at different companies in situations around the world I'd put you in the top category of highly loaded grid systems. I would say from my operational background you're as close as anybody to safe operating limits off the grid, and this leads me, you know, if I take a longer term kind of perspective of really suggesting that it's really important to minimise the investment delays and to try and maximise management focus on the grid network.

The challenging corollary, though, is that it's the observation in many companies that as you go into a time of investment, actually the risks go up before they go down and that's because you're taking the equipment out of service for quite lengthy periods, that puts extra stress on the remaining assets. And you're moving contractors on to site, you're bringing in cranes, you're doing work which in itself brings hazards and big incidents around the world have often been triggered by unfortunately those kind of combination of circumstances. So it's a demanding time I think you're facing.

So in summary I think companies should be required to be flexible and responsive. They should be required to take the responsibility, to manage the risks and to be accountable for their decisions. Companies make mistakes, if I may say so, as a previous Regulator. Regulators from time to time make mistakes. But the important thing is not absolutely right first time, but processes which will lead to continuous improvement, and that way the customers benefit over a period of time.

The companies will also need to find new solutions to new challenges, and I'd be very cautious about companies taking yesterday's solutions and trying to apply them to tomorrow's challenges which we are seeing happening in some companies. I don't refer to Transpower.

The Regulator in turn, I think, has obligations here to encourage good planning in the companies, to expect deviations from the plans. And I would be very suspicious myself if there was a lack of deviation from the plan. I think if the plan isn't being re-optimised I would be cautious of a company that's on a kind of tram line mentality in its processes. But very important that the Regulator probes out-turns and applies re-alignments if necessary.

My last comment there is that I believe that prescriptive positions, prescriptive rules I'd say always result in unintended consequences. And it's another discussion, but in the UK at the moment this has just writ large over our health service and our schools where the managers of those service providers are optimising the rules, they are, you know, they're in a tick box world where they're optimising the rules, not optimising the content.

So specifically if I might suggest this, I think we can see from the UK that there's much more to be gained than lost for customers by empowering companies, focusing on outputs. It requires an accurate capex planning and reoptimisation where there are justifiable changes. Important, I believe, to set thresholds high enough not to undermine the companies. If the thresholds for regulatory scrutiny are too low, of course, the companies will simply say well we've crossed the threshold, this is to the Regulator now to review and fully evaluate. Whereas I think those decisions should sit squarely with the board who should be accountable for that.

And important to probe the outputs, transparency, challenging any inefficiencies, but also set an expectation for innovation. And in that world of tram lines and tick boxes, one of the things that you can usually see suffering is that the old solutions are rolled out,

they're the lowest risks, they've been approved before, we'll do it the way we used to do it, which there's a lot of evidence now to show that that won't be a good long-term solution I believe.

So I've tried to capture this in a sentence. I think that without empowerment of the companies there will be poor responses to the new challenges. Unintended consequences will abound. That it's very important to align decision-making; aligning decision-making to the companies is the strategy that will bring real benefits to customers in a time of rising investment. But of course all of this put in place with, as I've said there, kind of regulatory eyes open. And I think that's very important to be able to challenge.

I should say, of course, what I would see as a situation without empowerment, I think without empowerment of a company, that that kind of consequence of undermining the company, which is a strong phrase, but nevertheless it leads to that focus on process rather than content, it creates kind of a dependency culture looking back to the Regulator all the time. And the outcome of that is things like good staff start to leave, it's very hard to recruit and retain good people at board level, and you clearly get into a world of avoiding risk rather than managing risk and suppressing innovation because it's uncertain. That's the kind of consequences I've seen elsewhere.

So thank you for bearing with me, and my last message on the bottom of the slide there I put it in red, hold the board members to account. Thank you.

CHAIR: Do Commissioners have any questions?

MS BEGG: I first of all had a question of clarification. In a couple of the slides you have said that we should focus on outputs rather than inputs, and given the discussions in terms of capital expenditure I just wanted to check by outputs did you mean transmission services and the quality of which they're provided, or have you got a more constrained view of outputs which is the investment programme?

MR SCOTT: I think, I envisage trying to capture those things that are important to customers.

MS BEGG: So transmission services and quality?

MR SCOTT: Yeah. Yesterday, if I may say so, I thought it was a very constructive discussion about quality of supply, that's a very good output. It tends to work better for distribution companies than transmission, but it's important to grapple with it for transmission as well.

But there's an interesting development you may have seen that's gone on in the last year or two in the UK which is trying to quantify outputs more precisely in terms of asset management. And Ofgem has now agreed with its companies, this is for

distribution but it will be applied in due course to transmission, measures of asset health, for example, by categories, you know, if you like, what proportion of the towers are rusty at a simple level, or more subtly output measures about the degree of utilisation of assets. So how much capacity margin, how much redundancy is still in the system. And of course, as you know, that's assortive. As demand grows you get nearer and nearer your limit, then you reinforce, you create more headroom and then you eat up that headroom again.

And what Ofgem has done is tried to take that forward into understanding the risk; hard to quantify, but at least over a number of parameters, a kind of basket of risks. And what they've said is that companies' money is being spent to invest on the networks but it's not being invested to eliminate risk. They recognise that all networks carry risk.

And what they're asking the companies to do is to identify the kind of risk level, degree of redundancy and age of assets and so on, at the beginning of the period and at the end of the five years, as it is in the UK, to show that that investment hasn't kind of removed all the risk, that would be an over-investment, but have managed to keep the risk at about the same level, different risks. But the risks haven't accelerated, but they haven't also been totally removed. And it's that management level of trying to pitch risk. It's hard to quantify, but I think there'll be a lot further work done in that area. So it's a range of outputs.

MS BEGG: If you looked at the outputs and they raised concerns, for example we've heard from Transpower how in the past there's been perhaps under-investment in the grid and in maintenance there's a lot of catch up to do, would that shift your focus from the outputs to also looking at inputs? Because when we hear from Transpower we hear that they are undertaking major projects to catch up with maintenance and so on, so how does your balance change if you're dissatisfied with the outputs?

MR SCOTT: I think that's an example of the really tough questions that a board of a utility company should grapple with. Do you continue putting a lot of money into refurbishment, extending the life of old assets, do you take the plunge to move to new assets, particularly recognising that over the next life of those asset, next 20 to 40 years, the demands on them will change considerably.

And to give just one example there, there's work going on at the moment that I've seen recently in the UK on the impact of electric vehicles. And we're going to be faced, I think this is around the world, faced with either a massive traditional replacement, much

more copper in the ground, as they say, to meet the charging load of electric vehicles, or in the world of smart grids, as it's being called, you start to look at intelligent ways of charging vehicles and spreading the charging load.

All that makes sense because you don't need so many additional assets, but you change the loading on the assets, everything that the companies at the moment know as cyclic loading. In other words the assets are all operated at the moment around the world to have an overnight rest period. You load them up during the day, they get very hot, but you give them a cooling off period over the night and that happens again the next day. If there's electric vehicle charging taking place all night these assets are going to be cooked around the clock. And it's already changing the views of asset management.

Sorry, I haven't given you a very clear answer to your question. I say this is where we should be looking to our asset owners and the companies and say well how are your asset policies changing and are you investing to meet that kind of demand and not putting in an asset, for example, that's really only sized on a very peaky cyclic rating.

MS BEGG: Just going back to my question which is more what's the role of the Regulator in that process? I can understand your response that the board has difficult decisions to make where the outputs aren't satisfactory and it's obvious that Transpower's board is trying to address that issue, but what's the role of the Regulator when it's not simple, or when the monitoring of the outputs indicates that there might be issues?

MR SCOTT: I think there's the important role of the Regulator here to challenge the companies to show that they've thought through the issues, you know. So this should be asset management in a dynamic sense, in the sense that asset strategic policies should be being thought through, they should be recognising international best practise, and then the companies of course should be demonstrating that they're applying them.

MS BEGG: So the response is for the Regulator to review the processes that the business has for asset management?

MR SCOTT: Yes, and that can be done at two levels. Ofgem again wanted to try and stay hands-off. I give you two examples. One it asked consultants to drill down into such matters as, you know, the asset management of underground cables, particularly problematic for polluting underground water courses and something. So the Regulator drilled into that, but that was a one-off piece of work and then it was satisfied that the companies had a good policy and it might occasionally dip check whether it was applying the policy.

What I think is difficult is where there are emerging policy issues. And I myself had more confidence in what I call the PAS 55 standard which is being used around the world, which is a standard for asset management. The reason I favoured it is that it's non-prescriptive. It doesn't tell the companies how to asset manage. It says if you're doing good asset management you will have the following kinds of processes. You will have good asset registers, you will have processes for getting equipment on your asset register and off your asset register, all those kind of basics. And a PAS 55 audit is a check that companies have got good processes and they are operating them. And again Ofgem didn't act as the PAS 55 auditor but encouraged the companies to go to an independent audit party.

MS BEGG: Thank you. I just had one other question and that was the focus in the UK on ex-post review of outcomes. I just wondered, it seems to me from the business's point of view that would be a bit risky, and obviously ex-post with the benefit of hindsight decisions that were taken, you know, a few years ago might not look good. And I just wondered how that balance is struck between second-guessing when you have all the information in versus the information available at the time decisions are made.

MR SCOTT: It's hard to quantify this, but there is a measure of trust needed and the reasonableness of reviews and that they should be proportionate, that's important. What happens in the UK is that Ofgem uses specialist consultants. Ofgem is about 300 people, mainly economists and so on, but with a small technical team of engineers, which I think is a reasonably good balance actually. You don't want too many engineers but it's helpful to have some.

And the use of consultants, the consultants are directed by Ofgem using engineering knowledge and so on. And to give you an example, I checked recently because my company assisted Ofgem recently. There were transmission schemes that were reviewed in detail because they were unusual, they had a lot of undergrounding, or they were going to be very contentious for public consents point of view and they were given closer inspection.

But out of a long range of projects there were projects in New Zealand dollar terms of 40, $60 million which had a very brief review by the consultants just looking at do the unit costs look reasonable, is this following good asset practise that we looked at before, you know, in other words the company's getting on with its business in the way we expected. And then there were projects perhaps at more like the $40 million level,

which were unusual, which were probed in some detail and in some cases even subjected to consultation because they were unusual.

So Ofgem has no thresholds, it uses a judgment of, you know, separating projects which are unusual or contentious from those which should be business as usual and the company should be just getting on and doing it.

CHAIR: Thank you. Staff got any questions?

MR HEAPS: Yeah, sorry I was just thinking which one to ask first, sorry. Thanks John, I think that's very good, it's provided a lot of food for thought. I was just thinking about, there's a trade-off, isn't there, you're talking about, and particularly Transpower's facing that with the aging condition of asset and the need to invest more at a highly loaded system as you're outlining, and there is a trade-off there between speed and expediting plans going through and getting moving on things and actually control on the money that's spent.

And I presume you'd agree that when you move into a time where you are going to be spending more it's also extremely important to be able to target that expenditure in the best places and make the best use you possibly can for the available capital. So there's a tension and a trade-off between those two.

You didn't mention around Ofgem about least cost efficiencies in terms of economic efficiency and decision-making. Can you just explain where you think the Regulator should be in ensuring that those outcomes occur as well?

MR SCOTT: Thank you. The approach taken by Ofgem at the time of the reset as well as looking back, of course, in particular looking forward, again consultants probe the company's plans. And it usually becomes quite evident actually if there is inefficient investment, which is usually where there hasn't been enough thinking done.

But what Ofgem does recognise is that, particularly with a five year period, it really isn't possible to have the same degree of planning by the company for the later years. So it's looking at a kind of envelope of expenditure, it's expecting those substitutions to be made later in the years, the plan, as the company gets closer and gets better information and makes the necessary trade-offs.

Again, you know, the company would be required to demonstrate good internal investment decision processes, proper evaluation of alternatives, sensitivity analysis, all the things that you'd expect. There isn't a formal equivalent to your grid investment test, but I'd see that kind of approach as a useful tool that should be informing a balanced business judgment.

Because what I did used to see myself was that the difficult decisions were often the ones which weren't quantifiable. You know, if you can get the answer from the bottom right-hand corner of a spreadsheet it makes the decision-making much easier. But if you have issues such as difficult landowners, or the risk to assets failing before you get to them, or difficult issues like what happens if there is an unexpected - an unknowable unknown occurs during the work. You know, if you're doing major work into an urban area and you have an unexpected event during the work the return to service time, as we used to call it in the UK, for the other assets can be frighteningly long. It's not just like getting a maintenance outage return, it could be weeks while you complete some piece of work.

So those issues, I feel, are very hard to simply put a numerical answer to, but they are very much the things that the company should be alert to, and should be able to explain themselves, you know, and give account for.

MR HEAPS: So are you saying that the Regulator would expect them to have good process? Does the Regulator assess that in any way?

MR SCOTT: Yes, the Regulator would typically pick out, this is looking to the forward period, the consultants would look over a major programme of work, you know, could be many hundreds of schemes in a five year plan as well, and pick out those things which were unusual or large in scale, and drill down into those in more detail.

And I think what the Regulator's doing, to be honest, is putting the company on its toes. And perhaps I could mention, and I should have brought it out earlier maybe; Ofgem, to try and tighten up in these areas, has introduced annual reporting, RRP, the regulatory reporting pack during each year of the period. And it requires the company to report, all the companies to report on their expenditure and their delivery to date.

But there are important things here. One is it's required a lot of attention to consistent reporting, but that has a benefit later when it comes to the next reset that you don't spend half the time arguing over the definitions. How did you treat subcontractors in your costs and all those things. So it's achieved more consistent reporting.

It is not used in any way to influence the financial framework or the incentives. What it is used to do is identify things that look to be going off track. And Ofgem, you know, why I say keep the board members accountable; Ofgem calls in senior management, calls in at certain stages in the price control review, they actually call the board members in. Before they settle the price control they actually quiz the board

members on what's going on, do they really know what's going on in the business and so on. And this annual reporting is used to again bring the agenda items up, get the spotlight out and if necessary remind the companies of what's expected of them.

MR HEAPS: Can I just ask you as well, I think an interesting area is the ex-ante evaluation of plans and then the ex-post review, and you're saying Ofgem's focus is on the ex-post review. Could you just maybe discuss the extent that accurate planning sort of influences the ex-post review. Because if you had highly inaccurate planning you are going to be looking at massive ex-post reviews, which of course will flow through to price volatility for consumers and different sort of wealth transfers and all of those sort of issues.

So there has to be a degree, I would have thought, of accuracy to limit the extent of ex-post reviews. Is there now a history that Ofgem have got in how good the planning is and how close that is and how that minimises ex-post reviews?

MR SCOTT: From what I saw myself the ex-post review, because there's a large volume of work there, cannot be exhaustive. So it's looking for management by exception, you might say, which is usually a good approach. But it's very real because Ofgem, you know, this is about the Regulator with its eyes open, the Regulator is looking for poor planning, is looking for poor investment decisions, and it holds the ultimate sanction in the UK of saying if they're not persuaded about the value of that asset in the sense of its investment worth to the customers it will be excluded from the regulatory asset base.

To my knowledge that was done while I was with Ofgem for a gas investment, or a gas pipeline was put in, it then had very very low utilisation. And Ofgem's starting position was that it was going to exclude this from the company's asset base, in other words it was going to be paid for by the shareholders not the customers. I think by the time a lengthy investigation had gone through there was something of a compromise position adopted, but the signal sent was a very powerful one. And this was that these things would be scrutinised but not down to a micro-management level.

CHAIR: Thank you, thank you very much. Can I ask Merryn York to give a statement from Powerlink.

MS YORK: Hi, I'm just going to run through the Australian capex regulation framework, and this is the framework that applies in the national electricity market part of Australia, so it's the interconnected states on the eastern seaboard but including South Australia and Tasmania. So I'll just run through this quickly. Hopefully I've captured all the main elements that are relevant to the kind of things that you guys are considering.

So in essence there's two components to the capex allowances that are set. One is the main ex-ante capex allowance, and at the end of the day in the transmission determination that the AER makes that's one bucket; Powerlink's five year ex-ante capex allowance for the five years that it's currently in was $2.6 billion. And there's a separate arrangement for contingent projects, and I'm going to talk a little bit later on about what contingent projects actually are.

The framework is incentive based, so it's about keeping return on and of capital which is below the main ex-ante allowance, but only within the regulatory period, so within that five year period. That doesn't carry forward to subsequent regulatory periods. And the converse, it's a completely symmetrical incentive arrangement, so if you over-spend your capex allowance then you lose both the return on and of the capex within the regulatory period.

So at the end of the five years the AER will look at the actual spend of the business and that is what is rolled into the regulatory asset base. So it's determined year-by-year for the five years, but it's all assessed at the end of the period. What the AER's mainly looking for there is that it's all prescribed services. So you're talking about connections and things like that in the Australian framework, connections between the transmission and the distribution businesses, and the investment in the main network that meets reliability standards or replacement standards, that's all prescribed. Connections to generators or major customers are not prescribed, so they sit outside of the maximum allowable revenue and they're not actually - strictly they're not regulated so that's just something to note.

The return on capital is determined on an as incurred basis at the WACC rate, so that's as you spend it each year, as you're actually investing in that capital. But the return of capital is on an as commissioned basis. So it's when the asset actually goes into service, which is pretty much aligned with accounting standards.

And the depreciation is straight line typically, the businesses do have an opportunity to make a case for something different if they consider that's more appropriate but the standard lives are agreed with the Regulator. Again, the business can make a case to have a different standard life for particular classes of assets. In Powerlink we have 20 different classes of assets, so things like transmission lines, underground cables, transformers, substation primary plant, substation secondary systems, comms, but also fleet, buildings, EMS, things like that.

In terms of the incentive framework there's really a few objectives that it's important to understand. So in the regulatory determination, the transmission determination, the allowances are set at the beginning, and the aim of the incentives is to have the business actually out-perform those allowances or those benchmarks which are set. So the business gets to keep efficiencies for the duration of the regulatory control period, and then what's actually happened is taken into account in the setting of the allowances for the next regulatory control period.

So over time the businesses are actually incentivised to reveal their true costs of running their business. So it's a cyclical thing. If you get an allowance and you under-spend it, then naturally those efficiencies are going to be taken into account in the setting of those allowances for the next determination period. So that's the aim. Of course the Regulator wants us to undertake necessary investment and that's built into the Service Standards Scheme, or in Australia it's called the Service Standards Scheme. I think it's got a slightly different name here, but it's the performance measures and it's a bonus penalty scheme in Australia.

Of course they want reasonable price outcomes so they want a predictable price path for customers, they want to maintain or improve service quality, and they want to have ongoing efficiency drivers on the business. So they're always looking to set a benchmark that the business makes a case for, but then to out-perform it, to actually do better than that by finding efficient ways to deliver the services over time.

The natural information asymmetry between the regulator and the business has been talked about this morning and it is real. I don't think there should be any expectation that the Regulator is going to know as much about the business as the business knows about its own business. So there is that natural information asymmetry. But the incentive framework is really there to help the business to explain to the Regulator how it's developed its allowance proposals, what they're based on, and to then deliver efficiencies throughout the regulatory control period.

In terms of the framework, as I said before there is this ex-ante capex allowance. It covers essentially most or all of the expected investment. Obviously its driven by the investment needs of the business; so things like demand, replacement, telecommunications systems investment, all those kind of things. The dollars are included in the cap up-front, and in the Australian context there's pretty much no second chances. So if something comes out of left field that you don't know about or is not

predictable, either the known unknowns or the unknowns unknowns, then you really don't get a second chance to go back and ask for some more allowance. It's up to the business to decide how it's going to manage that.

The forecasts that are put forward are generally scenario based. So in Powerlink's last revenue determination we had 40 different scenario outlooks. So there's 40 different potential outcomes, and the reality is that we're probably not going to be on any one of those, we're actually going to meander between those scenarios. So the forecast in any individual one of those scenarios is never going to eventuate. And that's reality, that's what happens. So the capex allowance that we actually applied for was the probability weighted average of the mix of those scenarios.

So the corollary of that is that we're never going to do all of the projects that are listed in our revenue proposal. It's no expectation that we would do all those projects that are in all of those scenarios. We're going to do a selection of those projects. And we may do some that aren't on the list because things happen. There's certainly no expectation in the Australian context that all those projects will be approved at the start when we actually make our proposal, no expectation of that at all.

The ones which are underway are naturally expected to be approved in accordance with good governance practises, but the ones that aren't yet started will be going through the approval process. Some of them we know we won't do so there's really - it doesn't fit to have all those projects approved, it's just not what's expected at all.

In terms of the contingent project allowance, this is really for projects where there's some uncertainty about the timing or the spend, the actual amount of money that's in the project. They are all linked to pre-defined triggers. And I've got the list at the end of the presentation, towards the end of the presentation I've got the list of contingent projects that were actually included in Powerlink's revenue determination. We had about 480 projects in our scenario mix and we had 11 contingent projects, so it's quite a small number. There's no revenue or capex allowance associated with those contingent projects included in the revenue determination up-front.

So I guess the big question is, given all that, how does the AER actually determine an allowance that they're going to give to Powerlink in our case. So it's quite a structured process, it's quite predictable. The AER have developed this process, I guess, over a period of years, so we already know pretty much what approach they're going to take when they come to our next revenue determination which starts next year.

The first thing they'll look at is our governance frameworks, so what approach do we take for different types of projects to reach a conclusion that we actually need to make an investment. So for a demand driven project how do we identify that we have a forecast limitation, how far out do we look, what is the basis of our demand forecast, what is the rating that we use on our network elements, how do we then choose options that we will evaluate, how do we compare those options, how does that fit with our overall network strategy outlook with other things that are going on, what do they cost, how are we costing it, how are we allowing for escalations; all that kind of thing.

So they'll check all the inputs, like our probabilistic planning, network planning criteria, replacement triggers, are we using condition assessment or some other kind of assessment for replacement triggers? Is it age, is it lack of spare parts, lack of manufacturer support, what's actually driving the feed for the investment?

And then they look at the groups of projects that we've got in our application and they will test that against a selected sample of projects. So they don't look at all 470 projects, they take a sample of the projects from each category and they test whether or not we've applied the governance framework that we said we have, the planning criteria or the replacement trigger, or whatever it is that's driving that investment. They test whether we've applied that framework in the way in which we've said we use it, and they do that, as I said, for the range of different types of projects we have.

And they also look for how we're applying it for different dollar values within that group of projects. So they might look at one project that's $100 million but they also may look at a project that's only $5 million in the same type of projects. Like demand driven projects or replacement projects. So they're trying to look at whether or not we're applying the methodologies and using them in the way that we say. They're really looking for good governance.

If it's a near in project then we may have a regulatory test assessment underway or a business case underway. But if it's further out it will more be documented in our grid plan outlook. So we have a grid plan for our load driven investments, or our load driven needs, and we have what we call a non-load driven plan which really covers all our replacement activities. And they're looking for whether or not they're approved if they're close in, and if they're not are they in our plans, are they documented, what option have we looked at, how have we compared those options and things like that.

They're also looking for reasonable cost forecasts, so they'll look at our unit costs

and how we've built up our cost estimates. And again different approaches depending on how near in or how far out the project actually is. So for a project that we've already got underway we would have a detailed cost estimate. But for a project that is five years out we'd probably only have a unit cost-based estimate. Our estimating project is US cost, I think Kieran was talking about that being implemented in Transpower.

They also look at how we then accumulate all those costs, so we estimate in today's dollars, all of our current project estimates are in today's dollars, and have to take account of the fact that costs will increase over time. Experience is that not all costs escalate at CPI, so there'll be some estimating, some forecast of how things will vary over time. It might be steel prices or labour prices. Cost estimates will be broken down into those different building blocks of what makes up that cost estimate escalated at different rates going forward and that's all factored into the decision.

There'll also be maybe a risk premium on the cost estimate because there's an asymmetric risk of where actual project costs are going to go more over or under. It's more likely that you're going to go over your estimated costs rather than under your estimated costs. That's proven true historically. So all those kind of things are taken into account.

And then they'll check the overall capex is deliverable. So do we actually have processes and procedures, contracting arrangements, all that kind of thing in place so that we could deliver our programme of work. Particularly if there's a change, a significant change in the amount of capex that you're likely to be spending going forward. So in our last regulatory period we had ramped up quite significantly from about $200 million a year up to about $500 million a year capex spend, so they wanted to make sure that we were actually going to be able to deliver that capex before they made that allowance.

Practically how does it work? Because we know that process in our revenue proposal that we submit to the AER, we will provide information that helps them understand what's going on for each of those steps. We have a five year regulatory period in Australia, five year minimum for transmission and for distribution, and it's really a balance between the actual overhead of doing a revenue determination, and the process takes about two years to make a revenue determination, a year for the business to get the information ready and about a year for the Regulator to analyse it. So there's a balance there between just that sheer overhead of doing a revenue determination and the forecast accuracy to set the allowances. So over time as you get further out the actual forecasting

accuracy drops off and that's the way it always happens.

Our next revenue period for Powerlink is from 1 July 2012 to 30 June 2017. We have to submit our proposal in May 2011, so we're starting to do the preparatory work for that now, we've just formed our reset team which will prepare that application. But there's certainly no expectation that we will have all those projects in that five year period approved ahead of time. These projects get approved as we actually make the investment decisions. But they will be in our revenue proposal.

The as incurred approach to capex means that we're actually forecasting projects which are being started at 30 June 2017, so they might be getting completed if they're a network investment in 2010, or if they're involving an easement acquisition might be all the way out to 2021. So it's a fairly long period to be thinking about how you're going to estimate, how you're going to forecast those projects, how you're going to estimate the costs of those projects.

Once the determination is made by the AER, from their point of view it's pretty much set and forget until next time, although there is annual reporting, as John said for Ofgem. We have to make annual reports to the AER of what our actual spend is by project, those projects are categorised. If the AER wanted to they could compare that with the revenue proposal that we made. That's up to them if they want to do that, but that makes sure that we are keeping track of how we're going. If we have changes in the projects then we have to provide a brief explanation with those regulatory accounts.

There's also no ex-post prudency review at all. So they're not looking back with the benefit of hindsight as to whether those investments were legitimate or not. In our previous regulatory framework there was an ex-post review but in that framework there was no ex-ante cap. So from the Australian point of view it was one or the other, not both. So there was a change from ex-post to ex-ante.

In terms of the types of projects that are in our framework, and I stress that these are just groupings, they don't mean that this is one cap and that you can't substitute between one group and the other, there is freedom for the business to allocate things as they see fit. So there are load driven projects which are essentially augmentations, connections. And again I stress just to DNSPs or distributors and easements, non-load driven, projects which might be replacements, or security, or EMS, or communications, and what's referred to as support the business projects; IT, buildings, fleet and other things like that.

The reason that they categorise the projects like this is that they're slightly different governance frameworks because these have different drivers. So if you're looking at a demand driven project you need to be looking at the demand forecast, what the flows on the network are and how that compares with the rating of the equipment, what your obligations are in terms of reliability. Whereas if you're looking at a replacement or an EMS upgrade it's a different driver. And they want to capture that, they want to test our framework and test a group of projects against that framework.

They also recognise that there's different levels of scrutiny based on the dollars of the project and that's both on the part of the Regulator and on the part of the business. So most businesses have different delegation levels for different people to be able to approve projects all the way up to their board, and the Regulator recognises that. So they want to test that if you have to go to your board to get approval that you've done that, if it's an approved project, but if you can get it approved by someone like me then you've also done that.

In terms of augmentations, which is just the component of load driven that's on the shared network or what we call the shared network, I think Richard might have used the term core grid and maybe that's equivalent. Augmentations must also satisfy the regulatory test, and again this is not ahead of time, this is at the time you're actually about to make the investment decision. Small investments are things more than $5 million and large investments they're actually things more than $20 million, that 25 is incorrect, it's actually $20 million. Less than $5 million even if you are making an augmentation there's no regulatory test assessment required or consultation process.

The consultation process for augmentations is that we have to put out our assumptions to the market, market participants have an opportunity to comment on that, tell us if they think we're right, we're wrong, we should be taking something else into account, we're looking for non-network alternatives to a grid augmentation. So those people come forward and tell us if they've got a demand side response or a generator that we haven't accounted for and they're prepared to run it in a way that we need to suit the network. Usually they want some payment for that, so if that all flows through and that is the most economic way to meet that need, then that grid support can also be included in the regulatory determination, as an opex line item just for interest. So in terms of at the time of our revenue proposal some assessments are complete, some not. It just depends at what stage that investment is actually required to be made.

As I said before, substitution is okay amongst all the categories; it's actually expected, that if we have some unforeseen demand driven requirement that means we have to make an additional investment somewhere to meet our reliability of supply obligations, that we'll actually reprioritise the other components of our programme so that we still live within the cap, otherwise if we over-spend we're actually losing money within the period. So we're actually expected to reprioritise.

And if we have to do that and we don't have other efficiencies such that we can catch up, then the thing that we've reprioritised out we'll have to ask for again. Just because we reprioritised it out doesn't mean we don't need to do it. So that's an expected part of the framework.

I thought this was an interesting quote just to share with you the AER's view on the capex allowance. So I'll just read it out. This was actually in Powerlink's final determination from the AER.

"Notwithstanding that specific capital projects have been proposed by Powerlink and a sample of these have been assessed by the AER, this decision does not require Powerlink to undertake or not undertake any particular investment. Under the ex-ante framework, Powerlink has full operational discretion to allocate its expenditure allowances as it sees fit. It has an incentive to seek more efficient ways of delivering its services in order to maximise its profits while maintaining the service standards that have been set in the decision. These arrangements should provide benefits to users over the longer term".

So it's very clear that the AER are not approving things on a project by project basis, they are actually expecting the business to manage that bucket in the best way it sees fit.

Just a couple of final things. Contingent projects; these have a minimum threshold, so in terms of large dollars and uncertain, they have to be at least $10 million or 5 percent of the first year MAR. So in Powerlink's case 5 percent of the first year MAR was about $35 million, so had to be a project in this case greater than $10 million. And they had to be uncertain, and that was really about whether the trigger would occur, not whether we were uncertain about what project we might do. So the uncertainty was around the driver for the investment.

In terms of how it works, if the trigger is activated and it's a pre-defined trigger, we make an application to the AER for adjustments to our capex, opex and revenue and

that is within period. So it's like a little mini reset for the contingent project itself, and the MAR is adjusted within period. So the AER will determine what the revenue, what the adjustments to the capex, opex and revenue are and give us a new X factor for the remainder of the period because we're on a CPI-X revenue path.

These are the 11 contingent projects that Powerlink had in its last revenue determination. So the triggers were things like if an upgrade to the interconnecter between Queensland and New South Wales satisfied the regulatory test in terms of net market benefits. The QR electricity track, that has actually triggered, but because of changes to what's a prescribed service that doesn't come into our MAR, that's actually dealt with as a negotiated service outside of the MAR. Things like an early closure of one of our major power stations in the Southeast Queensland area, Big industrial developments, specific coal mining developments, and these all had, underlying these sort of high level triggers I've listed here, they had how many megawatts actually needed to be added to which load forecast, which year's load forecast in order to give rise to the trigger.

So they're quite specific, they're not things like that the price of steel was double what you thought it was going to be, or that the price of copper is triple what you thought it was going to be, or that labour costs have escalated two or three times what you thought they were going to be; those are all things that the business has to manage and can drive changes to your project costs, which can then give rise to a need to reprioritise.

Just wanted to touch on lastly how we got here, so how we got to this framework and the AER being comfortable that they can run this process in this way. In Queensland we had vertical separation in 1995, so prior to that we were all one integrated organisation called the Queensland Electricity Commission; generation, transmission all in together, so we had separation in 1995. That's when revenue regulation commenced of us as a transmission business.

Initially it was one year, then three years, and now it's five years or more. So we could make a case to the Regulator to have longer than a five year regulatory period if that's what we wanted to do and if the AER accepted that. There are some transmission parts in Australia which don't have a lot of capital investment and they actually have ten year regulatory periods.

The NEM commenced in 1998, Powerlink started being regulated by the ACCC in 2002 and that's now the AER. The ACCC at the time ran a draft statement of regulatory principles from 1999. Initially that had an ex-post capex framework, and the ex-post had

the opportunity for capex efficiencies. So that if the business considered that it had delivered efficiencies in the delivery of particular projects then they could make a case to receive some of those efficiencies themselves on a sharing basis between the customers and the business. That's now moved to an ex-ante framework and that occurred during 2004, but there's no ex-post, it's just ex-ante, one or the other.

And then more recently there was the so-called Chapter 6A review which actually created Chapter 6A in the National Electricity Rules. That occurred in 2006 and 2007. Ex-ante was confirmed, again without ex-post, and those arrangements are now in the National Electricity Rules which effectively makes them law in Australia. So that's all pretty much locked in.

CHAIR: Commissioners, do you have any questions? Perhaps it's 20 past, we're running a bit behind schedule, perhaps if we reconvene at 10.40, is that okay? Thank you.

Adjournment from 10.17 am to 10.40 am

CHAIR: Okay, welcome back, hope the coffee was nice and warm. We are running slightly behind schedule, that's not to worry I'm sure we'll catch up. Commissioners do have some questions from Merryn's presentation. Commissioner Begg.

MS BEGG: I just had one question, and in your presentation you noted that for projects that were under $5 million they weren't subject to the equivalent of our GIT test. I just wondered what regulatory scrutiny they were subject to.

MS YORK: In terms of the actual investment when we're making the investment decision or at the time of the revenue proposal?

MS BEGG: At the time of the revenue proposal.

MS YORK: They would just be in the mix of projects that are sampled by category and by dollar value. Does that answer the question?

MS BEGG: [Nods].

CHAIR: Associate Commissioner Caygill.

MR CAYGILL: Can I get you to explain how the regulatory test, the net market benefit test relates to the revenue determination. Are they separate things in effect, can we just -

MS YORK: They are separate things. So at the time of the revenue proposal and the revenue determination for projects that are close in or either approved or on the verge of approval. So if we've got an approved project we might have spent some money on it, but there'll be

some money still to spend and there'll be the roll in and the depreciation allowance after it.

So the AER will, in their sample, if they're looking at a particular project, they'll want to see, if it is an augmentation and it's above the thresholds, they'll look at our regulatory test document as part of their scrutiny of that particular project, if that's in their sample. If it's, you know, further on there's no regulatory test because we're not making the investment decision. So they are separate.

MR CAYGILL: Right, so maybe without prolonging it because in one sense it's not the fundamental focus - fundamentally it seems to me the discussion today and yesterday is about the equivalent of the revenue determination. But because I don't understand how the regulatory investment test works, can you just take us - in particular I guess the thing I don't understand is who does that, is that just a test that you apply as a company, or is it subject to somebody else's check off and oversight and who enforces that?

MS YORK: I can explain this because I actually run those in my company. So the regulatory investment test at its simplest is just a cost benefit test. So I won't go into the kind of mechanics of it. But in the rules, in the National Electricity Rules in Chapter 5 there's a consultation process that's associated with it. So as a transmission business, or a TNSP, for investments in prescribed services that meet the definition of an augmentation which is that it has to increase the capacity of the network to transfer active power, that's in the definition - I'm paraphrasing but it's something along those lines.

If it meets that definition then it's above the thresholds then we have to go through a consultation process. That's something that we do, so Powerlink runs that process, and we have to put out - we actually apply another step which I'll come back to. But the rules requirement is for us to put out what's termed an application notice, and that is a draft recommendation for what the investment's going to be. That investment could be grid support, demand management or a network element.

In that there's a whole pile of things that have to be included in that document which is all our assumptions, what the need is, what options we've looked at, our economic comparison of those options, what information we base it in, what the cost is, technical description at a high level of what the network investment is. We have to call for submissions on that, and then we have to take those submissions into account, respond to those, and then subsequently put out a final report, which is the final recommendation that we're making.

The AER technically is not involved in that process at all, that's something that we run. They don't get involved, they're not evaluating it or anything like that. After we put out the final report there's a dispute period, so if someone doesn't like or doesn't feel that we've made the right recommendation they can dispute our recommendation and the dispute is heard by the AER.

MR CAYGILL: Okay. So it's -

MS YORK: There's probably one other bit. In the dispute process the AER still don't say yes or no to the investment, they say you need to go back and re-evaluate and take these things into account and then we have to put out the final report again.

MR CAYGILL: Sure, but to the extent - basically you described what I would call a third party review process that is quite independent from the revenue determination which you described earlier.

MS YORK: It comes to our compliance with the rules. So if we don't do the regulatory test then we're not compliant with the rules. And in order for our investments to be seen as prescribed services they have to meet some obligation that we've got in terms of reliability of supply, or be required to, you know, maintain things like replacements are not augmentation, they're not subject to the regulatory investment test.

There's always that relationship between replacements and augmentations where if you can combine them together you can get economies of scale. So if the replacement includes an augmentation component that's above the threshold, just the augmentation component, then we need to do the regulatory test on the augmentation component. But if it's straight, you know, the transformers had it and you're buying a new one it's not subject to the regulatory test. So the AER wants to know that we've done it and that our governance framework has that we will do it for all future investments.

MR CAYGILL: I'm clear, that's useful, thank you for that.

CHAIR: Do staff have any questions?

MR FLETCHER: Mr Chairman, can I just clarify a point? Merryn, the process you just described that's the detailed process for the over $20 million?

MS YORK: That's right.

MR FLETCHER: And there's a lesser process for the lesser -

MS YORK: There is a lesser process for the 5 to $20 million category where it's a kind of more simplified consultation process where we can use our annual planning report. So once a year we have to issue an annual planning report. That's got all kinds of information in it

about what our network looks like, what our demand forecasts are, where we expect flows to go, and it includes in an appendix any small network investments that we want to make and that can form the consultation process for that. That's more of a one step process, so if we put that out in the annual planning report, or as a separate document, if nobody makes a response or anything then that's it, we don't have to issue another document.

MR CAYGILL: But if somebody did challenge it?

MS YORK: If somebody did challenge it we would be required to address their concern and put out some more information about what we were going to do.

MR CAYGILL: And is that -

MS YORK: It may not change the recommendation, but it has to be - we have to say how we've taken that into account.

MR CAYGILL: Sure, and if somebody didn't think that you had sufficiently taken into account their point of view, is that reviewable?

MS YORK: On the 5 to 20 there's no dispute provision.

MR CAYGILL: That's fine, thanks.

MR HEAPS: I wonder just for completeness then, the under $5 million, that would be subject to your own internal processes -

MS YORK: That's correct.

MR HEAPS: - that you define, and those processes are reviewed by the Regulator?

MS YORK: At the time of the revenue determination.

MR HEAPS: At the time, yeah.

MS YORK: But not for each investment.

MR HEAPS: But the Regulator would look at whether those processes have been applied in practice through project sampling?

MS YORK: At the time of the revenue determination through project sampling, that's right.

MR HEAPS: I was just wondering as well, using the incentive I think it's an interesting mechanism. But actually locking in the allowance at the start of the period through the ex-ante review potentially places the company at risk but also the consumers at risk of over paying.

But it provides the company with an incentive for investments. It must be based on the assumption that the planning has got a reasonable degree of accuracy to manage those risks. Because you would have the ability to have efficiency gains and that's sort of fair enough in there, that's a good incentive for that. But also planning inaccuracy could

potentially drive quite big differences between the actual spend and the planned spend.

So is that assumption correct that I'm making, it is based on, as you've said, the history, that the Regulator has now got confidence that the planning is sufficiently accurate to be able to take that approach?

MS YORK: I can't comment on the views of the AER as to whether they think that our planning processes across all businesses, because it's all transmission businesses and distribution businesses that have an ex-ante framework set ahead of time with no ex-post review. So I can't comment on whether they feel the accuracy across all those businesses in the NEM is sufficient.

But I guess what I could say is that in our previous revenue determination under the ex-post arrangement we actually had a 20 percent over-spend in capex. And they went to an ex-ante framework because that's where they were headed. So in that regard on an ex-ante framework that would have been a disadvantage to us as a business.

So I guess my view is that they are forcing the businesses to get their act together. There's a lot of downside risk for the business if they don't get their act together.

MR HEAPS: Thanks.

CHAIR: Any more questions?

MS WARD: One point you made was that there's annual reporting by the TNSPs and you said that the AER can compare that with the proposal and they can do something. What can they do? Can they re-open the revenue requirement?

MS YORK: No.

MS WARD: What can they do?

MS YORK: They can look at it.

MS WARD: They can look at it, that's it, thanks.

MS YORK: Within the revenue period they can look at it. Obviously they would want to take that into account when they're setting our next revenue determination about how different was it, what are our reasons for that. That comes down to particularly, I guess, asking for the same projects again. And I can tell you right now that Powerlink will be asking for some of the same projects again because we have had variations in costs of projects, changes to the mix of projects, things that were unforeseen occurring to us, plant dying before we thought it was going to, and we have to change our plan. And some of that will result in us asking for some of the same projects again.

MR MELVILLE: You mentioned in your presentation that the AER looks at whether the capex

programme is deliverable. Can you just give me a feel for how the AER makes that assessment of deliverability?

MS YORK: I can tell you what they did for us. So particularly because in our last revenue determination we were having quite a steep increase, they wanted us to explain to them what things we were putting in place to ensure that we could deliver that programme, so they wanted to know, for example, what our transmission line construction contracting arrangements would be going forward compared with what they were before; how we were making sure that we got delivery of circuit breakers and isolators and things like that from the suppliers, whether we had a process to pre-order production slots for transformers so that we could make sure that we could get delivery of those things; whether our contractors were able to source workers, riggers in particular, and where they were going to be coming from, what mechanisms the contractors were using to get those people in. In Australia they were coming in under 457 visas employed by the contractors. So they wanted to know fairly detailed information about how we were going about that.

MR MELVILLE: Thanks.

CHAIR: Any more? **[No comments]** Thank you very much. Now we're going to start the Commission presentations. Bill Heaps of Strata will be making the presentations on behalf of the Commission. The way we'll do it is that he'll do his presentation, the overview of the approach, and he'll lead the approach on the nature of capital projects. And once questions are asked about that Bill will go on to the next presentation on proposed capital expenditure categories. So please, Bill, do take the floor.

MR HEAPS: Thank you. I may well stand up during parts of this because I have some slides with transitions that I hope will help to better explain the processes, so there isn't a fire if I suddenly jump up. The focus of this session is on the proposed capital expenditure categories. However to place these in some context I think it's necessary to cover the background points, and also provide an overview of the proposed capex approach. But I will be discussing in more detail the proposed approach in subsequent sessions.

Please note that the first four sessions that I'm going to present will be actually looking at the long-term framework that the Commission is seeking to implement. And I'll discuss the management of transition from the current position to the longer term framework in two later presentations. So please bear in mind this is about long-term view and we'll look at transitions later. I'll intend to keep reminding you of that as we're discussing the long-term view.

The Commission is interested in any points of view on the various components of the proposed approach, and what I'm going to do is break for discussion at various points to gain your views and input. The purpose of the following session is to set out the proposed capital expenditure categories and also provide the rationale for the materiality level that we've used to set the boundary for large projects.

In developing the proposed approach the Commission took into account the objectives contained in the Part 4 of the Commerce Act and the Government Policy Statement, and included in the 2009 Input Methodologies Discussion Paper was a section on the regulatory arrangements in Eastern Australia, and in the UK. The arrangements in both of these jurisdictions provided some valuable inputs into the development of the proposed approach for New Zealand. Those of you that are familiar with the AER and Ofgem models will no doubt spot some of the similarities and some of the differences between the proposed New Zealand approach and those arrangements.

The arrangements contained in the settlement agreements have been in place and operating since 2008 with two annual reviews completed. And that experience has been considered when developing the view on how the proposed approach would actually work in practice.

Also we've reviewed historical data and that's enabled a view to be gained on the structure of Transpower's capex, the relative sizes of projects and the accuracy of planning expenditure. And we've also considered a range of other sources of information and advice including, as John mentioned, the PAS 55 assets arrangements and standards, and knowledge of how asset management actually is implemented in practise particularly in New Zealand.

The following slide provides an overview on the proposed approach, and I'll take you through you this one in sequence. So first of all at the core of the approach is Transpower's forecast capital expenditure plans. Taking into account the range of projects, these have been considered to fall into two categories, into large and minor projects. I'll discuss these categories in more detail.

The capex plans are developed by Transpower using input data such as the age and condition of assets and the capacity of the network. These inputs are assessed through the engineering and other processes in order to establish needs and priorities, and out of this comes the forecast capital expenditure plans.

Of course in a well managed company it's expected that developments of

expenditure plans are guided by policies, strategies and procedures that ensure the planned investments are required to meet the service obligations such as those contained in the GRS, the grid reliability standards. And of course that these can be delivered and are at least cost to the customers.

In accordance with good regulatory practise the Commission's focus is intended to be at the business case level for large projects and at the policy and process level for minor projects. So the proposition when taking this approach is that if the business has good governance and management structures, then the outcomes will be appropriate.

Information at the qualitative policy and process level is supported by data and information gained at the quantitative level. So using the qualitative information, comfort is gained that the businesses policies processes are actually being applied in practice and that the business is capable of delivering.

So just to summarise that, it's intended that the Commission's focus for the larger projects is at the business case level, and for the minor projects at the process and policy level, and that the comfort is gained that the processes and the policies are being applied in practice by reference to ratios and base data on such things as asset age and condition, and through the appropriate application of Transpower's approved policies and processes.

Of course there are always trade-offs when looking at regulation. Regulatory controls are considered desirable because they increase the certainty of least cost capex outcomes. However, depending on how they're structured they may have unintended adverse effects, such as limiting Transpower's ability to act responsively. Regulatory controls may require a degree of certainty and accuracy, whereas Transpower may need flexibility to respond to change in circumstances.

Under Part 4, and under the Part 4 Purpose Statement Transpower is to have incentives to invest, yet Transpower is also accountable for investments under the Government Policy Statement. Potential conflicts may have to be considered between these two objectives.

Reducing the extent of ex-ante reviews versus minimising price impacts of ex-post reviews, prices during the RCP should accurately reflect the costs of the business during the RCP and ex-post adjustments that move prices into the following RCP. It's hoped that those would be minimised. However, ex-post wash-ups can also benefit consumers if actual costs are below planned.

Planning accuracy, therefore, is desirable but needs to be considered against those

flexibility needs. Regulation that's too prescriptive may prevent economically efficient options being taken when deferral and substitution is desirable. In terms of the categories that we're going to consider, the inclusion of larger projects in a bucket of minor projects may actually swamp that bucket of minor projects and, if you like, create headroom if a major project is deferred or changes substantially.

So in considering the need for categories, characteristics of large and minor projects were identified. Of course large projects we've got a high number of relatively small value individual projects, and I think that characteristic probably applies across all transmission companies.

Grid asset projects, principally replacement and refurbishment within a small enhancement component, that's for replacement and refurbishment of the grid assets. Options are likely to be limited for grid asset projects in the minor projects categories. And information systems, technology expenditure has got quite a large development component.

Both RR&E and IST projects can be considered to be structured into aggregated project groups of programmes. So they can be individual projects, but they could also be considered to be aggregated into programmes, such as tower painting, transformer replacement programmes. And it's recognised that a degree of flexibility is required to optimise and prioritise minor projects during the RCP due to planning uncertainties.

Accuracy of planning and forecasting of course increases as the projects complete process stages and gain Transpower approvals. So you could consider the initial list of projects or the initial plans as being a long list and as the plans are subject to good process and move through to approvals then the long list becomes a shorter list, and that one may well have gains. So there could be gains in terms of least cost and there could be gains in terms of improvements to those projects through prioritisation, so that the longer list becomes the shortlist.

And we would expect that's because planning accuracy forecasting increases as those projects complete those process stages. So they're generally what we saw as the characteristics of the minor projects. We thought that large projects were quite different and have different characteristics. Again large projects can be both replacement refurbishment and have an enhancement component. And of course there can also be IST projects within Transpower. They are high value and they do require rigorous assessment and analysis.

Not all projects will be of a size that will require full investment tests, but we would expect that they would undergo tests that are commensurate with the size of project. There are likely to be more options to consider for large projects than smaller projects. And, of course, in a transmission company, and in particular we found in Transpower that there are a range of values and they can be extremely large, so between hundreds of millions and millions of dollars.

Planning accuracy is expected for large projects. We do consider that for particularly the larger end that these projects should be reasonably well-known before time and a high degree of planning accuracy is undertaken before the regulatory control period. But it is acknowledged that unforeseen projects may arise during the regulatory control period as well. So I think that's pretty consistent with what we've heard in previous sessions as well in terms of those characteristics.

I just wonder at this point if we could just have views or a discussion -

CHAIR: Discussion, yeah.

MR HEAPS: - on whether - just on the range of splitting capex into categories. Does it make sense, should the categories be based on a dollar value, or on business unit, or a combination of those, and what are the advantages and disadvantages of each method?

CHAIR: Transpower.

MR FLETCHER: I think we generally agree in principle that a distinction should be made between major projects and not necessarily just by value but by complexity, as John said. There'll be certain projects which have different options which perhaps need to be consulted on and subject to more scrutiny.

I think we also agree that there should be projects which are outside of the revenue envelope if they are of that nature. The question is where you set the threshold, and I guess we'll be coming on to that in a moment.

I think, as Merryn said, by the fact that different parts of a capital programme have different drivers and therefore different governance arrangements in terms of how they get progressed by the company and how they're justified, and I think you do need to categorise, as Transpower does itself internally, different programmes of work and different types of work. So I think as a general principle, I think we agree with what you've said there.

CHAIR: Has anyone got any other comments from the floor?

MR SCOTT: Could I add an observation. Bill, you talked about forecasting accuracy and I

don't think I included in my comments earlier that Ofgem had some concerns in this area and did introduce what they loosely called the sliding scale approach which was rewarding companies for accurate forecasting. And that allowed the incentive for delivering more efficiently and keeping the returns, but only if it was reasonably close to the forecast, and if it was a gross saving the returns allowed were much less. So there's a kind of sliding scale of how close the company delivered to the forecast but without being rigid in the sense of recognising that there's bound to be a variation at the out-turn stage.

CHAIR: Continue with the presentation.

MR HEAPS: Yeah, I'll now just explain the rationale for the proposed levels that we set and then leave time for discussion on that. The proposed materiality levels have been set at for large projects $1.5 million and above and for minor projects below $1.5 million. In the proposed approach there are aggregated project groups, and they were considered to be a maximum of $10 million for each programme or aggregated project group in any one year with an individual total limit of $1.5 million per project. So that's the total value of the project, $1.5 million and then $10 million expenditure on an aggregated project group within one year. Those are the proposed materiality levels.

We considered the settlement approach, so it's worth just looking at what the current position is. The settlement approach was that enhancement projects have a materiality level of $1.5 million and replacement and refurbishment projects don't currently have a limit under the settlement agreement. Individual assessment of large projects, there's about 40 a year, around about 20 IST and 20 RR&E that are subject to sampling and individual scrutiny in the below 1.5 - in the RR&E projects. So that's the current approach under the settlement.

The large project materiality level, I'll just talk about the rationale for that. So as we discussed earlier it's considered that all projects and programmes should be subject to an appropriate commensurate analysis and testing. And I emphasise the word 'commensurate' because I think that's pretty central to how we see investment tests applying.

So the materiality level actually sets the level at which individual regulatory scrutiny occurs. So the view that all projects should have commensurate level of analysis and testing, even $50,000 projects there should be some process that's gone through before spending that level of money, which of course you would say is different to the hundreds of millions of dollars. So there's a range of tests that you would apply and we

would expect them to be commensurate with the size and complexity of the project. And so the materiality level actually sets the level at which regulatory scrutiny occurs of each of those individual projects.

We also took into account the fact that Transpower has some pretty massive projects but that shouldn't mean that good planning analysis shouldn't also occur on the smaller ones. Large projects should have a greater degree of certainty than minor projects because of the level of planning which is undertaken for them. If there's only one category, so if we didn't have large and minor projects then, as I mentioned earlier, it was considered that the large projects could swamp the bucket, making the facility to be able to substitute, as I'll discuss later, within the bucket actually meaningless. So, for example, the cancellation of one large project could provide quite a massive opportunity to relieve efficiency pressure on all the other projects in the bucket.

The following slide summarises key points considered when proposing its materiality level of large projects. So the key considerations were the appropriate size and value of the project to require individual assessment, the level at which an incentive for accurate planning at an individual project level is desirable, the likelihood of multiple options for analysis, the size of projects that are likely to be contingent and I'll talk about contingent projects and how we've defined contingent projects later but it's very similar to the AER approach; the ability to group projects into programmes and the number of projects that would be required to be assessed through a commensurate investment test.

So those were the key considerations and we also undertook some analysis using historical data. So if you look at this chart - I think I'll stand up for this actually. So this chart is based on the 2009/10 capital expenditure projects. You'll notice we've excluded the Part F projects because, of course, this would be extremely small and this would be very high, you'd hardly see the chart if you exclude(sic) Part F projects. There is one project which is about $37 million and that was the replacement synchronous condensers. So we have one very high project and then a lot of smaller projects.

So that gives you some idea of the scale there. And there's obviously a distinction there between the large projects and the others. But if we take these synchronous condensers out so we've excluded Part F projects and we've excluded the $37 million synchronous condenser projects, and we considered that there was still quite a difference between the homogenous large number of small projects and quite a few of the larger projects at the end.

And so again we looked at well where would be a reasonable point to actually say whether you have a homogenous group or whether you have some differences. And again this was because we felt that projects in this area where deferred or changed substantially could actually swamp anything in here just because of the large size of them.

Looking at under $1.5 million, so if we took the $1.5 million materiality limit, then you can see - we considered that that was quite a homogenous group, whilst you still have a reasonably steep curve here. We considered that actually any deferral or changes to those projects could be handled within the whole bucket. So we considered that that was reasonably homogenous.

This slide shows the analysis that we undertook on what we would expect for the number of projects that would fall under ex-ante, so prior to the RCP, how many projects would fall under individual regulatory scrutiny. So again we use the 2009 combined RRE and IST non-Part F projects. And the red line is a dollar value of those projects, the blue line are the number of projects, and then we've got that you can pick out different materiality values where you set them, and that will give you the number of individual projects that fall under scrutiny and the millions of dollars that are contained within those projects.

So if you had a $20 million materiality limit, as I explained before, it's one project which is the synchronous condensers which is around about $37 million, so that's the synchronous condenser projects so you'd only have subjected one additional project to the Part F projects for regulatory scrutiny. And that's the same down to $10 million. At $5 million you're moving to 10 a year and then at the $1.5 million limit you're somewhere between 40 and 50 projects a year, again based on the 2009/10 financial year forecast.

So that's the sort of level that we're currently scrutinising each year. There are about 40 projects that are subject to individual scrutiny currently under the settlement agreement. And we considered that the $1.5 million was no change on that. Of course what will happen is that because of the five year period that scrutiny will have to take place ex-ante, so this is just one year's figures, 40 to 50 projects. So of course you have to take into account that you're going to be doing five years and not just one.

Now that isn't just a straight multiplication of five years because of two reasons. One is that there's a number of projects that continue over two years, or over one year period. And so that would reduce the number that you would expect, it wouldn't be a straight multiplication of five. And the other reason is because quite a number of the

projects that we would expect to see in this category could be included in programmes, so they could be included in aggregated groups of programmes, up to $10 million. So again, that would have the effect of reducing the number of projects that you would see across the five years.

But it is acknowledged that it is going to be a substantial number of projects that have to be scrutinised ex-ante, but it has to be done once. Rather than doing it over five years, as will be the case under the settlement agreement, it's actually done once and then the allowance is set.

So after balancing the trade-offs and considering the characteristics of the project and the review burden it was concluded that the $1.5 million materiality level was a reasonable position, and that was proposed in the emerging view. I think at this point it would be good to hear and have a discussion on that materiality level.

CHAIR: The discussion will be led by Associate Commissioner David Caygill.

MR CAYGILL: Okay, so we thought we might do this in this way. We've identified a couple of issues that we thought we'd pose and maybe get your response relating to the issues that Bill's outlined. The level of flexibility, well, the two issues are the appropriate cut-offs for each type of capex and the level of flexibility for Transpower to substitute approved capex within those levels. If we deal perhaps with the substitution issue first and then come back to the cut-offs threshold issue.

In relation to substitution the Commission is of the view, the preliminary view obviously, that the nature and characteristics of relatively minor capex typically allows maintenance replacement and refurbishment programmes to be set out well in advance of need. Overall levels of these programmes of capex, as Bill has described, should be able to be reasonably accurately forecast years in advance. But in many cases the individual pieces of work that may make up this programme aren't going to be known until closer to the time of need.

The Commission considers that for this reason it should continue to provide approval for the category of minor capex as a whole rather than for individual projects. Capex within the category of minor projects therefore would be able to be substituted freely between projects. But the justification for allowing full substitution between types of expenditure, such as IST and on the other hand refurbishment, is less clear.

So our questions here are, firstly do you consider that Transpower should continue to be able to substitute minor capex without restriction, or that should there be some

limitation on the ability to substitute based on the type of capex.

And secondly, is there any reason why Transpower should be able to substitute approved IST projects with, say, replacement or refurbishment type projects within the minor capex category?

MR STRANGE: Perhaps I can make an overall comment and then Richard can get into the details. But I should register how far apart we are on this in terms of materiality. And if we read the assumption it means that over a three year programme, if we do a substitution of a $1.6 million circuit breaker replacement or something, we effectively have to come back and sort of clear that through a process.

Compare that to the Queensland situation, compare that to the CEO's own delegated authority, and compare that to the discussion we had yesterday about opex, which is a big bucket, and we can substitute pretty freely. I mean we go through a pretty tight scrutiny with the board etc, but I think my delegated's authority $5 million providing the overall capex is in budget. And the nature of 2 and $3 million budget is it's used reasonably widely, and we tell them after the fact etc, but we are going down here to a granularity which I really am very very uncomfortable with. And I would say look at, you know, look at the other extreme of Queensland.

A couple of comments before Richard gets into the detail. We're sympathetic to the view that IST versus good expenditure are two quite different categories. I don't think we've thought about it a huge amount but perhaps Richard can discuss. Substitution between those is certainly open for question.

But if you go back to what really is a major project, our view with things which would be contingent projects outside, the number's probably - it will depend on the nature of the project. We would suggest that the number is probably $50 million but there'd be an option between the Commission and/or Transpower to say there are certain types of projects, probably down to $20 million, which have particular impact on the market or are of a particular nature that we should treat those as contingent too, or because of the nature or because of their uncertainty.

And we would predict, I mean if we're getting more than, say, three or four contingent projects a year we're going to have real trouble, we just couldn't process those. I don't know how many we're doing with the EC at the moment, but I mean it's a pretty high loading to be more than five or six.

Those are my sort of top level comments, but I would say we're going to come

back and our submissions are going to be for a move much more towards good practise in Australia, which I think is working, and what we see as really a pretty interventionary and unnecessarily detailed and inflexible approach, which in good faith has been put up by the Commission.

MR FLETCHER: I don't necessarily want to go down to too much detail until we get into the detail. But I think there's a distinction needs to be made between the threshold for what is scrutinised and then approved and then capped and not allowed any substitution against, and the threshold above which the Commission would expect a more rigorous governance and planning and consultation process, which will be part of the role of the Commission to review that we'd applied that. So I don't think that you can just look at a threshold in isolation from what you're actually going to do with the projects at above or below that threshold.

MR CAYGILL: Perhaps one other question then about substitution. In respect of large project capex, our preliminary view is that we should continue the current process, which is to say that Transpower isn't able to substitute one approved project for another, and we just simply wanted to give you the opportunity of saying whether you agree that that's reasonable or you don't, in which case we'd be interested to know why.

MR FLETCHER: I think I'd just refer back, if the threshold was at the level that Patrick outlined and it included a certain type of project then that would be outside of the revenue, individually have a maximum allowed cost associated with it, and again it comes back to where the threshold is.

MR STRANGE: And the nature of those big projects, I mean are in many ways outside our control, they are driven by where market investment goes and generation in New Zealand, or by, you know, particular uncertainties about major load growth or something. So we think those are appropriate to be outside. But I'll say again, if we're considering sort of in a three year reset more than a dozen or more projects in there, I think we've created big problems for ourselves.

MR CAYGILL: So maybe, Mr Chair, if I come on to the threshold question then we can open it up to others. In relation to the threshold levels, the Commission seeks Transpower's views on, and the views of others, on what level of expenditure would be appropriate to define the cut-off between large and minor projects.

It's our view that the decision on this matter needs to take into account a number of factors, such as the number of projects being submitted for individual approval and the

practicalities around this. It should also take into account what size of project should appropriately receive additional regulatory scrutiny. Yet another consideration is the lessened incentive for Transpower to manage minor capex efficiently if Transpower was not to undertake a number of significant projects that have been allowed within the minor projects expenditure allowance.

Ultimately this will likely be a judgment call, but my question is approximately what size of project do you consider is too large to include in the minor project expenditure allowance within which substitutions would be allowed?

MR FLETCHER: I'll just answer that briefly. I think this issue of what constitutes a large project and therefore what requires more scrutiny has been on the agenda for 18 months or so, and I think we made a proposal to the Minister as part of the GPS consultation that the cut-off should be at $50 million.

But again it comes back to John's comment as to it depends on the nature of the project itself and the complexity of the project and the need for that project to be consulted on more fully. So you could put a rigid threshold or you could put a criteria against that. I think the GPS itself signalled $20 million as being the threshold, and I think that's consistent with what Patrick's just indicated.

Again it comes back to the practicality also, I mean on a number of projects which practically can be processed through the system both from Transpower's point of view and the Commission's point of view and the customers themselves in terms of undertaking that detailed scrutiny on a year, and I would say that the sort of numbers Bill's talking about, which is 40, 50, 60, from our point of view is totally impractical and unnecessary in fact.

MS PROCTER: Could I just make a point? At the moment through Part F we are putting on average the last two years around seven or eight projects up a year, which requires a regulatory overhead as it is. Under this proposal we'd be looking at at least an increase to 50 projects per year, which I just think would be a very large step increase in terms of your regulatory overhead.

MR HEAPS: In saying that, have you taken into account the point that the Commission made about commensurate with the size of project?

MS PROCTER: Yeah, that's another point I'd like to raise. It's in the current rules at the moment, commensurate analysis. The GIT is a very prescriptive test, it's very difficult to actually define what commensurate is. And it's something that we've struggled with for

the last four or five years, that we actually find that the level of analysis and the level of analysis that's required by the Regulator as well, it's very unclear what commensurate means.

MR HEAPS: However, if commensurate didn't impose any additional burden on Transpower, other than what you would expect to be good planning, good governance processes, would this then be an issue?

MS PROCTER: I guess you'd have to be quite prescriptive about what commensurate meant then.

MR STRANGE: You get to a governance point and we've got to look at the overall governance and what is the board's role, that's exactly what they're doing. So, you know, to answer the Associate Commissioner's question I do think the cap should be set at 50 personally, it's been proposed by some market participants, but with some guidelines, so that things as low as 20 at our nomination or at the Commerce Commission's nomination could go in that.

You know, there are some like a synchronous condenser replacement which, unless the world turns upside down, we need those synchronous condensers for the next 50 years in Wellington it's fairly routine. But there might be a $22 million enhancement in the Wairarapa which is hugely dependent on wind location, has quite a big impact on values for generators, and is also highly contingent because we don't know when the wind guys are going to get there. We might well propose that that one go into a contingent analysis.

MR CAYGILL: Can I put a slightly different way of thinking about this to you. It strikes me, thinking about the Australian approach, that you have there two processes. They recognise each other but they are separate, indeed they happen at different times. You've got the process for setting the total amount of capital expenditure that will be built into the regulatory base which will in turn set the amount of revenue that Transpower's allowed to earn. And then separately from that you've got a process relating to individual projects over a certain size which is essentially designed to answer the question, was an appropriate weighing of costs and benefits done in relation to these individual projects.

I wonder whether there aren't in fact two different sets of objectives here. The first being to make sure that the total amount of revenue that Transpower earns is not unfair to customers, but it seems to me that assessing the cost benefit of significant projects is not just about fairness to customers. Typically there might well be other

parties who have an interest in whether that enhancement occurs. So yes, they're interested in not being able to charge, but they're interested in other things as well. They might be generators or they might be a provider of an alternative means of meeting the particular need, there's an interest in whether the alternatives were assessed fairly.

So I wonder whether the right way of thinking about the threshold that should apply to the projects to which a cost benefit test should be applied, grid investment test to use our current terminology, isn't a question like at what point are the interests of third parties likely to be material? Does that make -

MR FLETCHER: It does make sense, and I do agree with your summary, but I don't think we're looking at a threshold above which a grid investment test or a cost benefit test would apply. I think even if the threshold was set, for example, say at $20 million, $30 million, even the projects below that and within the revenue envelope would still be subject to some form of cost benefit analysis, subject to the type of investment it was, in the same way that there are small projects which go through a lesser process in Australia.

So from my point of view, and I'm just, I guess, talking off-the-cuff, I think irrespective of where you set the threshold, it doesn't necessarily change the way that Transpower would progress and justify the projects either to the board or externally, it's a question of what you're including in the revenue envelope up-front and which ones you're not and which ones you're requiring a more detailed process to go through.

But I do agree, I think the two issues that you raise, there is the revenue setting process and then the process for progressing the projects are the two kind of - I agree with that.

MR CAYGILL: If the purpose of ensuring that a cost benefit analysis has been properly undertaken, if that purpose has already been achieved, in relation to projects above the threshold, whatever the threshold is, what additional purpose is served by subjecting those projects to scrutiny by the Commission?

MR FLETCHER: Sorry, I missed the point there. I think I agree with you, I don't know. **[Laughter]**

MR CAYGILL: It was a question, it wasn't a point. You suggested a second ago that the cost benefit analysis would in any event have already been done, it would have been done even in relation to projects below the threshold. So my question is well, if it's already been done and tested in some way, what else is the Commission looking at?

MR FLETCHER: The Commission's looking at - again it's a question of what level the

Commission interposes itself. The Commission would be satisfying itself that Transpower had the processes and the policies and the procedures in place that certain projects went through a certain route and certain governance and a certain approval, and that included a cost benefit analysis. And you wouldn't necessarily be looking then at individual projects and saying has each of these projects over this threshold gone through that process and then capping each project and not allowing substitution between those projects.

So it's what you're actually doing with it. You're satisfying yourself that the business is managing the business appropriately, it's got the processes in place and it's applying those processes in the forecasts that it's putting forward. And as Merryn said at the start of the period they will be forecast. But when they're progressed and actually delivered within the period, that detailed process would be applied to them. And that would be checked ex-post at the end of the period that that had happened.

MR STRANGE: I think we agree with you, David. But I come back to the, you know, sure there are some contingent projects and I think there'll probably be a dozen over the three year - and they will invariably be above 20 and I think most of them will be above 50, there won't be that many - Pole 3s don't come along very often.

But the rest of them fundamentally you sit and you look at a programme in quite some detail at the start of the three year session and you say, yeah, Transpower we've gone through that and that's a reasonable amount of money to spend, and then really you say to the company I mean what they're saying in Queensland really is well, you've got a responsibility for your standards of service and things, we reckon that $278 million that we approved is reasonable, and if you want to substitute and move as you go through, that's your business because you've got the latest information.

What we are adding in the New Zealand system, and we've accepted at least for a period is something they don't have in Queensland, which is an ex-post look, which is your safety valve. But what's being proposed here, as we see it, is sort of any change over $1.5 million has to go back to the EC through a process, and also not substitution between categories, taking IT away. I just think we're losing the plot.

MR DEVINE: Can I just ask a question of clarification. The Australian scheme, they agree the revenue and that's based on a series of proposed projects in various states of form, close in good information, further out lesser information. As I understand the proposal here we will have around 2,000 projects pre-approved before the revenue is set. That's, as I

understand, what we're proposing.

MR HEAPS: No, I'll explain later when I go through the minor projects one.

MR DEVINE: But all big projects would be pre-approved before they're accepted into the revenue one?

MR HEAPS: No, I'll explain that on the large projects ones when I come to the next one. But really there are, if you like, three subcategories. So there are the projects that are pre-approved ex-ante before the regulatory control period.

MR DEVINE: Whether they've started or not?

MR HEAPS: Yeah, that's correct, but they're approved forward expenditure during the regulatory control period, they've passed all Transpower's approvals and gone through a commensurate investment test, and they've also been compliant with Transpower's other policies such as procurement strategies and those sort of things.

The second category would be the contingent projects, so they're the projects that you were aware of before the RCP and you can put forward a list of those contingent projects and the triggers. And that they will be, if they occur during - they do actually occur, the triggers fire and they are undertaken during the RCP then they will be accepted in the wash-up.

And then there are projects which I've called emerging projects which will emerge during the RCP that you weren't aware of prior. And again they will be reviewed and accepted if they've passed Transpower's processes and procedures and are compliant with policy, but there will be, as I'll discuss in a bit of detail later, there would be some sort of financial consequence to Transpower of doing that. And it's just about when the expenditure would be included in the regulatory asset base and flow through to the MAR and prices so when you get a return on it.

So actually the way that it's structured is there are those three, so we considered that that gives Transpower quite a considerable degree of flexibility. So you can have projects that are pre-approved, contingent projects, and projects that just emerge during the period.

MR DEVINE: So at the start of the three year period we don't know what our revenue will be for the period?

MR HEAPS: No, that is set as the allowance for the projects that are accepted. So what you won't know is what the emerging projects are because you don't know what those emerging projects are.

MR DEVINE: Or the contingent projects?

MR HEAPS: That's right.

MR STRANGE: Or the projects that don't go ahead, it might have been all the way through an approval.

MR HEAPS: Well the projects that you don't go ahead with, so the planned projects that are approved that you don't go ahead with would be included in the wash-up, the ex-post wash-up, so that would be a claw-back.

MR STRANGE: I'd be interested in hearing the experts' view on it perhaps, but I mean I think it is a view of network planning that's sort of a little way away from reality. And what happens when you're doing out a third year project is the projects in the third year, you have all these enhancement projects; but then one of the contingent projects comes along and upgrades all 110 kV, we decide to do a massive upgrade of a 110 kV system in the Waikato, which is one of the big issues facing us; admittedly quite a number of the underlying projects, if we haven't upgraded the 110 kV system in the Waikato, will fall away and vice versa. So I just get a sense that this is just a little divorced from reality, to be blunt Bill. But I mean with your guys' permission I'd be interested in the experts' view.

CHAIR: Do the experts have a view?

MS YORK: I've got a couple of comments I might usefully contribute to your discussion. I know the regulatory test in Australia is a little bit separate from the revenue setting proposal, as David's rightly pointed out. But the thresholds that that test is applied to were reviewed a couple of years ago. Prior to them currently being set at 5 and 20 they were set at 1 and 10. And part of the discussion around the increase of those thresholds was not only how many projects there are and things like that, but about what you could get for that amount of money and what real options there are, what real alternatives there are.

So if you're looking at a threshold around $1.5 million, and I don't know what transmission assets cost in New Zealand, but we can't construct a capacitor bank at 110 kV for $1.5 million. So if we're down at that level of asset, you know, what alternative is there to a cap bank? You know, there might be an SVC or synchronous condenser, or, you know, all these are way higher.

So one of the reasonings that was in the debate about the thresholds in Australia was what are the real alternatives at that level. And does putting that out there and

looking for alternatives actually add any value to the process. Even at $20 million you can't establish a bulk supply point, a new bulk supply point as we refer to them, so a new kind of injection into the distributor's network for $20 million. So if all their transformers are overloaded, supplying a particular area, you can either add more transformers to an existing substation or establish a new one, and there'll be pros and cons of those.

And so long as that is going through a proper process of joint planning and we're looking at what are the alternatives with the distributor, because if we put more transformers in at one location, you know, they might have massive fault level problems down in their network so we actually need to establish a new one and radialise, you know, what are the real alternatives that you're actually comparing and what value is additional scrutiny and investigation adding to the ultimate decision.

So they were some of the things that were considered in setting the thresholds for the regulatory test when they were reviewed. I'm not sure whether somebody's got any alternatives for a cap bank.

MR CAYGILL: Was that issue, that examination you've just described, was that published? Is that a process that led to a report that we could look at and consider its applicability here?

MS YORK: It was a rule change proposal because those thresholds were actually in the rules.

MR CAYGILL: Yeah.

MS YORK: So there was a rule change proposal put forward because that's the only way we could change them, and there was a full consultation on where they should be set, what was proposed, how they reached the reasoning for the thresholds that were set. So all that would be on the AEMC's website under rule change. It was a couple of years ago.

MR CAYGILL: There's some material there we can look at.

MS YORK: Absolutely. The other comment I just thought might be useful is about the revenue determination process and the sampling of projects. I actually ran Powerlink's last revenue reset process as the Project Manager, the team leader, and I can't recall the exact numbers off the top of my head about how many projects were sampled for detailed scrutiny in the forward projection, but I think it might be, you know, 40 to 50 in total across the whole range.

And I don't know how the AER selects them, but they certainly look for a selection across the different drivers and the different dollar levels, so that they can test that not only are we applying good governance to large projects, but also good governance to small projects. So just as Transpower are indicating they do some kind of

analysis and justification for each and every project that they approved, commensurate with the level and different people can approve different projects, I can approve $2 million worth of capex so, you know, I'm not the Chief Executive or anything like that. So, you know, $1.5 million is not - we probably wouldn't put the term 'major' in front of a project that's $1.5 million, that's pretty small.

But, you know, it doesn't mean that the organisation should be able to get away without applying good governance, they need to apply good governance and that is appropriate, it is charges going through to consumers. So you need to be comfortable that that is actually occurring. But not huge numbers of projects sampled in the revenue determination process, it really is a sampling process. If you want to know the exact numbers I can look that up, but I mean you could count them in the consultant's reports from our revenue determination if you wanted to, and the level of scrutiny that they look at in each project is documented in the consultant's reports. So it's quite intense on each project, particularly the large ones, but they are looking for whether we followed our process.

CHAIR: Mr Scott?

MR SCOTT: Thank you, I won't duplicate the helpful comments from Merryn. I think it's very helpful to think about the number of projects that are referred, you know, because that reflects the effort both within the Regulator and on the company side in bringing forward projects for review. And something, you know, if we're talking numbers of 40 or 50, if that's in a year that's one a week, it doesn't sound practical to me, especially when we are talking in the scale of things of relatively minor projects.

Now it could be that in a period of relative stability on investment, incremental growth, fairly large numbers could be handled and cycled through because they'd be very similar, but I do think it warrants some fresh consideration here looking to the future. I can only see larger projects, more complex projects and new technology coming through, much more use of power electronics, much more integration between communications and ICT and the power grid. That separation we've had in the past is fast disappearing when I see projects elsewhere.

So the need to bring a level of comfort for the Regulator, I think, would be best done by setting thresholds, or defining projects to bring through a representative sample in, you know, a handful, and that that test really looks for has good governance been applied in the company rather than kind of repeating the whole process. Because my

view is that when you get competent people together they can always come up with a different way of analysing something, they can always ask more questions about the scenario assumptions and ask for the whole thing to be reworked, but in the bigger scale of things I do wonder how much value comes from that.

And it's back to my question I proposed earlier, make the board accountable, you know, probe and challenge the company here. And if you don't feel that their cost benefit techniques are right or their risk assessment in new technologies is right, press them on that and get them to do it. Don't repeat it yourselves because you then end up with just that painful process of reconciliation between different people's views all the time.

MS BEGG: Could I just ask the two experts, do you think there should be any constraints on substitutability for the large projects? Should it be fully flexible or should there be some size related constraint? It partly comes to this idea of headroom that if you had a large project which you substituted out that basically could relieve all the constraints on the smaller projects. I just wondered if you had any thoughts on that issue.

MS YORK: I'm not going to say what my personal opinion is but I'll try to talk through some of the ways in which the Australian system works that might inform your considerations within yourself. The Australian framework is really built around three different incentive arrangements, one is the capex, one is the opex and the efficiency benefit sharing scheme, and the other one is the service standards. So if a large project is proposed and it's really genuinely needed, then if we don't do it we're not going to be able to meet our service standards. So I think the substitutability needs to be considered in the context of the whole regulatory framework, not just solely looking at capex.

And it's the same with opex, if you're planning on replacing some equipment that's pretty ordinary and is costing you a lot in maintenance costs and you factored that into your opex forecast then if you don't do it you're going to get hit in your opex because your opex costs are going to be higher. So I think if all the incentive parts work together then there shouldn't be just an incentive to not do a large project so you can do a bunch more smaller ones, or if you can manage that and still strike the right - if the business can strike the right balance against all the incentives well that would be the right decision.

So from my perspective I think the complete substitutability is how the incentive is meant to work. That's certainly the AER's view. I mean I don't think anybody really isn't going to do all their IT, they're not going to not replace their desktops and laptop computer and their servers and things like that. So substitutability between IT and

network projects, I mean the history would say that doesn't really happen a lot.

The other thing I think that impacts on that is that the actual history is obviously a relevant factor in setting revenue allowances or allowances for the elements going forward. So it's about that revealing the true costs. If you justify in your IT programme that you need, I don't know, I'm just plucking a number out of the air, $10 million a year for IT expenditure and you only ever send 5 then in the next period you're only going to get 5. But if you really need 10 and you only spend 5 then you're going to have a much harder effort to make a case to jump it up, if you've got 10 and you've only spent 5.

So it is about the incentive framework, getting the business to reveal their true costs and their true needs, or working together.

MR SCOTT: It's an interesting question, you know, cancelling one large project and so on. My experience was it didn't happen really, and as long as you've got a good ex-post mechanism, you know, if there is some exceptional case I think there's usually a way of unpicking it, you know, afterwards. I'd caution against a lot of complexity, dividing things up into bands and types, that's just overhead really. I think you can provide yourself with a safety net for the rare cases when it arises.

CHAIR: Is there any other questions? Transpower or the experts?

MR WALL: I don't actually have a question - Ashley Wall, Genesis - but as a statement I think the $1.5 million is ridiculously low. The regulatory burden from it would be huge and it would certainly be a job for boys for the consultants in the world running around challenging Transpower on all of these projects. I mean the business should be able, as our experts here have said, if the business has got good processes and controls inside itself it will be making the right decisions. It will be justifying these things, they must go through an approval process.

There's a huge incentive for them not to spend the money that they have been given up-front, because if they don't spend it then they capture that benefit in the regulatory control period. Service levels are there to make sure that they do spend appropriately, the grid reliability standards are there to ensure that they invest appropriately. I think this level of burden would be huge and unnecessary.

MR CAYGILL: Sorry, Mr Chair, I sort of feel compelled to ask this question. And I will try and do it in the form of a question. Is there any other explanation for the $1.5 million than the fact it was the figure nominated by Transpower in the settlement agreement. That is to say it was the figure that Transpower volunteered as the threshold that it would

apply at the time in relation to Part F?

So I mean this is a genuine question. Have I got this wrong when I say that my understanding of where the $1.5 million came from, is simply that in the settlement agreement it was the threshold figure that Transpower indicated it would use as the point at which it would submit projects to the Electricity Commission for approval under the good investment test. In return in the settlement agreement the Commerce Commission agreed that if the EC had approved a project in terms of its rules, then on being notified of that approval it would agree to roll the figure into the regulated asset base.

I'm not for a moment arguing that $1.5 million was ever the right figure or should continue to be the figure going forward, but I mean it's got no science to it, it's got a piece of history. And have I correctly stated the history or have I got that garbled in some way?

MR FLETCHER: I think you've correctly stated the history. At the time the Commission was looking for oversight of all our capex and at the time the EGRs required certain investments to go through the grid investment test process. The question was asked did we apply a threshold as to what we submitted through to the Electricity Commission for approval and at the time we said well, really very small ones we don't because we've got so many going through at the moment so it's generally these, but they were the requirements at the time under the current EGRs. And I think, as Patrick mentioned, we obviously had an issue with the one size fits all approach of the EGRs, but that's a different matter I guess.

MR STRANGE: And it was before most of our time, yours too.

MR CAYGILL: Yes.

MR FLETCHER: Not mine unfortunately. **[Laughter]**

MR STRANGE: I'll talk to you about your salary review later. As I understand it was really the split between the Part F and the non-Part F, which I find somewhat artificial because they all go together. But we're now talking about applying a 1.5 even to the non-Part F projects, so it's not quite horses for courses. But I think that was the history.

MR HEAPS: I think again it might be worth just thinking of Genesis' comments as well. Just to summarise, that the $1.5 million materiality level wasn't expected - because remember I was presenting the long view - it's not expected to mean that projects above $1.5 million would be subject to full grid investment tests, that it was always considered that it was going to be a commensurate. And it was considered that all projects should undergo commensurate analysis and gain levels of approval that are commensurate with that

project.

The other side of that is the level of regulatory scrutiny that is applied, and it was considered that the regulatory scrutiny would be also commensurate with the size of the project. So obviously the major ones that are currently included under Part F would be subject to more regulatory scrutiny and assessment than the ones at the $5 million level.

So the whole scale was meant to be commensurate. It then just says, it comes down to well, what would you consider the level of project at which the Commission should have individual scrutiny rather than including the project in a whole bucket. And when we looked at the different levels for the number of projects it was considered that $1.5 million was a reasonable sum of money, you know, even taking into account the range of spend that Transpower has.

So $1.5 million was considered to be a reasonable sum of money, but that any evaluation of projects around $1.5 million, $5 million, the evaluation would be very much commensurate, which would involve looking at whether Transpower had actually applied its policies and processes and the investment tests cost benefit analysis sufficiently for that, to approve that expenditure. So I think we're sort of a bit hung up on what we currently have under the grid investment test and what is envisaged for the future.

But it was also considered that there is the high number of projects that potentially would fall in for an annual review, but that that wasn't different than the current level of analysis and individual project scrutiny that's currently carried out. So we considered that there wouldn't have been an increased burden on Transpower but there would have been an increased burden on the Commission to do the individual analysis in the year at the point of setting the allowance.

The other key issue that we considered we've canvassed quite a bit in there, is around the substitutability. And it was considered, as I said before, that there are some reasonably large projects that could be deferred and we have seen large projects being deferred, from year to year, that would swamp the bucket of minor projects. So again when we did the analysis on a historical basis it was felt that the $1.5 million level was reasonable to avoid the swamping of those, the distortion of any deferral of several million dollar projects from the ones in the bucket.

But when I come to describe the approaches we've also tried to build in flexibility, so whenever Transpower has a requirement to substitute it has an opportunity to do that.

CHAIR: Right, I am mindful we still have a lot to get through and we're slightly behind in the

agenda. What I propose is that I'll ask Bill to do a Commission presentation on the proposed approach for large projects and RCP2, then we'll adjourn for lunch and reconvene with a discussion after lunch. So if I could hand over to Bill.

DR BERRY: Actually before we start this can I just ask, I notice that Mr Matthes was potentially expressing a view on this materiality question. It just seems to me to be material to have some idea of MEUG's view, if you have one, Ralph, that you could share with us on materiality.

MR MATTHES: Yes, thanks Mark. I actually signalled just before David started talking and in fact David took my point, which was the $1.5 million is the status quo and that was my thinking. If you can demonstrate why we should shift from that in this what I see as a transitional period; I was very interested to see where Powerlink is now, maybe we'll get there in five years time, there's quite a bit of capability and I think confidence required by the parties around this table to get there and, you know, perhaps that's where we need to go.

It's also just a matter of practicality about the $1.5 million limit. I heard Transpower say that it might involve another 50 projects going up for additional bureaucracy, but in my mind that bureaucracy should already be embedded in Transpower, and all we're asking is to have a bit of transparency around it. If there's a few sort of no brainers in there let's just see it. I don't think it is quite as simple as an extra approval per week. These will be just batch processed. All we're asking for is a bit more transparency.

MR STRANGE: We're quite happy to provide the transparency, but I think the regulatory experience would argue, and I'd be interested in Merryn's views etc. I mean when you go beyond the company's processes and you put it up and you, you know, you have to respond to challenges from MEUG etc and various also self-interested parties, I'd never say MEUG was self-interested, there is a regulatory burden. History around the world, we're quite happy to be transparent, we're trying to put everything up on our website so everything's there. But to go through a batch test to take it out to a Regulator to go through consultation etc, show me a regulatory system in the world where that doesn't impose a significant regulatory burden is my challenge, and I think it's naive to think it doesn't.

MR FLETCHER: I think again we're kind of mixing the process that we go through to develop projects and the approval, the ex-ante approval of the revenue, which the framework is

designed to do.

CHAIR: Apologies, Mr Matthes, I didn't see your signal. Okay, if we have a 10 minute presentation from Bill.

LARGE CAPITAL EXPENDITURE

MR HEAPS: We've covered some of this previously during the discussion, but the purpose of this session is just to provide an overview of the proposed process for approval of capital expenditure allowance for large projects. The overview sets out the approach intended to apply in the longer term again. Transition mechanisms that may apply are discussed in the next session. So the key points to be covered are the proposed ex-ante approach to setting the allowance and the approval of the projects, the treatment of contingent projects and the treatment of emerging projects and the use of wash-ups.

So again, just to put the definitions around them; an ex-ante project is a project that is known about and planned prior to the RCP, contingent projects are projects that are well-known and are reasonably well developed but require some form of trigger to operate before they are actually implemented, and then emerging projects are those that aren't known prior to the regulatory control period but the need for them emerges during the RCP.

Wash-ups at the end of the RCP are adjustments to reflect under and over-runs and expenditure on projects not included in the maximum allowable revenue. They're intended to hold Transpower financially neutral, so be in the same financial position as if the expenditure had been included in the MAR at the time that the project was commissioned.

Again just to refresh your memory, what we've categorised as the large projects, the projects that are subject to an investment test, commensurate with the size of the project, they're the ones we're talking about now. I hope you can see this slide, it's a little bit low down there, but just to give you an overview of the proposed review process. Prior to the regulatory period Transpower provides large projects and contingent project lists and the supporting documentation for them. The assessment of those considers Transpower's application of the investment test and compliance with other relevant policies on an individual project basis. As I've said we would expect that that assessment is commensurate with the size of the projects.

The approval for individual large projects will be undertaken on an ex-ante basis and they will be included in the maximum allowable revenue. Contingent projects, and those emerging projects through the RCP, are assessed on an individual basis at the end of the RCP, and contingent projects are included in the wash-up. So just take note there that contingent projects are included in the wash-up and emerging projects aren't included in the wash-up in the long-term view. And that leads you to the individual projects allowances.

So just a summary of key points of how the proposal handles large projects. Large projects include both RRE and IST. There is an expectation that projects in the large project category will be able to be submitted ex-ante, but there's also an acknowledgment that some may emerge during the RCP. Transpower needs to demonstrate that the projects have been submitted to an investment test that's commensurate with the project size and also demonstrate that appropriate policy and processes, for example procurement, have been complied with and completed.

Contingent projects and triggers are to be identified ex-ante and wash-up provisions will be included. Again note only contingent projects included in the wash-up. Emerging projects will not be included in the wash-up but will be included in the regulatory asset base and the MAR for the subsequent regulatory control period. Expenditure approval is specific for each project, but note that projects can be submitted at any time during the RCP. Large projects that are not commissioned in the period that they're forecast to be are included in the wash-up. So if there's an under-spend and they're not commissioned then that is included in the wash-up.

Just to work through a chart that may explain this. So first of all for ex-ante projects detailed information is provided and submitted over a period, it's not considered immediately before the RCP so there is a period there through which the assessment can be undertaken. So individual assessment is made of each of those on the ex-ante projects list that come through. Individual project approval will be given ex-ante.

Approved projects that have successfully completed the investment test will be accepted for inclusion in the MAR. They're included in the MAR and at the end of the regulatory control period there is a wash-up, so the wash-up provisions adjust for legitimate under and over-spends, and projects not commissioned in the RCP are included in the wash-up.

Then we have contingent projects, so contingent projects is submitted over a

period, and again not just immediately before, prior to the RCP, so the evaluation can take place, the assessment can take place over a period. So the contingent project list is then assessed, and individual contingent projects are approved. Contingent projects that have successfully completed investment test during the RCP are approved.

They are included in the wash-up provision, so approved contingent projects undertaken during the RCP are included in the regulatory asset base, and they're used to establish the maximum allowable revenue in the subsequent regulatory control period. But the wash-up allows this to be financially neutral for Transpower. So it takes account of the return on the assets for the period from when commissioning took place, the actual spend occurred, and the end of the first regulatory control period. So the wash-up's intended to hold Transpower financially neutral for contingent projects.

Then there are projects that may emerge during the five years through the RCP. And for those projects that they've completed the required process stages and approvals during the RCP but they weren't approved ex-ante and they're not contingent projects, then they're subject to individual project approval. Projects that have successfully completed the investment tests are accepted for inclusion in the MAR, and then there will be no wash-up. So approved emerging projects are accepted for inclusion in the regulatory asset base which is to be used to establish the MAR in the subsequent RCP.

So basically the difference between the contingent projects and the emerging projects is that the contingent projects will be included in the wash-up that holds Transpower financially neutral; for the emerging projects Transpower will have to wait to the subsequent regulatory control period to get a return on those assets. So there is a consequence of not including the emerging projects in the ex-ante or the contingent project list, which is considered to give some discipline on Transpower to the extent possible, project, predict and forecast large projects ahead of the regulatory control period.

So again we consider that this gives Transpower flexibility to handle projects that emerge during the period, to be able to substitute and change projects as they move through the regulatory control period, but that there is a discipline on Transpower to the extent possible to be able to forecast accurately the projects that it will undertake ex-ante prior to the regulatory control period. I might just leave that slide up as we move into discussion.

CHAIR: Are there any points of clarification that are required? **[No comments]** If not then we

will adjourn for lunch. We'll have to have an hour, so if we can reconvene back at 1.20. Thank you.

Lunch Adjournment from 12.20 pm to 1.19 pm

CHAIR: Good afternoon ladies and gentlemen, and welcome back. You hopefully will recall Bill's presentation just before lunch on the proposed approach for large projects. We'll now going into the discussion phase. It will be led by Commissioner Sue Begg discussing the ex-ante approach. Commissioner Begg.

MS BEGG: Thank you. Just focusing on large projects and the longer term, so not the transition issues but where we hope to get to in the future, maybe second or third regulatory period. My question is what should we be able to expect from a business such as Transpower in terms of best industry practice, in terms of its ability to be able to forecast capital expenditure five years ahead for large projects? Just noting of course that an allowance is being proposed for contingent projects and we're also proposing to treat minor projects separately.

So the question is, in the long-term how far ahead should the Commission reasonably expect Transpower to be able to submit for approval one-off large individual capital expenditure projects? And I'd just also note is this going to depend somewhat on the scale of the project and the nature of the project, and will the degree of certainty differ over the term of that forecast period. So I'd appreciate if Transpower could respond.

MR SIMPSON: I think we need to look at this from two perspectives. I think there's a planning perspective where you can look at load forecasting and things like that, so there's probably a little bit more certainty perhaps than looking at long-term load forecasting and the annual planning report process. In terms of forecasting, say, a conductor replacement project that's very much based on condition assessment, we might not know five or six years out whether the conductor needs to be replaced on that year because we'll be monitoring the condition as it goes and seeing well has it got to the point where it's reached the replacement criteria or not.

So I think it's horses for courses, I think, in terms of certainty. We may well be able to have a view about the quantum of reconductoring work we might want to do, but we might not be able to say which one it was. So it's a balance about how far ahead you can see. Certainly on the planning front I think it's better and easier because you can say

well what's the historical known load forecasting, 2 percent or 1 percent, so then you can say well, the system replacement, you know, needs to be enhanced at that point.

MS BEGG: In terms of your overall work programme, though, what sort of proportion would you say was reasonably predictable and forecastable versus the proportion that's not?

MR SIMPSON: I think I'd perhaps need to just ask from Siobhan's point of view what's the GUP part of it, because I think that's a fairly large lump in dollars, the rest of it's probably in the remaining 30 percent.

MS PROCTER: Yeah, from a Part F perspective new line build we require seven years in advance we need to really know what we're doing. Reconductoring duplexing would be probably three to five years and probably the same for transformer replacement. So we have a view ahead of time now. We would anticipate that that would actually get better as time goes on as well, once we get - the last few years we've been dealing with projects that we have to do from a reliability perspective, so we should be moving into a more predictable planning phase over the next few years I would think.

MS BEGG: I wonder if I could ask Powerlink in terms of their experience comparing what they forecast and what their out-turn was, what sort of proportion of projects were substituted in, I guess, that weren't in the original forecast. Just obviously it might be tricky to give that in precise terms but just in broad -

MS YORK: Yeah, I don't have the precise information to hand, but certainly in our first couple of years of this current regulatory period, we've experienced some challenges getting some projects completed, things which were beyond our control like extreme wet weather in North Queensland and flooding and things like that. And those kind of things that come from left field may happen or may not happen. We're now going through a good period where we haven't had a lot of wet weather and our projects are getting completed in the timeframes that we forecast.

MS BEGG: So that's projects that you had forecast and it's a matter of conditions allowing them to be completed rather than different projects?

MS YORK: That's right, that's line build projects that were in our allowances and some of them even approved and underway at the time of our revenue determination that just didn't get completed because of wet weather largely. We had significant floods around the McKay area in North Queensland which just meant those projects, you just couldn't get anywhere, couldn't do anything. Any time they dug a hole it caved in because it was full of water. So there are some extreme circumstances where things happen and you're not going to

necessarily be able to do what you planned to do.

We've also had instances since the revenue determination like our telecommunications equipment which at eight years old, you know, the level of call-outs and repairs to that equipment just went through the roof and so we've got to replan our telecommunications programme so that we replace that equipment. It's only eight years old, we've got notionally a 15 year life but it's certainly not going to last the distance. So we've got to substitute in a project to replace that, get some spare parts, use those spare parts on other parts of the telecommunications network while we gradually replace all that, and it's all going to end up being replaced before its notional 15 year life. So things like that do happen.

MS BEGG: How significant is it in terms of the overall forecast, though, just the ones that are brought in that weren't originally forecast?

MS YORK: It's going to be more than probably, you know, certainly more than 5 percent of the programme, you know, maybe somewhere between 5 and 15 depending on what actually happens in any year. That's just off the top of my head, I don't have any numbers or anything to support that, but that's the kind of thing we can experience.

MS BEGG: Okay, that's helpful thanks. This really is going to the question as to whether the Commission should require Transpower to have sought regulatory approval for all large projects that aren't contingent projects prior to the determination of the revenue for the regulatory period. So I just wonder if Transpower would like to comment on that, how able it would be to forecast the projects that are going to be -

MR STRANGE: I think for a three year set it's impractical. It will vary, I mean if it's a transformer replacement project you've probably got an 18 month, 2 year just manufacturing delivery time. So to get it commissioned in that period you probably are going to have a business case. But then you go into some reconductoring work or something which you think is going to be in the third year. Whether it actually ends up occurring in the second year or the fifth year is quite fluid, it will depend on resource, it will depend on land access.

In New Zealand one dry hydro season will wipe almost a season off us. Even right now the Contact outage has just turned us upside down in terms of our programme around Auckland because it's been a three month outage. But funnily the macro spend on that sort of - so the big ticket items tend to go sort of reasonably firmly, the transformer's ordered and you know that Siemens is going to deliver it within plus or minus three

months out in two years time.

But there tends to be quite a lot of substitution around line work etc. Though funnily enough the macro amount tends to stay the same because you've got the same amount of work crews using the same amount of equipment, they just tend to move around the network and do it elsewhere.

So individual projects I think probably, looking to Kieran and Bob, quite a lot of substitution. But the macro, it's really an ordering - projects get pushed out, other projects come forward and then I mean we get the unknown unknowns. I think last night or the night before, Kieran, we had a copper conductor, 110 kV fail in Karapiro which we didn't think was in bad shape. We knew we had to replace it all, and it came down across an 11 kV line so we've probably caused a lot of damage. That will cause probably an emergency project looking at the condition of that whole conductor. We might see 5 or $10 million reconductoring in the Waikato and it will possibly mean we have to bring forward the whole Waikato 110 kV upgrade. So that's an unknown unknown. We've done condition assessments on it, we thought we had a few years and 24 hours ago our mind was totally changed.

However, I do - funnily enough that's why we're happier with a cap and a forecast programme. There will be a high substitution but the macro spend doesn't actually vary so hugely because there's only so many crews, so much work that can be done.

MS BEGG: So in terms of giving us comfort that your forecasts are reasonable, you're basically saying that you're not going to be able to forecast the individual projects, although you'll be able to forecast presumably large major work, but that you've got a capacity to undertake work and your forecasts will largely reflect that?

MR STRANGE: It will largely. We've put it in scale. Really, and I'm just looking at Kieran's numbers from earlier, if we take out the big contingent projects, and sure we're spending nearly a billion a year, but you take Pole 3, NAIGU, NAAN out of that. In this sort of small Part F and non-Part F space we're probably forecasting $200 million, a bit more a year. And that's spending I think, you know, all these substitution, the first year a lot of the business cases will be done, the second year they probably won't be in the business case but forecasts will be there. That 200, 220 will stay the same, reasonably the same, that's why we're happiest with the bucket.

And what we're trying to get into too, a huge problem with our cost of line work, particularly in the field, that our contractors are seeing lumpy work. And it's already

lumpy because we're seasonal, we can't work through a lot of the winter because of the loads on the network and the conditions out there. Increasingly we have outages from generators in the summer constrains us.

What we're trying to do is to give them a sort of bow wave of work so that they can plan their resources over the next two three years. So we can say to them well we need to reconductor this class of conductor over the next four years, come back to us, and we don't really mind whether A is done in year 1 and 3 and substitute. And there's huge benefits from doing that, they start to be prepared to compete with Queensland and stop them stealing our linemen, which is the game we're in.

And to put it in perspective, I mean it is I think about 200, $250 million a year we're talking about. It's more stable opex, I totally grant that, but yesterday we were talking about opex, a big part of which is maintenance. Basically of the order of, I don't know, a bit over $200 million a year, which is totally ex-ante for three years, totally a bucket approach, we substitute, and it is more stable than capex. But it's why we think for this class of capex, which is of a similar order of money, we should be really adopting the same approach.

MS BEGG: So to what extent then would you provide information on individual projects ahead of time to help inform, you know, prior to the regulatory period, to help inform us as to the reasonableness, I guess, of your approach, if you're looking for a bucket approach?

MR STRANGE: Well the forecasts a-la Queensland would be totally made up on, I mean they've probably got more sophisticated slightly than we can be right now. But as I understand it, I mean they've got quite a suite of projects sitting there in their forecast plan, some of which get weightings to them because you don't know which scenarios develop. I mean I would hope in a second regulatory reset we'd be right there, the first one will be a long way away along the line. So each individual project making up the forecast would be in that plan but there wouldn't be a business case.

But I think equally important is our reporting, and our game's lifting a lot, we've still got a long way to go. I mean we think in terms of status of these projects and decisions, given web etc, we should be and can be totally transparent, so that everybody can monitor, you know, where we're substituting and what we're doing. There's no downside to that at all.

MS BEGG: Thank you. So one of your main concerns with the Commission's proposed approach would be the suggestion that projects that aren't approved prior to the period are

only allowed into the regulatory asset base in the next regulatory period. So if a project comes up during the period and you go through the process of approval etc, and it's only allowed into the next regulatory project, you'll forego some return on capital etc if it's commissioned in that period, that would be a concern?

MR STRANGE: That's certainly part of the concern, but the bigger concern is the process. That, you know, basically we're going to have to come back and go through a process, and it is a regulatory process, to revisit everything over $1.5 million. And, you know, as good, and may have been good, you know, as Strata and we can be, that is a regulatory overhead and a regulatory process which I just will say bluntly I think is unnecessary and inappropriate.

MS BEGG: So if there's a project that you wanted to substitute in during a period and it was, say, $10 million and not $1.5 million, do you think there should be any process whereby the Regulator is involved in approving that, or do you think you should have the discretion within your bucket to do what you like?

MR STRANGE: At $10 million I think we should be open about it and inform people, but in principle, regulation we should have a discretion to do that. It's us trying to -

MS BEGG: If it's $50 million you'd -

MR STRANGE: I mean $50 million, we don't have many, I mean -

MS PROCTER: Six in the next two years.

MR STRANGE: Six in the next two years. There's tending to be more because we're aggregating what used to be individual projects. And a lot of those are less easy to predict the timing of etc, because they're influenced by generator location and the like. I think they would tend to be either contingent projects, which is probably the best, so they would follow their own path. A bit like Part F now, though, I think it can be a lot simpler. And that will largely address it.

There would be very few projects over sort of $20 million and under the normal Part F I would have thought, non-Part F. I mean synchronous condensers are one of the exceptions, 35, $40 million. And we won't even know, I mean we say that that's easy and you can predict it; the reality is we won't know what we're spending on the synchronous condensers in large part until we take the face plates of what we have. I mean sitting rumbling around there for 20 or 30 or 40 years and it's going to be hugely condition dependent.

MR FLETCHER: Can I just add, just to answer your point about substituting a $10 million

project; if there's a $10 million project forecast to be in the plan at the time when you set the revenue and then that doesn't happen, for whatever reason, but it's substituted with another unplanned $10 million project, that project, that substitute project would still be required to go through whatever process is required under the rules for us to develop that process, be it consultation, be it a very formal GIT test or whatever. And so as long as we follow that process I think our position is that we should be able to substitute within the cap that's been set.

MS BEGG: Thanks. One concern obviously we have is Transpower's ability to forecast its capital expenditure, this is based on historic issues. And I just wonder if we give you a big bucket where you're allowed to substitute, does that take away an incentive for you to actually improve those forecasting processes and planning processes?

MR STRANGE: Good question. I think quite the reverse. The minute you put incentives - I mean if you try and say well, you know, put a tight process on that approves project by project you get into a regulatory game. And your focus goes not necessarily on the planning, the focus goes on making sure you get through the Regulator on individual projects.

If you've got $200 million in the bucket and, you know, it's not easy, we've got to keep the lights on, and you've got three years, I tell you the board and the governance and CEO will be requiring a very very high degree of planning, because we've got the incentive to get it right and we've got the penalty if we get it wrong.

Nothing worse than getting - you know, you've got a few projects to finish in the last year and an unknown unknown comes along, we drop a conductor and we're faced with having to spend another $40 million in the Waikato. Because fundamentally, that would be money that goes from the shareholders pocket. So my view is that with the approach that Queensland's got is the way you incent the company to actually improve its planning processes.

MR FLETCHER: I think we recognise the historical issue with the forecasts and that's a reflection of the business planning cycle we've previously operated to. Kieran mentioned the initiatives which are in place to kind of improve that and get the asset strategies and long-term integrated planning. And that's one of the reasons why we propose, and I think very early on in this process the ex-post review at the end of this period, at least for the transition period, was to enable any - to provide the Commission with the comfort that they could claw-back material forecast variances.

I guess it begs the question how that ex-post review will reward legitimate efficiency savings over that period, but I guess the design of the ex-post review will address that. But that's specifically why it was in for that period.

MS BEGG: Okay, thanks. Did any - Bob?

MR SIMPSON: Just to put one more thing into context; the numbers Kieran presented this morning which looked at unplanned and Bill was focussing on the unplanned part, I think we need to understand what we mean by unplanned. If a job starts one year and gets moved to another year that automatically becomes unplanned. So the view I think in the past has been it's a one year view, what was planned in that year, did you do it in that year? And we might bring work forward, like the grillages work, you know, we were asked by the Government to look at what issues we could do to bring work forward. So that actually became unplanned because it got put forward to a year ahead.

So the question about how you categorise work and what is really unplanned and what is planned, because I think you can get the wrong conclusion if you don't look at it from the right perspective.

MS BEGG: In a five year regulatory period obviously you have more flexibility about the timing, so hopefully that becomes less of an issue.

MR SIMPSON: Yeah, so you'd have a five year view not an annual view which you look at through one particular window.

MS BEGG: Okay, thank you. Anyone else?

MR WALL: Yes, I have a comment. From the substitution point of view, if you're a commercial business like Genesis you can only spend so much capital in a year, you get a capital forecast that you can spend. You've planned your business out five to seven years and you've got a capital spend priority list in there. But as things unfold in your business, as your business changes, as things happen, as your assets change state, you have to reprioritise that work all of the time.

We've just gone through a relatively big piece of work where we planned to replace some stators and rotors in the Rangipo machines and we're also looking at transformer replacement and Tokaanu. Now we were going to do the stators first because we thought they were the greatest risk, the transformers had a lower risk. Condition monitoring is now saying that we've got to reverse those, so we're suddenly scrambling around doing contracts today that we were planning to do in a year's time.

You know, the capital spend is the same over the five year period, but we're

spending it in a different order. And you've got to be able to be flexible enough in a business to be able to reprioritise to maximise the benefit of your business. I think that's what Transpower's asking the ability to do.

CHAIR: I'll turn over to Associate Commissioner David Caygill.

MR CAYGILL: I just wanted to explore one issue relating to wash-ups. At the moment in relation to large projects, Part F projects, they're typically approved on a P90 basis. Presumably the cost estimates you're likely to be using in future will be something similar. I mean there's a degree of uncertainty, you look at the range and you take a figure like the P90. But my question is, if you continue to do that, or if we continue to expect you to do it, actually is it reasonable that there should be a regulatory wash-up when there was a degree of probabilisation around the original number? Does that make sense?

MR STRANGE: Yeah, I think I can start and Richard can make a comment. First of all I think, you know, I think in the long-term wash-ups are undesirable. We'd certainly prefer an ex-ante because there's protection in a transition period for both Transpower and the Commission. In terms of how we forecast projects, I mean the forecasts should be across an aggregate, the expected outcome. And I was interested, and we'll probably take it up with Powerlink, Merryn referring to some statistical stuff you did. We have a P50 and we have a P90, but the reality is the expected outcome is probably somewhere between the P50 and the P90. Because projects only ever go one way. They're never under budget, they're usually late and you get more IDC.

It gets much easier when you're approving a forecast bucket, because the overs and the unders wash out. The issue we have with the current one, with the EC, is one project in 10 goes over the P90, and EC's been very good when we come back, but of course we don't get any credit for the three or four out of the ten that are way under the P90. Under a bucket you end up with whatever the probable outcome is, P70, and you take the risk.

MR SIM: Someone made the comment earlier that, I can't remember who, but that some of the larger projects, the really massive projects, are unlikely to get substituted out or substituted with other projects. And I know that we've been talking about Transpower obviously needing to have the flexibility to move projects around and substitute within a bucket, which is what we've proposed for - setting aside the cut-off level for a moment - we've proposed that Transpower should retain the bucket and be able to substitute freely

as it sees fit. And we've also, I think the comment was that the large projects would never be substituted.

So I guess my question is, where is that boundary between where substitution may become necessary? Is it a $100 million project, or is that still far too big, that if you got that approved you would never substitute that for another thing within a five year period; or is it a $50 million project, or is that still too big?

So I'm interested to hear where you think that cut-off may be for where the substitutability is needed, as opposed to where the extra level of scrutiny. So we can talk about a $1.5 million cut-off, which is really for where the Commission might start looking at doing project approvals, but just in terms of where you need the substitutability, where would that boundary be?

MR SIMPSON: I think the question perhaps just to ask in return first before we perhaps - if I could just clarify; are we talking about a one year bucket or a three year bucket?

MR SIM: I think we're confusing again the - the three year bucket we're talking about is only for the minor projects. What we're trying to - what we started off talking about here was the long-term regulatory picture for where we should be getting to for those larger projects, so the Part F, what's currently Part F. So in terms of substituting one Part F project for another Part F project, is that really necessary?

MR FLETCHER: We come back to the point we made earlier, or our proposal for where that threshold could or should be, which is the 30, 40, $50 million and above large projects. And below that within the bucket, or envelope as I prefer to call it, I find it a bit vulgar a bucket, but I think we should - I'll get over it.

MR SIM: So are you suggesting that it's necessary to substitute a $50 million project out, so if you're part way through a five year control period that you should be able to substitute a $50 million project for other capex?

MR FLETCHER: I suspect that if that was the case, for example then, you know, there would be a very specific reason as to why that less than $50 million project didn't occur as planned, and that would be taken into account by the Commission at the end of the period, during the review.

MR SIM: So you're suggesting that a wash-up would be necessary then?

MR FLETCHER: Well I think in that circumstance, yeah, I think it would, that's why we have the wash-up facility.

MR SIM: I thought it was just proposed earlier that we should be aiming in the long-term to

avoid wash-ups.

MR DEVINE: Just to sort of clarify, a delay of a project, or the substitution of a project that size is more likely to be a delay than an actual - we're talking some reasonably significant event that's probably demand driven that we may shift in time and refine for a later date as conditions change.

I think John expressed it reasonably well, there are some known unknowns that are best dealt with by exception. As I understand a wash-up, basically everything is done line by line at the end of the period and evaluated. By exception says that there are going to be some things that are really known unknowns that are reasonably dealt with as a one-off at the time. And that's what I would see that the very large projects that, for whatever reason, get either, well substituted is the word in a financial sense, but actually in reality are likely to be time delayed.

MR SIM: Sure. Okay, so if I can just clarify. What you're suggesting is it's necessary for Transpower to have the flexibility to defer projects, and perhaps, I guess, the Commission needs to consider how it responds to a project that's been deferred. But if it's been deferred from one control period to another, so from year 4 or 5 into year 1 of the following control period, are you saying that in year 4 or 5 Transpower should have the ability to take the $50 million project that was deferred and spend that on something else?

MR DEVINE: Provided the replacement projects go through due process. There should be no difference to the Regulator for that outcome.

MR SIM: At the moment what we've proposed is that any additional projects that were required would be submitted for approval, so that extra $50 million project that was deemed necessary and you would have substituted; so are you suggesting that you shouldn't bring that through for regulatory approval? Because we have also proposed that there is another mechanism for how you would recover that separately, so Transpower still has the flexibility. Do you follow my question?

MR DEVINE: You have a $50 million project you've delayed for some reason, for a valid reason, you may replace it with another $50 million project and that would go through due process and if that required regulatory approval that would be done. If it was made up of five $10 million projects and the cut-off was 20 they would go through due process inside Transpower and then basically be approved by Transpower, and then effectively the Regulator would look at them after the event for the reset for the next period.

MR FLETCHER: I think it's an unlikely scenario as well, we have the three year period, we

have a $50 million project, if it hasn't already progressed at the time before the period starts then it's a new project, it's unlikely to be commissioned in year, 1, 2, possibly 3 if it's a large project. So the impact on the overall revenue cap is a return, you know, an assumed commissioning date in year 3 of the period. So although it sounds a lot, the $50 million project, it's more likely to be deferred a year and towards the end of the period where it will be impacting on the revenue.

MR SIM: I guess that's where I was trying to lead to, is because it's actually going to be undertaken in the impact on the revenues from other projects, is not going to have that much impact on Transpower; should that be included in the bucket of the smaller capital expenditure which has quite an impact on the incentives to manage within that bucket?

So if it was deferred in the later years it takes all of the pressure off Transpower to efficiently manage the smaller bucket of capital. Which is why I'm trying to clarify the size of those large projects that should be allowed to go into the small bucket. Because in my mind I can't see why there isn't sufficient flexibility for Transpower, given that there's enough processes around deferring and bringing in new projects when it has such an impact on the small category, the minor projects category.

MR SIMPSON: It comes back to the point I made earlier on, is it the $50 million or $20 million? It's that criteria that we're working from I think.

MR STRANGE: And I think we have to think - I think we're boxing at straws a bit here. I mean the reality is anything of the order of $50 million is probably going to take five years to build anyway. So, you know, it's going to have to be committed and well through the gap at that point anyway. And we'll have very - I think we'll have very very few projects over $20 million that are not contingent projects under the New Zealand scene, which is somewhat different to Powerlink. You know, the exceptions will be synchronous condensers and perhaps the odd GXP.

So I think we're more arguing what about $15 million projects, or before Bill mentioned a $7 million project as having an impact on a bucket. I think, you know, $7 million projects and $15 million projects absolutely should be in the bucket. If Transpower in the third year of the reset says look in terms of prioritising our spending we should defer that $15 million reconductoring or something because we can spend the $15 million more effectively over here, Transpower should be able to do that, and should do it.

And as I think Merryn said earlier, I mean I think Powerlink does that in its last

years, and often those deferred projects come back into the revenue reset for the next period. It seems to work. But I think talking $50 million - I mean how many projects do we have between 20 and 50?

MS PROCTER: Very few.

MR STRANGE: Very few. Most of the bucket ones we're talking about are sort of, you know, the big reconductorings are probably 15, $20 million, very big ones. Once we get beyond that we're getting into long-term projects, you know, duplexing in the South Island if that gets approval is, I don't know, $150 million. It will be three years before we even get foot on the ground, we've got to talk to a few farmers. So there's very few projects over sort of $25 million that are not going to take several years to order and get on the ground. They'll span your regulatory period.

MR SIM: Okay, so back on to wash-ups then, in the long-term, so not in the first one or two control periods, and assuming, well, whether we have substitution or not, are you saying that we should not be going to wash-ups?

MR STRANGE: My personal view long-term is wash-ups are undesirable, it should be like opex and should be all ex-ante. But we've virtually proposed or agreed with the Commission, I think, in that first three year term that for protection for both, given the uncertainty and the state of the New Zealand network, that there be an ex-post review. I don't know if I'd call it a wash-up.

MR FLETCHER: It's an ex-post review.

MR STRANGE: It's an ex-post review which is different to the wash-up.

MR FLETCHER: Yeah, with claw-back in the first period. That's the important thing, it's not just a review to inform the future, it's actually a review back just for material forecast variances, if there were variances as a result of material forecast inaccuracies. So if we recovered more revenue in that first period than we should have done due to forecasts being materially wrong, the ex-post review would adjust the revenue in the forward period for that excess revenue in the first period.

But then we're moving to a situation where we're getting to a position where there's more confidence in long-term forecasts, there's more confidence in the process which underpin those forecasts. A forecast is made in the second period based on what is deemed to be a reasonable forecast, and then the company and the Regulator lives with that determination. So there'd be no claw-back in the second period. But it's based on having more confidence in the forecasts themselves.

MR SIM: Okay.

MR FLETCHER: Which I think is the Australian approach.

MR CAYGILL: Switching topics, although we've partly been talking about it in the last few minutes. Is it Transpower's view that it would be useful to have an explicit category of capital expenditure called, if you like, contingent projects, along the lines of at least, well, I think I understand is the system in Queensland. So if some external contingency occurs, perhaps a generator gets a resource consent that you can't know at the start of the period they will or they won't, if they did then you would undertake the project, if not you wouldn't. Is that a useful thing to do?

MR STRANGE: Yes, I think we need to have contingent projects and probably always will need to have in the New Zealand system. But I think we really, and they're a bit like the very big Part F projects, and I do think we should look at the Queensland system where the company drives the consultation etc, and we leave the Regulator, but that's a different issue.

MR CAYGILL: Different issue.

MR STRANGE: But yes, I think we'll always need them, but if we get them over sort of five or six in a regulatory period we're making a mistake. And that's a lot.

MR CAYGILL: That's good.

MS BEGG: I think we've covered wash-ups, I'll just check if staff had any extra points? **[No comments]**

CHAIR: I'll ask Bill to talk about the transitional mechanisms for large projects in RCP1.

MR HEAPS: Okay, this won't be hopefully quite as long as the other presentations, because I have only a couple of slides. I've tried to ensure that this is visual, so you can see the transition period before your eyes. So the purpose is to provide a summary of the proposed transition mechanisms being considered for RCP1. You'll recall this is the chart that I included in the large projects long-term approach.

So I thought what I'd do is put the long-term approach and then there's basically the only one transition mechanism proposed at the moment, and that's down at the bottom right-hand corner. So you'll see for that one that now the emerging projects are those projects that you weren't aware of, Transpower wasn't aware of before the regulatory control period, are actually included in the wash-up provisions that Transpower has held neutral, financially neutral for those projects.

So basically ex-ante the projects get approved and included in the MAR and there

is a wash-up of unders and overs. Contingent project list, if the contingent projects go ahead the triggers fire and they go ahead, then they're included in the wash-up provision and included in the regulatory asset base and the MAR for the following regulatory control period, but within the wash-up Transpower is held financially neutral for the timing of the investment that was made.

For emerging projects, providing they've gained all approvals and followed the required processes, then they will also be included in the regulatory asset base at the end of the RCP and included in the MAR for the following RCP, and they will be included in the financially neutral wash-up. So that was the transition mechanism that's proposed for large projects.

CHAIR: Questions?

MR STRANGE: I think all our comments we were talking about earlier just apply to this, we don't need to go over old ground really.

MR HEAPS: Yeah, I think if there's just any other transition mechanisms that you think should be applied and whether it's appropriate to include the large projects in the wash-up.

MR FLETCHER: It's difficult without just repeating what we said this morning. I think we have the transitional approach, we have the - I mean our view very simplistically is large projects should be outside of the ex-ante forecast and they can be treated as contingent projects and we'd identify those up-front, we'd put a forecast of our three year capex expenditure to the Commission and we subject that to an independent review and it's substantiated based on the process. The revenue envelope is determined.

The wash-up at the end is - and allowances are made based on that forecast; we can set certainty of revenue for three years for customers etc, with the assurance that any material variance against that will be clawed back and adjusted in future revenues. So I think the wash-up, we've already discussed the wash-up, that's just as a very quick summary of our position. So I don't know if there's merit in commenting on this in any more detail.

CHAIR: Okay, before we leave large expenditure, does MEUG or Genesis or Meridian or anyone else have any comments they'd like to make of the discussion in the last half hour or so? **[No comments]** Okay, thank you. We'll call Bill back to talk about the proposed approach for minor projects in RCP2.

MINOR CAPITAL EXPENDITURE

MR HEAPS: The purpose of this session is to provide an overview of the proposed process for the review of Transpower's minor projects capital expenditure proposals. The overview sets out the approach intended to apply to the longer term transitional mechanisms, as I did for the larger projects that may apply I'll discuss in the next session, so please remember this is the longer term view.

Just to put it in context for the earlier slide that I put up, we're now talking about the minor projects and this is where the Commission's focus will be on the qualitative governance and management levels, so on the policies and procedures and processes. And that that would be supported by the quantitative building block information provided at a level that demonstrates practical application of sound policies and strategies.

So we envisage that sampling at the top projects in the minor projects categories and sampling of projects in there to give assurance that the policies and procedures have actually been adhered to in practice. Also, review of the application of the policies and potential efficiency gains that may be made through the types of improvements that you're talking about making in the procedural areas, and also looking at things like ratios and base data. So some of the items like cost per tower, cost per kilometre of line reconductoring, those sort of things; again to get the view that the policies and procedures are actually being applied in practice. So we're looking at the minor projects.

The overview of the approach to minor projects sort of progresses the transition that we see occurring, is that first of all Transpower provides qualitative information, policy strategies and procedures, that have been used to establish the expenditure forecasts. The assessment considers the policies and if appropriate provides adjustment factors to account for any potential efficiency gains that can be made.

The proposition is that if policies are appropriate then the planned expenditure will also be appropriate for use as an expenditure allowance. That proposition is then tested by reference to the quantitative information and analysis is undertaken to assess if the policies have been applied in practice. So that's a sort of straightforward approach. And then the, if you like, the bucket expenditure allowance would emerge from there.

So summarising that, minor projects would include both RR&E and IST projects. They can include aggregated project groups, e.g. programmes, and remember that those programmes have a limit of $10 million not $1.5 million, but individual projects in there

would have to be under $1.5 million.

Aggregated project groups must be subject to a common underlying asset management strategy or policy. So again we'd see the transformer replacement, tower painting strategies, actually driving the greater use of programmes and aggregating projects into programmes in this category, so not every individual project has got to be looked at or identified ex-ante if prior to the RCP. We'd expect a lot more of the forecast expenditure is contained in aggregated projects and programmes, and that the policies and strategies and processes are assessed.

The projects for the first three years must have completed required process stages and gained Transpower approvals prior to inclusion in the minor projects expenditure allowance. Then projects for years 4 and 5 that have not completed Transpower's internal approval processes may be adjusted prior to inclusion in the minor projects expenditure, and that's to take account for any gains that we consider may be possible as the projects progress through to approvals through those processes.

Just to continue, the review considers the application of policies and processes. Adjustments may be made to account for potential efficiency gains. Approved expenditure allowance sets the boundary for minor capex expenditure, and substitution is allowed within the boundary. Substitution limitations may apply, so it's been considered whether, as we've discussed between business divisions or between RR&E and IST, or even around asset categories whether substitution limitation should apply around those. And allows also for policy changes that occur during the regulatory control period may need to be considered in this category.

So just to summarise the approach, Transpower provides process improvement information, and also projects and programme list 1, and these are projects that have completed processes and gained Transpower approvals. They also provide asset management policy strategies and planning information. Project list 2 are projects that have not completed the process and gained Transpower approvals.

The Commission then assesses the process improvements and approves the projects and programme list, so projects that have not completed Transpower's approval, approved internal projects approval processes are rejected from list 1. So list 1 is Transpower's provided what it considers to be its approved project and programme list, and the Commission would reject any projects and programmes in there that haven't actually followed Transpower's approved policies and processes. Account is taken of the

asset management policy strategies and planning in that assessment. Project list 2, so these are the projects that haven't completed processes and gained Transpower approvals for years 4 and 5 only would be assessed by the Commission.

The determination of the expenditure allowance, so process improvements and adjustments would be applied if that was considered to be appropriate. Off list 1 the projects and programmes considered for approval would exclude the projects that have been rolled over for more than one regulatory control period. And the project list 2, subject to adjustments would be approved for inclusion in the MAR.

The approved expenditure allowance would then be decided upon by the Commission. And the approved expenditure would be included in the regulatory asset base and used to establish the maximum allowable revenue which flows through to prices.

There is consideration of a possible safety net. So considering a safety net provision just to account for any significant under and over-spends, although the main intention of the minor projects bucket is that Transpower can operate within those parameters. That summarises where we are with the minor projects.

CHAIR: Thank you. Commissioner Begg will lead the discussion.

MS BEGG: I'd be interested just to get Transpower's feedback on whether it agrees that the capital expenditure reviews undertaken by the Commission for minor and aggregated projects should continue to be process based and should continue to focus on Transpower's compliance with its own internal capital planning processes and policies.

MR STRANGE: No, I mean there are elements of this, but I just think this is sort of getting into a level of detail which we wouldn't even do at, you know, this would be a level or two down at company governance level. And if you put this sort of programme where anything under $1.5 million that was a discrete capex programme, you know, basically you're saying you have to have the business case approved three years out.

What will happen, and people do respond to Regulators, is you'll get about eight big programmes, one of them will be called protection upgrades, another one will be called substation security, and we'll just be forced to put them all into buckets ourselves to take them out of this process. Because, you know, doing something because Tasman Network's decided to do something quite small which affects the security vents between the two of us, so we go and spend $600,000 on a capex programme, I mean that's not planned three years out.

MS BEGG: So your concern is the suggestion that you'd need the approval for these projects

three years out, rather than the overall process which is similar to what exists at the moment I guess?

MR FLETCHER: I think on the positive side I think the process and the level of regulatory scrutiny is pitched at the right level. This is looking at our processes and it's saying let's look at what you do, Transpower, now show us that you do what you say you do, as long as we agree with what you do is appropriate; a bit of a long way round of saying it. And that's not dissimilar from the Strata approach at the moment for non-Part F. And there are concerns with the current non-Part F processes that it's annual, it doesn't take a longer term period into account.

So to answer your question directly, I think the level of regulatory scrutiny and the processes described in terms of the level that you'll interpose yourself is appropriate. Then it comes down to the threshold, it comes down to the convoluted list 1 and list 2 and the process prescribed, it comes down to the substitution issue, and it comes to the requirement to have full certainty up-front for three years when that's not practically possible. So it comes down to the full business case.

So there's a positive bit followed by three bits which I think need to be looked at in more detail.

MS BEGG: So one of your concerns is the 1.5's not high enough, you'd prefer that to be at a higher level for the definition of minor projects?

MR FLETCHER: Yeah, that's - yeah.

MS BEGG: And in terms of up-front approval, what do you think would be reasonable for the Regulator to expect Transpower, you know, would it be reasonable to expect that the first year of a programme had gone through all Transpower's processes, and the second year, or -

MR FLETCHER: I wouldn't say -

MS BEGG: Or 90 percent of the first year's projects?

MR FLETCHER: I'd be tempted to satisfy yourselves that the forecasts are reasonable, and the expert opinion is that the forecasts are reasonable given the transparency of the assumptions and the information that Transpower has made available, Transpower's looked at options where they're appropriate, where it's appropriate they've applied a cost benefit analysis.

I think it's difficult if you start saying it should be 85 percent approved or 95 percent approved, I think it's more an expert view, is that a reasonable forecast given

the information that is available, and the practises that you put in place to plan that work, and if it is, let's set revenue on that basis, and go forward.

MS BEGG: Given that the forecast change is - I presume as a project goes through Transpower's approval process it's refined and, you know, options change etc; how can we get the certainty over the forecasts if they haven't been through the process? Do we just say well you're forecasting a certain amount now and we know that when it goes through the processes you will achieve some efficiencies, so we'll just make an adjustment, or will we expect you to make some adjustment -

MR FLETCHER: It could be -

MS BEGG: - in providing us?

MR FLETCHER: Sorry to cut you off. I could be a bit facetious, they can go the other way as well, they don't necessarily come down. I guess that comes down to the confidence in the long-term forecasting process. As we develop things like the US cost estimation tool, which is actually feeding back actual delivered cost into the process, it's looking at making sure we've got benchmark unit costs that we're applying. When we get things like that in place, the Commission, and Transpower, will be able to provide evidence to the Commission that forecasts are reasonable. And we may not be there in nine months time when we put our plan in, so we've put the ex-post review in to mitigate that impact. So I hope -

MS BEGG: But in the subsequent regulatory periods you'll be confident that your forecasting will be better but you still won't expect to be getting more projects approved up-front, that will still be -

MR STRANGE: The nature of these small projects, I don't know what the number will be, but if we start a business plan year with - perhaps we've got an aggregate of, I don't know, $20 million very small projects, a lot of them delegated to GM level, I would not at all be surprised if business cases for half of those weren't even done a year ahead. A lot of them will be driven by field work, something will happen. So what we can say is well, we'll allow for six, I don't know, might be change outs of interrupters or whatever. We don't know where they'll be etc but we know in the course of events through the year they'll pop up.

And quite often those will be approved by Kieran, and it will be delegated to Kieran in his bucket from me and will be informed etc, and that's the nature of just a vast amount of these small projects. I hate to say it but it doesn't take much for us to spend

a million bucks. My controls, my board's control, my control etc is pushing it down. I mean I think we heard Merryn say your capex authority is a couple of million, and we're the same. And I wouldn't expect a lot of those to be in place at the start of a business year. I don't know if - Powerlink could the same.

MS YORK: No.

MS BEGG: One possible option that's been suggested is that we could require Transpower to have its minor and aggregated project capex plans verified by an independent party prior to submission to the Commission, so we get an independent view. Do you have any thoughts on that?

MR FLETCHER: I think we'd presume that either the Commission would undertake that independent assessment or we would self-certify through an independent assessment which we'd commission; either way there would be an expert review of the proposal, yeah.

MS BEGG: Right, okay. Obviously we're moving to an as commissioned basis as opposed to at the moment where it's an expenditure based threshold. I just wondered if there's any forecasting issues around that? So we're moving from just -

MR FLETCHER: In putting together our business plans we do forecast the commissioned date of the project, so I think working out the details of that but I think in principle it's okay.

MS BEGG: Okay.

MR FLETCHER: And it actually reflects the impact on the revenue, so I think it's good.

MS BEGG: The proposal has been to have an aggregated projects category to enable Transpower to more easily submit for approval large programmes of capital expenditure based on a particular strategy or approach rather than having to seek approval for individual projects. And we've suggested a $10 million allowance there. For example a strategy for tower painting might identify $10 million per year to maintain the current state.

As the individual projects will be based on current state assessments, Transpower obviously might not know which towers it would need to paint three years in advance, but it would be likely to be able to develop a robust programme supported by empirical data that its proposed capital expenditure is reasonable. And just ask whether you think it's beneficial to have a separate category which allows for sort of bundling and whether the proposed $10 million is a reasonable cap.

MR FLETCHER: I think it comes back to the - we've put down our position on the

substitution, so our comments on the - we still think a programme - we seem to be working to an overall revenue envelope and there shouldn't be individual caps within that revenue envelope. But having said that, I think consistent with what we said before, you know, these programmes are driven by specific asset strategies, they are looking at an asset stock over the whole of its life and that then does determine a volume of work which is required on certain assets over the long-term.

So I think they do need to be looked at. As we said earlier the governance and the process by which the drivers for investment are decided are specific to the programmes of work, so they do need to be looked at individually, which is what is the current approach that Strata apply for non-Part F.

I will make a point, though, that the majority of the programmes of work, the transformer replacement programme, the safety breaker replacement, the grillage, the tower painting programme, specifically the tower painting programme, has an expenditure in excess of $10 million per annum, most of the others do as well.

MS BEGG: Right, okay.

MR SIMPSON: Even within those programmes, a switch from indoor to outdoor conversion, you wouldn't do one job for $1.5 million, so we've got to think about if the individual jobs in the programme, you've got to raise your sights higher because it can't realistically be achieved in such aggregated levels.

MR FLETCHER: I think it comes back to the point, if the business case for doing a certain amount of work is driven by a strategy as opposed to an independent cost benefit analysis, then that business case, that asset strategy has to be assessed by the Regulator to be prudent, to have looked at options, to appropriately reflect good industry practice.

Then it's a question of saying well is that strategy being applied in the forecasts? Obviously because of the substitution issues that we talked about earlier, we think it's inappropriate to lock that in as a cap within an overall envelope. But in order to inform the Commission's view as to whether the overall forecast is okay, then that's the approach I think we'd advocate for.

MR CAYGILL: Just so that I'm sure I'm following; what you're saying is that assessment of the accuracy of your strategy would be made once at the start of the regulatory period?

MR STRANGE: Part of the forecasting, absolutely, just like a project.

MR FLETCHER: I might add to that in a similar way to we do with the current non-Part F process. At the beginning of the next regulatory period we'd identify any changes to that

policy or strategy.

MR HEAPS: So the points of difference between the proposed approach then, because it mainly follows that that it's an assessment of process and look at process improvements and policies and strategies; and then it's well, the projects that have been through those policies should be included, so long as it's confirmed that they've been subject to those approvals, and then the projects that aren't, haven't gone through those processes could be subject to adjustments. The only point of difference there that I can see is the three and four years, that the requirement for the first three is to have the projects and programmes through the approval process prior to the RCP.

MR FLETCHER: I think it's a general principle that the strategy will drive a certain amount of investment on a certain part of the asset stock for a particular reason. I guess the question is, is are we proposing an appropriate allowance, annual expenditure allowance to maintain our overall asset stock condition, for example, at a certain level. And so I take it away from having projects themselves identified in business case, but it's about an appropriate level of investment consistent with the strategy.

MR HEAPS: Which is where we saw the programmes coming in, where we saw those working, so that the programmes developed in accordance with the strategies and driven by the policies.

MR FLETCHER: I don't think we've got any - sorry I'm getting carried away - I don't think we've got any problem with that approach, it's a question of the criteria around - it's a question of what you're going to do with that at the end of the day, you're going to cap it based on some criteria of certain value projects being in or out of it. So the approach for the Commission to determine whether that expenditure on that particular part of the asset is reasonable is okay; looking at the strategy, looking at the application of it.

MR HEAPS: So there's one point of view that says well if your tower painting strategy is driven - should be driven by - the strategy should then be setting policy, which is then sort of embedded in how the organisation operates, whether it's processes and procedures or whatever, but how they operate, and the actual age and condition of the assets. So the actual age and condition and the physical nature of the assets then feeds into the planning procedures and that drives an estimate of how many towers you're going to have to paint each year, or how many towers you're going to have to refurbish to replace each year, and the same for transformers.

So out of those we'd envisage that the programmes would be being developed that

would then give a reasonable forecast of what your capital expenditure would be for those areas. And that seemed to be, you know, a reasonably flexible approach, but driven so that the focus could just be at that policy and strategy level rather than a detailed project level.

So I don't know that we're saying anything really different, I think that the approach that we've proposed sort of enables that. The only issue probably is whether there are substitutions allowed between asset categories. And a problem that I might have there is that if you've established your programmes, say for tower painting based on the aging condition of the assets, and then you don't do that, you put that into transformers, put that expenditure into transformers, then what is the process that you work through for doing that sort of substitution? Because presumably what you might be saying there is well towers actually did need to be replaced and refurbished but we didn't do them, we did something else.

So there needs to be some sort of regime around that, some sort of approvals process which enables you to control projects and look at the impact of projects that are deferred.

MR STRANGE: I challenge you just a little bit whether that's right Bill. Basically I mean there are a lot of company processes, we won't decide to ramp up because of what we've learned two years out, ramp up our transformer spend and ramp down our tower painting without a hell of a business case to the board.

MR HEAPS: I think that's what I was meaning, the process of doing that.

MR STRANGE: We'll be doing that, we'll be doing that absolutely. But fundamentally we've done a forecast, we've said Transpower you need to send $617 million. On what we know now, which will be sometimes four and a half years in a three year set out of when we're actually doing it, to keep the network up and meet the performance standards, you absolutely want to - we're only going to change that programme for one reason, because we can spend the money better to get those - given what we've learned. And we will go through a process, Kieran can't suddenly decide to go and buy another transformer instead of painting the Otorohanga Bay towers.

But as far as the Regulator's concerned, providing we keep within that bucket, and you'll see the changes when you do the next reset, I would say that's the level you want to be at. But we don't do it lightly within the company, and I'm sure that's what Powerlink's doing all the time within its regulatory reset. Given you've got performance standards,

you know, performance standards are the ones you set, but we've also got to front up when the lights go out in Auckland. We are fairly driven to get this right.

MR HEAPS: Yeah, but I think you were saying that you would need to have some sort of process if there were shifts from -

MR STRANGE: Internal governance processes, absolutely.

MR HEAPS: - deferral of - well looking at an impact, as you've said the impact of not continuing with budgeted tower painting expenditure and putting that budget into some other asset, something else, there would be a process around and an impact study on what would happen.

MR STRANGE: There has to be, internally there has to be.

MR DEVINE: In both those cases, tower painting and transformers are good examples, because both are largely driven, a little bit by age but largely by condition assessment. Transformers have arrived in lumps, not continuous spread over the 70 odd years that we go from whoa to go. And at certain times we'll have to replace more transformers than we'll do tower painting, and that's a balance we take on the risks. Tower painting you can slip a couple of years without too much aggro. Transformers, if you're concerned about it you replace it as quickly as can, that's just a fact of life, that's risk management, we need that flexibility.

MR STRANGE: Tower painting's probably a slightly bad one to use because it's actually a specialist application. There's so many qualified tower painters out there actually, the year to year spend, we can't suddenly decide to stop using them in June, you know, we'd be laying off contractors' staff.

MR HEAPS: I think to a certain extent as well, you're saying the sort of concerns we've looked at previously and the sort of position you've inherited, you know, the historical position where, you know, we didn't see a good regime around substitutions and changes and, you know, changes in different strategies moving each time. So there has been an issue around those which I think is being reflected.

MR DEVINE: Is the issue around the changes or issue around the information about the changes?

MR HEAPS: Planned projects that you would see in this programme so, you know, moving - and are there other projects coming in, unplanned projects and, you know, the process through which those changes occur.

MR DEVINE: So lack of information about the change?

MR HEAPS: Yeah, the lack of information around the process around the change, you know, how the decisions are made.

MR STRANGE: I think how the decisions are made, historically we'd say that's a fair criticism.

MS BEGG: One issue that's been a problem in the past for the non-Part F capex is the roll-overs of projects that have been in the plan and then they aren't done in the regulatory control period and then they appear in the next one and still they're not done the next year. Obviously a five year regulatory period helps address that. But I just wondered whether there should be any constraints on the number of times a project can appear in a forecast plan.

MR FLETCHER: I think the issue of the roll-over for the non-Part F threshold is a function mainly of the fact that it's an annual threshold, so a project only has to slip by a week and it's into the next threshold. There have been a couple of projects which we've discussed which have actually been in the plans for three years and we've rectified those issues.

But I think, you know, if you are talking about a project which was in a - not just rolled from one regulatory period to another, because that's again the same issue, just rolling from one year to the next, but if it's been in there for three years and nothing's happened and it just appears in the three years then we'd have to explain that, I would say, specifically at the time of the ex-ante reset. So, yeah, it's an issue we're aware of.

MS BEGG: In the longer run we're looking at possibly not providing for a wash-up for the minor projects, I just - I'd presume that would be consistent with the approach that you're seeking?

MR STRANGE: Yeah.

MS BEGG: So we'll obviously have to review that as we get more experience with the process and how well it works. But in the initial periods we're talking about wash-up.

MR FLETCHER: I know it's something we haven't discussed, but Merryn mentioned when there isn't a wash-up there is facility for the company, or Powerlink at the end of a period to explain, or make a case to the Regulator where it thinks it's made efficiency gains. And then the determination is made on whether there are real efficiency gains and then they're shared with the customers over, I don't know what the process is. Once you've got rid of the ex-post review you almost need to build some incentives into the capex approvals process similar to what we've got in the opex.

MS BEGG: Yeah, that's a good point. Just wondered if any other parties had any comments on the long-term position and proposed treatment for minor projects.

MR SCOTT: I might make a comment, I've been interested for the last hour or so seeing the debate go backwards and forwards, you know, these are issues which in other jurisdictions around the world aren't a huge problem, so either there's something really unusual about New Zealand or there's a transitional issue here, there's a need to kind of move things to a new place.

And I can see the kind of discomfort on both sides. The Regulator's got responsibilities and it needs to demonstrate that. On the other hand the company is kind of saying if you don't trust us to get on with it we never will. And it seems to me that, you know, when I look at what's gone on in the UK, for example, the Regulator has, maybe where it's unsure, it has three ways of kind of trying to go forward. One is it takes over the process itself, so it asks for every little bit, it ticks every box and it double checks.

The other one is where the Regulator actually second-guesses the company, reworks things, it may as well actually do the company's job for it. And both of those have the big draw-back of not only regulatory overhead but it's never self-correcting because it goes on indefinitely following that track.

Then of course the last one, the third one, is where the Regulator requires the company to improve its performance, whether that's in its planning or its transparency, its forecasting accuracy. And the advantage of that route, of course, is that once its right then that pressure drops away because the thing is self-perpetuating.

And I think one thing a regulator can do is make provisions for itself to, for example, be able to undertake quite in-depth ex-post reviews, so that's provided for. But it makes it clear that it's not its intention to utilise that facility, or that it says it will only utilise that facility for certain clearly stated out-turns, such as complete cancellation of a major project or for a project of a greater than so much percentage of the plan. Because many of these things are not actually cancellations, they are year to year shifts, so it's going to get done eventually. So there is somewhere in there the opportunity perhaps for the Commission to provide itself with capabilities but to hold them in reserve in effect.

And the other one is where the Regulator shines a light into the company for a limited time and really helps the company to bring its game up to a higher standard. And we heard right at the beginning today Kieran was listing various initiatives that are coming into place. I mean I've seen some of those but I don't know any more than anybody else how effective they're going to be, and I think this is down to the board of the

company to bring them through.

There are some process things that can help, you know, you can have ISO 9000, or we mentioned PAS 55 and business process reviews, all those kind of mechanistic things they maybe have their place. But I suspect the best one is transparency and getting clear reporting and comfort, and in fact getting the sector to provide the cross-checks, so the customers or the other third parties are the ones who come in and say can you explain more what's going on here, you know, so actually that the sector becomes more self-regulating.

MS BEGG: Thank you. Did MEUG or -

MS YORK: I've just got a comment I'd like to make. There's been a lot of discussion this morning and this afternoon about substitution, and the framework that you have seems to have these kind of mini gaps for the different bands. And picking up on the point that was made by Ashley about, you know, in any given situation the business is really taking a risk based approach to what they're going to do and what they're going to change.

So it might be that tower painting has a higher risk than transformer replacements in a programme, but it also might be that there's something in another one of your mini caps that's actually more important and you do want to allow that substitution taking into account the overall mix of things.

And that's certainly where I think the Australian scheme of allowing substitution across wherever is really coming from, that they're not saying well you can only risk substitute within this little band, you can actually risk substitute across the whole lot if you foresee that there's, you know, your demand forecast shoots up higher than what you've planned and this becomes more relevant as you get a longer regulatory period, you know, you need to be able to take that into account.

And if you're starting construction of a transmission line two to three years ahead of when it's needing to be commissioned you do actually need to do that, you need to get on to it and you might need to not do something else either because you're resource constrained or you're capital constrained or whatever, and the business has to take that decision across the - I think they need to be able to be allowed to take that across the whole thing rather than only being able to risk substitute within your own minor projects or programmes or large projects.

It just seems a bit artificial if you're really wanting to drive the business to make the right choices across the whole programme. That's just an observation from my

perspective, knowing the kind of things that we might be required to do. I don't know off the top of my head what your demand forecast growth is, but ours runs at about 4 percent, it's had a bit of a drop off. If we get another boom it's going to scoot away from where we think it is now and we will be expected to respond to that, not just we might respond but we're actually expected to respond to that reliability of supply obligations. And that will necessarily mean not doing something else which might be in the programmes or the minor project. So that's just, I guess, a perspective on that.

MS BEGG: How do you get overall comfort, though, or comfort on the overall cap if all the ingredients that go into it are highly uncertain and can be substituted and so on?

MS YORK: I think the way it works for the AER is that they take their best guess, their best view based on the information you have at the time you make the decision. You know, in the fullness of time hindsight's always 20/20, it's not going to be right, but it's as right as you can make it at the time the decision's made and that's the best you can do.

So things will change, I mean we update our five year capex forecast every year and we also have a mid year budget review. I've still got spend in our capex in this financial year which is unapproved. That's only a small amount at this time of the year but it's still there, you know, it's $10 million, I think, that's still unapproved, even for this financial year, that we're expecting to get approval. We approve projects every month, so it's just a rolling thing that you're always looking at what you're doing and making decisions and going through the processes and that's what happens.

MS BEGG: Thank you. Any other comments?

MR SALMON: Just to say that we're keen for anything that will drive efficiency gains within Transpower, so kind of that's something that we're looking to happen as soon as possible. The other thing is we support kind of the idea around transparency, it's an area that we think, and it sounds like there's a good commitment from Transpower in that area, just to get a better understanding of that kind of capital expenditure and the programmes involved. And we're not expecting necessarily to be consulting on it or anything like that, but just to know what's involved would be quite useful.

MS BEGG: Thank you.

MR CAYGILL: At the risk of putting MEUG on the spot, I'd be interested in, Ralph, your reaction, if you have one, to the point that's being made about substitution. Because it seems to me that the reason why a Regulator might impose compartments within a regulatory asset base can only be in the end because it thinks it's necessary to do that in

fairness to the ultimate payers.

And so it seems to me that the - we're trying to balance all the arguments we've heard, which I think are good arguments, certainly clear arguments; against doing that, against the risk, as it were, to the consumer that we've in the end overestimated the regulatory asset base by allowing a free-flow within it. And I'd be interested in whether MEUG has a reaction to the issue.

MR MATTHES: Really, I mean I've listened with interest to this session, still making up my mind. But I think John actually sort of raised the whole issue about more transparency as actually being one of the more important things, because it does allow affected parties to come in and ask questions if need be. And Greg also mentioned that. I think in the longer term that's the better approach. And I quite like Patrick's idea of no wash-ups, and I think that all fits into with having greater ability for substitution. So it's just a matter of how fast do we get there really, that's always been my question. Can't give much more than that.

MR CAYGILL: No no, thank you for that, I didn't want to put you on the spot, but that is a helpful response, I understand, thank you.

CHAIR: Any other comments? **[No comments]** Thank you, perhaps if I can ask Bill to discuss the Commission's proposed transitional mechanism for minor projects.

MR HEAPS: I think I'll stand up for this one, there's a few more transition mechanisms in this one. So the purpose of the session is to provide a summary of the proposed transition mechanisms being considered for RCP1 for the minor projects category. So as before this is with the long-term approach line that I put up before with the information provided by Transpower, the assessment process that the Commission would carry out then to determine the expenditure allowance. And then the approved expenditure allowance would flow through to the MAR, and there's discussion of a possible safety net which I'll just outline in the next session.

So these are the changes that are being proposed. I'll just sort of flick backwards and forwards so you'll see the areas. So for year 1, because we're still operating under the settlements agreement, the proposed capital expenditure information will be provided and the assessment will be undertaken similar to the settlement agreement. Of course the difference then for the remaining three years is that the project and programme list, list 1, will be provided, and the approved project and programme list 1 will be subject to assessment. Again there will be an assessment of asset management policies and

strategies and planning information, and the project list will be assessed for compliance with those policies and strategies.

There will also be project list 2 which is all the projects that have not completed process and gained Transpower approvals. That list 2 would be for the remaining three years only, so not for the first year which is under the settlement agreement.

So basically project and programme lists are for those projects that have completed and got approvals, and a list of those projects that are intended to be completed - are included in the business plan but haven't completed processes and gained Transpower approvals. Both of those are assessed then against the asset management policies and strategies.

In terms of determination of the expenditure allowance, again similar process improvement adjustments are applied if appropriate, projects and programmes are considered for approval. Projects that haven't been included - that will exclude projects again that have been rolled over for more than one RCP. And the project list 2, the one that's for the remaining three years will be subject to potential adjustments prior to the inclusion in the RAB used to establish the MAR.

So basically we're just splitting out year 1 and then for the remaining three years assessing projects that have completed, processed and gone through to approvals, and project list 2 assessing projects that haven't progressed through those approvals ex-ante. And the only other difference is that safety net may apply but also there is a proposed wash-up at the end of the RCP1, there's a proposed wash-up to take account of unders and overs.

CHAIR: Commissioner Begg will lead the discussion.

MS BEGG: I'd just like to get feedback on whether the transitional proposals, whether people think they're reasonable. They're pretty much a sort of evolution of the current arrangements, but Transpower, I wonder if you've any issues.

MR FLETCHER: Can I just clarify, that was transitional - I was a little bit confused - that was transitional just for the year 1, the transition year of RCP1?

MS BEGG: Yeah.

MR FLETCHER: Which is the current non-Part F review that's ongoing at the moment?

MS BEGG: And perhaps the year 3 because you could argue that's - the one year then the three year and the long-term's the five year, which we've already discussed.

MR FLETCHER: I think our previous comments stand on the proposal as a whole.

MS BEGG: Same issues. Obviously during this period the intention is that Transpower enhances its forecasting approach. I just wondered if you had any thoughts on whether the Commission should be providing incentives to help Transpower on the way there. One option that was discussed was limiting the buckets in which substitution would be allowed and we've talked about that and Transpower obviously doesn't like that. But do you have any other views on whether as part of the regulatory regime we should be incentivising better forecasting, and if so how.

MR STRANGE: I think I come back - I don't think you should be diving in and incenting particular processes, it should always remain output driven. We're incented enough with our own drivers to get our forecasting right, to be blunt. I just think it's, you know, getting dangerous for the Commission to be incenting certain behaviours rather than outcomes. It would be difficult to do.

MS BEGG: The problem for the Commission, of course, is we have to set the one year, the three year, then the five year, so it is dependent on Transpower's forecasts.

MR STRANGE: I think, you know, the three year, we're putting a big effort into it. With the process changes occurring it will be a step up from where we've been, quite a long step up. But the sort of review at the end, the ex-post is the safety net.

MR FLETCHER: Also I think it's partly mitigated by the fact that if the Commission gets a clear view that the improvements which we're targeting will occur and are planned and have got clear kind of deliverables then I think it's satisfying itself at the ex-ante review time that those things are in place.

MS BEGG: Okay. I think we've already discussed that we're proposing a wash-up for these first periods. I think people, Transpower and others, seem reasonably happy with that and Richard's raised the issue of if you do ex-post wash-ups can you design an incentive arrangement, and I think that's a good point so that efficiency gains are captured as opposed to forecasting errors, which we need to distinguish between if we can. I just wondered if anyone had any other points to make.

MR WALL: I have a comment. The move to this type of arrangement actually puts a lot more onus on Transpower to do good forecasting by itself. The fact that their maximum revenue is based on their forecasts rather than a process at the moment where they just seem to go up to the Commission every so often with a GUP and say this is what we want to do and let us go and spend all this cash. The fact that they're having to do this forecasting I think is a major step forward from the existing process. So I think it's

already quite a large incentive in there for them to get it right.

MS BEGG: Thanks. Any other thoughts? Did staff have any issues they wanted to raise?

MS WARD: Perhaps we should clarify that actually, the minor projects process as proposed here is not that much different to what's called non-Part F capex under the current arrangements. So there's currently the Part F and the non-Part F, it's not terribly different than the non-Part F.

MR FLETCHER: I think other than the non-Part F (inaudible) it would be over that period.

MR WALL: That's what I'm more referring to, yes.

SAFETY NET RE-OPENER PROVISION

CHAIR: No more comments? **[No comments]** Perhaps we'll go on to the last session, which we had planned for afternoon tea but we'll work through it. That's on safety net re-opener provisions. Safety net is a re-opener provision that is triggered by a major shortfall of investment relative to the capex allowance. The concept of a safety net was introduced in the Transpower chapter of the Input Methodologies Discussion Paper.

Although re-opener provisions are being dealt with as an input methodology, we'd like to briefly discuss whether or not this is a useful mechanism to apply to Transpower in both the long and short terms. I'll hand over to Bill now to provide a short presentation on matter and then we'll have a discussion.

MR HEAPS: Thanks Chairman. So the need for a safety net, or the perceived need for a safety net, the key purpose of the safety net is to protect consumers from higher than necessary prices over the RCP. So it applies to the minor capital expenditure allowance.

The Commission is considering a safety net because ultimately a wash-up is not intended to be used for the minor capital expenditure. Over the term of the settlement Transpower has not been able to demonstrate accurate forecasting of its capital expenditure. The Commission considers that the safety net would place incentives on Transpower to improve the accuracy of its planning and not to inflate its proposed expenditure levels.

So the safety net facility would be if the actual spend during the regulatory control period falls materially below the level of the capital expenditure allowances then the Commission may, at its discretion, re-open the capital expenditure allowances for any year or years during the RCP. The Commission will undertake a review and if it

considers necessary make adjustments to the MAR during the RCP.

We considered possible options. There is a safety net that is used in the UK and our understanding is that that is triggered in the event annual expenditure is more than 20 percent below the capex allowance for that year, and Ofgem has discretion as to whether to re-open the revenue determination. A New Zealand safety net provision could operate in a similar way. We considered that there could be a trigger if there is a certain percentage under-spend for both years over a rolling two year average, and also a trigger which would probably be a lower percent if the under-spend occurred in any one year.

So the Commission is looking for views on whether if a wash-up is actually used in the first years where the safety net provision should apply and what the differences are, and the merits of the use of a safety net.

CHAIR: Commissioner Begg.

MS BEGG: I wonder if John Scott might like to comment briefly on his interpretation of its use in the UK and then we'll get Transpower. It's obviously a substitute for a wash-up and it's an alternative also to having no wash-up or safety net.

MR SCOTT: I can say that I'm not close to the detail now, but I don't believe that it's a facility that's used very often and I think that's an example of the big stick in the pocket, you know. And it's very important that it's not mechanistic, you know, it's not just triggered by some number threshold. Ofgem clearly reserves the right to use its discretion, but to know that that is there probably encourages good outcomes.

MS BEGG: Thank you. Transpower.

MR FLETCHER: We would concur with what John's just said.

MS BEGG: So you're not opposed in principle to the idea, it's how it's - I mean if you had a choice of no safety net -

MR FLETCHER: I think it kind of ties in with how pass-throughs will be treated now. You know, relevant change of circumstances in legislative changes which have an impact on our expenditures upwards or downwards, I think there needs to be an element of symmetry around any re-openings which might be possible. So I think - we haven't had that discussion about if legislations change or health and safety standards change or there's a major adverse weather event, a force majeure event, how they would be dealt with within the period. But I guess -

MS WARD: Those have been discussed as part of the input methodologies, re-openers and pass-throughs.

MR FLETCHER: So it does tie in to a certain extent with that. If there is one I do agree with John's comment.

MR STRANGE: I think of the options put up, the second one where you start going into segments again, all our previous comments apply.

MS BEGG: This is, I guess, seen as protection against if the forecasting doesn't become accurate then this is a protection for consumers where you under-spend relative to a cap. So it sounds like in the UK it might be useful as an incentive mechanism, but because it works it's not used, so -

MR STRANGE: It's a big stick you never want to use.

MS BEGG: That's right. So we'll continue to look at that, we won't rule it out.

MR CAYGILL: Can I just - Patrick, is it possible that a one way safety net - so a safety net not a wash-up, something that's not reciprocal, it just applies only in the event of under-expenditure - might be a reasonable tool in the context of the earlier discussion around caps or compartments? In other words if the Commission was persuaded to allow substitution between categories, but nevertheless felt a degree of concern about that in the first instance, then might a safety net that did allow for the recovery of gross under-expenditure in particular categories be a potential compromise?

If you under expend by, I don't know, I'm just inventing a number, by 20 percent in a particular category and you take that, because you've switched the money somewhere else, it might be because a contingent event has occurred, you know, some contingency has occurred that requires you to make that switch, or it might be you just got your forecasts wrong and because you're allowed the substitution you went ahead and did that, do you see what I'm saying?

MR STRANGE: Yeah, I still - I mean it's a bit like the old expression touching the tar baby. Once you go there it's going to be very difficult to get the tar off your hands and let go. Personally I mean I think we should learn from Powerlink in Queensland and transparency. I mean I don't think the case will come up very often either. And while we talk about our inability to forecast, actually when you take out the TNP programme which the new Chief Executive deliberately slowed down it was proved, actually it's been the substitution that's been the issue really in the last few years. We've been spending pretty much in the last couple of years what we forecast, we've just been spending it on different things at times, which is not necessarily a bad thing.

I don't think it's necessary to put individual caps like that. If we have good

transparency and we publish what we spent on tower painting programmes against our allowance there'll be plenty of questions asked, it's a small world. I just think, you know, it sort of sounds good theoretically but you're seriously touching the tar baby again. If you have the right drivers on us it's not going to happen anyway, and the drivers ultimately are, you know, the state of the network and its performance.

And I think long-term what Ofgem's actually getting into is some sort of analysis of the condition and risk profile of the network. Not easy to do, going to take a while, but I mean that's much better transparency.

CHAIR: Any other comments or questions? Staff, any other interested parties?

MR DEVINE: Just to pick up that theme of an area that you have a significant under-spend in theoretically should result in decline in service provision of some form, you know, whether that's immediate or later is very hard to determine. And the sort of penalty thing you're hinting at may actually require the double trigger. You substitute out of an area for a particular reason, and the assumption is that our processes are working correctly, we've done a risk analysis, we think we should shift it to B instead of leaving it in A. The outcome of that is that service provisions at least remain level or go up, which is what you would expect if it was being done correctly. If it didn't that's when the penalty should provide.

MR STRANGE: These things are, you know, there's no free lunch, we all understand tar painting, but if we've got an allowance to spend $15 million over a regulatory period or $30 million and we only spend 15, we're shooting ourselves in the foot because come to the next reset you'll be re-setting us back towards the 15, and what we will have driven our costs towards is 60. Because there's a reason we're painting those towers in this period, to avoid surface degradation and much higher costs.

So the last thing, you know, there's some beauty in the regulatory set like that and the fact that it's sort of reset every five years. And I'm sure Merryn and tower painting, the last thing you do is under-spend this year because A it leaves you exposed to spending a hell of a lot more in the next period, because they do rust, and what's worse is the Regulator saying I'm resetting your tower painting. So you'll find actually we have a big incentive not to do that sort of thing, it's quite elegant.

CHAIR: Any other comments, questions?

MS WARD: I do have a question around the level of the safety net.

CHAIR: Okay.

MS WARD: Just whether or not anyone had any views on where that should be set, what sort of level of under-expenditure. Sorry, what sort of level of under-expenditure might we set the safety net.

CHAIR: Who was that directed to?

MS WARD: Just a general question.

MR STRANGE: I could put a number up.

MR WALL: They're going to have to work it out themselves. The reverse question is at what level do you think you need to intervene. How bad does it need to be before you believe the customers have been adversely affected. I strongly believe that the stick is needed, it's a really good idea to have the big stick. I also understand Transpower's comments that, you know, they'll do everything to avoid the stick ever coming out of your pocket. So, you know, it's really a decision the Regulator has to make as to at what point do you think the consumer has been adversely affected by under-spend. You guys probably are in the best position to make that decision.

CHAIR: Any other questions? **[No comments]** Right, I suppose it falls on me to say that this concludes the Commission's workshop on regulation for Transpower under Part 4 of the Commerce Act. I'd like to close the session with the following remarks.

First, during the workshop the Commission has posed some questions that participants may address in post workshop submissions. The Commission will publish a list of those questions on its website together with the transcript as soon as possible.

Second, as noted yesterday and today, the various rounds of written submissions remain the principal avenue by which the Commission seeks and receives interested parties' views. Following the workshop all interested parties have the opportunity to make submissions on any matter discussed at this workshop.

Post workshop submissions are due two weeks from the date the transcript is posted on the Commission's website, which we expect to be no later than Monday 8th of March. This means that submissions are likely to be due by 22nd of March. Everyone is welcome to make a submission. There will also be an opportunity to make detailed written submissions on the draft price quality determinations and the applicable Input Methodology Determinations later this year.

On behalf of the Commission I'd like to thank everyone for their submissions on the Transpower discussion papers released to date and for their participation in this workshop. Particular thanks to those parties that gave presentations over the two days. It

has been very informative to the Commission and we appreciate the frank exchange of views. We have especially appreciated the access to expert economical and technical expertise.

Finally I'd like to thank the Commission staff and advisors, and also the transcriber and the technical person who has assisted us during the workshop. Are there any final questions from Commissioners? Are there any final comments from any interested party? **[No comments]** No. Well thank you very much, this session is now -

MR FLETCHER: I'll get in the last word I'm afraid. **[Laughter]** I'd just like to commend the Commission on the approach they've adopted to this and allowing discussion. I think it's really useful to allow a bit more of an informal debate going on these issues and I think it's worked really well.

CHAIR: Thank you, the session is now closed.

Workshop concludes at 3.08 pm