INPUT METHODOLOGIES REVIEW FORUM
HELD ON 29-30 JULY 2015 AT TE PAPA, WELLINGTON

[8.58 a.m.]

KESTON RUXTON: Good morning, my name is Keston Ruxton and I'm the Programme Manager of the Input Methodologies Review here at the Commerce Commission. I'm sure a number of you will have been receiving emails from me for quite a while now on this topic. I will be here today facilitating the sessions throughout the next two days of this forum. To kick off proceedings I would like to ask Dr Mark Berry, Chairman of the Commerce Commission, to say a few words of introduction.

DR BERRY: Good morning, I would like to welcome all here today to the Commission's Input Methodologies Review Forum. I'm joined today by Sue Begg, the Deputy Chair, as well as Stephen Gale. The three of us are the Division that will be making the decisions on this Input Methodologies Review. We are here in attendance today and tomorrow to listen to the discussions that will help shape the review. Also joining us for some sessions will be Pat Duignan. So, we're seated at that desk for the duration of the two days.

As you'll know, input methodologies are a key part of our Part 4 regime. They involve setting upfront regulatory methodologies, rules, processes, requirements and evaluation criteria for services that are regulated under Part 4, and those services are, of course, Transpower, electricity distribution, gas pipelines and the three main international airports.

These rules and processes were last set in 2010 and it's sort of hard to believe that it's that long ago we actually did that first round of exercise.

The Commission is required to review these at intervals of no more than seven years, as set out in the

legislation. Again, as you'll know, after consultation earlier this year we announced our intention to commence the Input Methodologies Review in June this year with a view to completing this task by December 2016, which is a year ahead of the end date in the legislation. Bear in mind, that's not a mandated date, that's an out date within which the review has to be done. Bringing forward the review allows any changes to be applied before the May 2017 reset of the default price-quality paths for gas pipeline services. We intend to reassess this indicative end date of December 2016 after receiving your submissions on the problem definition paper after this forum. We will issue a process update at that point.

We consider that if we were to complete this work by the end of next year, it will give affected sectors greater predictability and certainty in their planning. It also enables us to more effectively plan our own workload and that's one thing that we have noted in submissions, is a request for some flexibility and not to be worked up against the extremely hard timelines that we had to face the first time that we completed this process in 2010.

To provide further certainty for stakeholders we have decided to fast track the consideration of the airport land valuation rules and customised price-quality path related amendments.

In June we published a paper inviting interested parties to contribute to the problem definition. In that paper we stated our view, that a phase of problem definition is required before we can further develop the process for the remainder of the Input Methodologies Review and to begin to consider potential solutions. We want the issues to drive the process. As such, we see an effective problem definition phase as crucial to

informing how we focus the process and timeline for the remainder of this review.

Stakeholder engagement is a critical part of this review and we are committed to engaging with a broad range of stakeholders in an open manner to ensure that we understand their perspectives. We are particularly interested in their views on what the future regime should look like and when the incentives in place are working to achieve an appropriate balance between prices, quality services and investment in infrastructure.

This forum is the first of a number of opportunities for stakeholders to engage in the Input Methodologies Review process. Ideas discussed here and put forward in your written submissions on the problem definition paper will help identify the issues to be addressed by the Input Methodologies Review.

As matters progress, there will be draft decisions and more opportunities for more formal submissions. Also, if they are considered useful there may be more opportunities for workshops or forums such as this one.

The Commission considers that where possible stakeholders and experts should share their views in an open and transparent manner so that all interested parties can hear their views and keep up-to-date with developments. So, I do urge you not to be claiming for confidentiality unless it is truly justifiable. We are very keen to have an open and transparent process for the fairness of all parties concerned in this process.

The intention is for the forum today and tomorrow to allow open discussion and exchange of information between all parties. Unlike a conference such as the ones that we ran as conventional conferences the last time we did an Input Methodologies project, I and the other Commissioners here are attending as observers and

will not be in the role of questioning presenters, we are leaving it to Commission staff to be involved in the forum discussions here.

This forum aims to give you an opportunity to test your views on key issues for the review, and to hear possible questions and counter-perspectives. This will allow as many material issues as possible to be identified and shared early in the process; assist in more quickly defining specific problems that changes to the input methodologies could potentially address; it will allow us also to explore these issues before you make your formal written submissions; and, it will also allow the Commission to further develop a process and timeline for review. So, this is a growing process at this stage.

For issues that we don't know much about, discussions will be focused on identifying problems that the input methodologies could potentially address. For the issues that we know more about, the discussion will be more focused on potential solutions.

Many of our speakers over the next two days will have very different perspectives and we look forward to a free and frank discussion. Although discussions will form part of the record for the review, the Commission does not intend to test comments made during the forum and hopes that parties can use this forum to shape their views on the issues as we go forward. Therefore, if you have formed particular views you wish us to take into account, you should make sure that you include them in your written submissions.

I hope that you find the next two days engaging, informative and enjoyable. I look forward to your contributions at the forum and your continuing input into this second Input Methodologies process that we

have now started. Thank you and I'll hand back now to the presenters for the first panel. Thank you.

KESTON RUXTON: Thank you, Mark, and welcome again to the Input Methodologies Review Forum here at Te Papa. Before we get started I've been given the responsibility of doing the housekeeping. There's a number of things I need to tell you about. First of all, in the case of fire everyone should evacuate the building. Te Papa hosts will come and meet us and help us to leave by the main stairwell. There are also three other exits in this area that we're using.

In the case of an earthquake you should drop to the floor and cover your head with your hands, or if you're near a table, get under or near that table and please also listen to the instructions of Te Papa staff who are instructed what to do in these cases.

We're asked to remind you that this is a no smoking environment and smoking is only permitted outside the building.

There are bathrooms outside this meeting area. If you go down the corridor back towards the stairs, you'll find the bathrooms out there.

We've been asked to take no food and beverages outside this area and into the larger museum.

Delegates to the forum today should also be aware that if you have parked your car downstairs, if you bring your car-parking ticket upstairs you will get a reduction in the daily charge to $10 and we can endorse that at the front desk. There is a maximum charge for a 24 hour period, of up to $15, but this will cover you until 6 p.m. tonight.

Finally, WiFi access is available to everyone and there are some details about the WiFi access included on the back of the programme. There is no password and it

is free, you just need to be aware there is a maximum of 2 gig for a 24 hour period. Thank you.

So, moving on to today. As Mark discussed before, the purpose of today is a number of fold. Really, it is focused on problem definition and it is an extra event that we've put into this process to enable stakeholders to share and test views between themselves and with the Commission on the likely problem definitions that we will need to tackle as part of our review.

As part of that we hope over the next two days that we will be able to identify and share significant issues for the review. We hope that we will get to a point where we can start to define specific problems that changes to the input methodologies could potentially address. We also just want to allow people the extra time to explore these issues before completing their written submissions, and this will also give us the information we hope to develop a more detailed process for the review.

Looking at the structure of the sessions. You will notice when you look at the programme that we have not covered all the topics that we covered in the problem definition paper. This is because what we've tried to do over the next two days is to spend our time on the topics we believe that will most benefit from further discussion. So, to us those are the ones that will allow us to use discussions to flush out ideas and counter-perspectives, and where we feel that we need more information to define problems.

We also hope in a number of the sessions, probably around the airports, that we will also be moving on into the next phase and we may be able to start talking about some of the solutions where our thinking is further advanced.

There will be a variety of the topics over the next two days. For those topics that you haven't seen on the programme, please do not feel that those are not now to be covered by the review. An integral part of this forum, as we have announced, is there will be a process update in September to follow on from this forum, at which point we will be able to give stakeholders a much more clear idea of the detailed processes we anticipate following for the different groups and topics to be covered by the review.

I would just like to say also, over the next couple of days there will be a variety of formats for sessions. We have structured those in ways hopefully which will generate the conversations we need with each of the people who will be facilitating those sessions, who all will be Commission staff, who will be explaining those formats as we go.

For day one of the forum, which is what we're going to kick off now, we're going to start off with a session about the top three issues that key energy stakeholders see with the input methodologies as they currently sit. We will then have a short session on the decision-making framework for the review, and then the remainder of the day will be put to speaking about price quality regulation, emerging technologies and complexity and compliance. At the end of the day there will also be a networking event held here in the next room for people to attend after all the formal sessions are complete.

Tomorrow at the forum the topics will cover largely the interactions between DPPs and CPPs, CPP requirements and also airport topics.

The next steps after the forum are that, you should be aware we'll be publishing all presentations on our website as soon as possible afterwards. We will also be publishing the transcription of the forum that we're

taking, as you'll see we have a lady over here today doing that, and we will be asking for submissions by the 21st of August and cross-submissions by the 4th of September. Following that we will be doing a process update in mid-September for everyone.

I would just like to say, because the sessions are being transcribed today, those of you who are asking questions please be aware that we're trying to take these things down as honestly as we can. So, if you could speak clearly, and before you speak could you identify who you are and your organisation.

Moving on now to the first session of the day. This session is entitled "Stakeholders' 5-minute statements". We felt that if we were going to talk about the input methodologies, what better way to start off than to ask the people who are actually dealing every day with the input methodologies already, and have been doing so over the last few years. I would therefore like to invite the presenters of that session to join me on the stage and I can introduce the stakeholders who are speaking to you over the next little while. If everyone could come up on the stage.

So, hopefully in this rather cosy grouping on stage you will see a number of people that you will recognise. We have Alison Andrew, Chief Executive of Transpower; we have Ralph Matthes who is the Executive Director at MEUG; Simon Mackenzie, who is the Group Chief Executive at Vector; we have Greg Skelton, Chief Executive Officer at Wellington Electricity; we have David Freeman-Greene, who is the GM of Commercial at Orion; we have Richard Hale, representing MGUG; we have Nathan Strong from Unison Networks; and finally we have Richard Fletcher, who is the GM of Regulation and Government Relations at Powerco.

I'm going to ask each of these people to take five minutes to tell us about the three things that I guess are bothering them or have been bugging them about the input methodologies, or three key things that they would like to highlight to start discussions today.

We've got a lot of things to get through today so what we're going to do is go along the row and I will ask the person if they would like to come up to the lectern to speak or if they want to speak where they are, please do. In order to watch the timing, because we have a lot of speakers here to get through, we have Florian in the front row and he will just be keeping us on track in terms of timing. I'd ask the audience please just to hold your questions to the end. We will aim to get through and have a short period at the end for questions and answers. Can I first pass over to Alison, thank you.

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ALISON ANDREW: Thanks, good morning. We're mindful when considering the potential scope of the IMs that there's been a considerable legislative inability with the establishment of Part 4A and its replacement by the new Part 4 regime in a relatively short period of time. So, we're also mindful there's been a substantial amount of IMs that have been subject to Court review by way of judicial review and merits appeal. So, while the operation of the Part 4 regulatory regime isn't perfect, we think it's fundamentally sound. So, what we would like to see is that the Part 4 regulatory regime be given time to bed down. The regime remains in its infancy and this needs to be borne in mind in the scoping of this initial regulatory review.

So, the focus of the review, in our view should be squarely on incremental reform that future proofs the

regime rather than radical change that can only impose higher costs or risks.

We see the top three issues for the review as being one, emerging technologies; two, stability and predictability; and three, reducing debt cost risk and price volatility.

So, let me elaborate on these three issues. First of all on emerging technologies. It's quite evident that emerging technologies present challenges and opportunities for regulated suppliers, but in our view it's too soon to confidently assess these impacts. Major reform, in our view, would be premature. However, it is likely the distribution networks will be directly affected, firstly both in terms of new investment needed to enable and cope with these technologies, and commercial impacts.

So, consequently, we would encourage the Commission to place particular emphasis on ensuring that the IMs facilitate or at least don't impede flexibility and sensible decision-making by the EDBs, for example by ensuring the IMs support continued investment by EDBs in maintaining and adapting their networks, the most likely outcome is that electricity networks will continue to provide essential and valuable service to New Zealand communities well into a future. So, it's important as a sector that we keep investing for the long term.

It's also critical that the EDBs are able to adapt their tariff structures and that they are supported in chasing efficiencies, including where that involves partnerships or amalgamation.

The second issue we see is around stability and predictability. The stability and predictability intended to be provided by the IMs is more critical now than ever before. It's clear that emerging technologies and changing consumer demands will, over time, shape the

future shape of networks currently regulated under Part 4. However, there's a significant need to continue investment, both to keep the lights on and to optimise networks to allow the integration of PVs, battery storage and EVs into a reliable, stable power system and the IMs play an important and critical role in promoting certainty for suppliers and consumers.

We think the best thing the Commerce Commission can do at this point is to provide stability and confidence to suppliers, for example by establishing a clear decision framework for the IMs as the Commission proposes.

And the third key issue we see is reducing debt cost risk and price volatility. There's a genuine opportunity to reduce price volatility and debt cost risk for future regulatory periods by addressing a clear problem with the current determination window. Specifically, adopting a trailing average cost of debt would help avoid a significant increase in the debt cost component of WACC that could occur under current settings. It would also reduce the consumer price volatility between regulatory periods.

The trailing average approach benefits both suppliers and consumers and is a more productive area of focus than debates about the WACC percentiles that have had little efficiency benefit.

This approach, which has been adopted by electricity network regulators in Australia and the United Kingdom encourages balance sheet management and is more consistent with large firms in competitive markets. So thank you for the opportunity.

KESTON RUXTON: Thank you, Alison. Can I ask Ralph to speak.

RALPH MATTHES: Good morning and thank you, Keston. I will shortly cover MEUG's top three issues with the input methodologies, and after listing those issues I will

describe two scenarios that make me stay awake at night. But first I'll start with two facts about what's at stake.

First of all, consumers pay about $2 billion per annum in line charges. Every 1% improvement in productivity and/or reduction in excess profits is worth $20 million per year.

Second, Transpower and distributors spend about $900 million per annum on capital expenditure. A 5% misallocation of that spend relative to the most efficient level of capital expenditure costs New Zealand $45 million per annum. These are material issues.

Coming to my three top issues. One of them is similar to Alison's, the others are not. The first top issue, and these are not in order, is that the cost of capital is too high.

The second top issue is what to do with emerging technologies. I'm looking forward to the afternoon session on this particular topic. With changes in technologies since the original input methodologies were set, and expected further changes, we are unsure about how the IM should evolve to cater for uncertainty in demand for and competition at the margin with regulated line services. There is even a question about whether the building blocks paradigm that underpins the input methodologies is even the best form of regulation in such an uncertain future world. That is a question for another place and time rather than the discussion over the next two days. Nevertheless, it is an issue that we worry about.

The third top issue is that in amending the input methodologies, a whole-of-system view needs to be considered. Input methodologies are just one part of a number of factors affecting supply risks and incentives that mould prices for regulated line services. It's

those final prices that users of line services respond to. In a world of rapidly changing technology those responses can equally be swift and material. The challenge for the Commission in reviewing input methodologies is to understand the whole-of-system effects on behaviour, of which input methodologies are but one part of a chain of drivers affecting final prices.

Now for the two nightmare scenarios.

In scenario one, households and small medium enterprises reduce the need for their line services by use of PVs and batteries resulting in both lower line investment in future and some stranding of existing assets. However, parties that cannot reduce demand, such as high load factor large electricity users, and lower decile income households that cannot afford those new technologies, will pick up a greater share of those costs for existing though under-utilised assets.

The second nightmare scenario is that there is a significant net generation from households resulting in local line companies in effect becoming re-distributors and requiring a higher number of investment in the low voltage network. The risk of this scenario was large electricity users will pay a share of those high voltage network costs even though they're not the causers of the investment. To remove the risks of these two scenarios occurring probably requires changes to both the input methodologies and the pricing methodologies of distributors and Transpower. Hence, as mentioned with our third top issue, a challenge for defining the problem and making improvements to input methodologies, there's a need for a whole-of-system view. Thank you.

KESTON RUXTON: Thank you, Ralph. Simon, can I ask you to come and speak.

SIMON MACKENZIE: Thanks very much, thanks to the Commerce Commission for providing this forum.

Firstly, from my perspective the topic that I wanted to just quickly touch on is that how we see life is that customers are actually driving change. Customers want choice, and technology is enabling that choice. We hear a lot about new technologies, and this always seems to just get bundled into EVs, solar batteries, and PVs. Our view is it's much wider than this. We have to look at software solutions, whether those are products that Google or Nest or Apple will provide, and the impact of those on us.

So, the issue from our perspective is that unfortunately the regulatory environment won't be able to provide a certain arrangement and the speed of change is extremely fast and it's accelerating. We've previously seen instances where there have been choices made around investment in networks; how that was on a belief system that there may be some technology change, but the reality is that that technology change is here and now.

So, what are the key issues; that this leads to, from our perspective? Probably from our view is that it's about the incentives to invest. It's a major issue for us now as a lines company. For Vector in particular, we're at the sharp end of investment given that over the next ten years if we were going to invest in traditional network solutions, we would be investing in a network that would be the second largest in the country stand-alone to our existing network. This is driven by growth.

This leads on to our concerns around the way in which the cash flow profile works under the current regulatory regime, and given the rapid change in technology the risk profile that we face as a business

to invest in solutions that customers want. I also agree with Ralph that there has to be a whole-of-system view but my view on the whole-of-system is just not regulated solutions. We cannot now differentiate products that are available in the market as to whether these are actually a lines function service or a total energy solution which is also displacing generation retail and potentially other services that are provided in other markets, whether these be telecommunications, for example.

So, I don't believe that the regulatory environment can actually provide the certainty and stability that a lot of us would like. We have to embrace the new technology, find the best solutions for customers, and in some cases this may mean that lines charges or those solutions may actually increase the component costs to customers, but in so doing may lower the total costs to customers, whether that be via battery solutions or solar solutions.

There's a huge amount of investment required and what we also find is that many customers on this transition are, or looking into the future, still require to fall back on the traditional network solutions that have been put in place, and it's an extremely challenging issue for us to face, of how do we continue to supply services to customers at the same time in which they're wanting to adopt new technology and that adoption of new technology can in turn displace the investment that we've made? This leads on to big questions for us around asset lives and depreciation lives of the assets, and how do we actually account for those as an organisation?

Probably the last area which I think is particularly relevant to us is that in this customer choice, whilst many of us in the industry would love the

certainty, I don't believe that any of us in the room have any expertise, nor anyone does globally, about how this is going to play out. So, being able to predict this is virtually impossible and, as I mentioned, there will be services that could be delivered via the internet or iCloud solutions out of Palo Alto, or anywhere else in the world that will enable customers to manage and monitor their use, change their consumption patterns, and buy in alternate solutions which will impact the way the demand of the whole system actually works.

So, a belief system that we can compartmentalise everything as we traditionally have I think is a view of the past, thanks.

GREG SKELTON: Well, good morning everyone and welcome to Wellington, capital city, and my name is Greg Skelton. I'm the Chief Executive for Wellington Electricity Limited. I would like to recognise the Commission and thank them for providing us the opportunity to come and discuss the important aspects of the input methodologies review.

The points that we think are important for our business and the industry, and in particular consumers, are around the form of control. There is a demonstrable case for reviewing the form of control applying to both the CPP and the DPP for the electricity distribution networks. We're looking towards establishment of a revenue cap in order to make sure that under Part 4: it does ensure revenues reflect efficient costs; it does promote the incentives for energy efficiency and demand-side management, a number of the issues that the previous speakers have touched on; it also facilitates the developments of more effective tariff structures and these meet the points that predicate the purpose of Part 4, incentives to invest and innovate, provide

services to customers of a quality that they require, and also sharing of benefits and also limiting extraction of excessive profits.

The second matter that we would like to discuss at this forum and develop further is around the customised price path. Clearly there is an opportunity to introduce something in-between leaving a default price path and looking at whether that requires the full effort to go to a CPP or there could be something in-between; whether there's one aspect of the DPP that isn't working effectively for businesses, and this can be reviewed offline, put in place as a solution and then carried on under a DPP. It's either termed a mini CPP or a DPP reopener. We think this is important because, as the previous speakers have outlined, we're in a process of change, we're in a process of certain uncertainty and the DPP, while it offers a low cost, one size fits all approach, when you don't fit into that envelope then you have to look at steps which you need to take which may not be the full CPP solution.

This sort of moves into where there might be barriers to move to a CPP and our business is certainly encouraging engagement with the Commission to look at these sorts of barriers.

They exist in three forms. They exist in whether the WACC in a DPP can realign across to a CPP. At the moment there's a differential and I think it runs at around 70 basis points at present, so it's quite a barrier for a business to shift away from a default price path to go to something new when there's a lowering of your returns.

The other thing we think we should be looking at around the review of the CPP and its barriers, is to look at how much information and process requirements are really required. I think when the rules were struck

it was a time that it was quite uncertain, everything was trying to bed down, and I think Alison has touched on the fact that the system isn't broken, it's a solid system, it probably just needs some more refinement and looking at whether all that information set is really effective and producing the results that each party is seeking.

There may be financial model templates that could be provided to take away some of that uncertainty, there could be clearer guidance on expectations of what is meant by customer consultation.

Other issues are also looking at growth models for forecasting revenues and we see a way around that as really looking at a revenue cap, and revenue caps are fairly common. Transpower operates under what would be described as a revenue cap, and also other jurisdictions in the UK and also in Australia are also moving to that area.

The third point we think is important to discuss is around the WACC, and I know some of my colleagues up here would be saying that's a point they don't want to discuss, it's very very technical, but we think that needs to be addressed in a separate forum of discussion so we can actually go through and look at the areas that need to be covered as part of the IMs. It may be a separate part of the discussion, just to bring it out on its own and isolate it, but it is a requirement that the process is put in place so that shareholders can engage with the Commission on the WACC methodology, and this is important because we want to try and avoid where quick decisions around the correct percentile level aren't just made on an ad hoc basis, this does undermine the certainty, the predictability, and the reliability of the WACC being understood. It has a double effect on businesses particularly, obviously it lowers the returns

that we can make but also creates a disincentive for investors when they update our debt refinancing because that means that effectively there's a risk premium they need to put in place.

My friend in the front row is showing me my time is up so that's the three points we would like to cover. So, thank you and please enjoy the two days.

DAVID FREEMAN-GREENE: Hello, my name is David Freeman-Greene, I'm General Manager of Commercial at Orion in the South Island. Thank you, Commission, for the opportunity to present our three key issues today.

Our issues relate to, and with similar themes in a lot of respects, regulatory certainty or predictability or stability, the need to review the IMs as they relate to the CPP, and how to approach emerging technology.

One certainty - we probably all know that the Commission does promote certainty as is the purpose of Part 4 and the IMs. Orion is not looking at absolutes but we do see it as important. It's important for both investor confidence and for our own business decisions that we need to make.

Regarding investor confidence, significant changes like mid-period WACC review do drive up investor uncertainty and risk less than optimal outcomes when other IM issues or dependencies are not considered at the same time.

We also need a degree of certainty, as I say, to make well-founded business decisions. More clarity or certainty would have been useful for us in determining whether we actually went ahead and pursued a CPP post the Christchurch earthquakes. Clarity such as treatment of lost revenue quite early on in the piece would have been useful to have to put into our business case when we're looking for Board approval to go ahead with our

catastrophic CPP, and that's in terms of the event, not the outcomes.

Requirements for consultation under our CPP would also be useful to be clearer on. At the moment the IMs are reasonably brief on the criteria that you need to comply with and do leave a lot of discretion on the part of the EDB. We think some clarity there about expectations would be helpful, as just two examples.

Looking forward, ad hoc changes on material matters should be minimised. We understand changes may be needed but a clear process should be established for this including defining thresholds for change. We also support for this IM review a robust process to ensure intent such as a comprehensive reasons paper behind changes is clear, we support thorough consultation and potentially workshops to improve certainty and clarity of outcomes.

On the CPP itself our views are reasonably well-known through post CPP reviews with the Commission and our submissions. In brief, we think it's appropriate that this IM review process considers changes to the methodologies that reduce complexity, reduce resource requirements and ultimately reduce cost, and to my previous point, reduce uncertainty when you are looking to submit a CPP application.

Lastly, we see emerging technology as a relevant topic for this IM review. We saw in the IM review paper the Commission's understanding of this topic is one that they're developing. I think, as we will find out in the course of the next two days, if you poll people in this room they would have different views on the extent and timing of change.

Given this, we suggest a cautious approach to making changes to the IMs to address the impact of emerging technologies, similar to broader corporate

strategies though there may be some no regrets actions or changes to the IMs and probably the broader regulatory regime that would be useful as part of this review and to be discussed as part of this review.

A note of caution is trying to define IMs regarding this topic in an uncertain environment could lead to unintended consequences or unclear regulation. I think the good point about this review is these topics are on the agenda and we look forward to engaging with them and on them throughout this review in the subsequent consultation process. Thanks very much.

RICHARD HALE: Good morning, my name is Richard Hale from the consulting firm of Hale & Twomey. Jointly with Arete Consulting, we provide secretariat services to a number of industrials who are major users of natural gas.

Those, the membership of that group consists of Refining New Zealand, New Zealand Steel, Carter Holt Harvey, Fonterra, and the ammonia urea plant in Taranaki owned by Ballance Agri-Nutrients.

We obviously don't engage in the IM structure on a regular basis so we did this when the DPP was first introduced, so for us it's very much a learning experience and we thank the Commission for setting it up in this way that we can engage with it and begin to understand what is the significance of it for users of natural gas.

To give you a statistic, cost of transmission, basically these companies are taking most of their gas off the high pressure transmission system, there's some small amounts into a lower pressure system but that's not that significant, but it represents about 20% to 30% of their delivered gas cost. So, it's a significant cost for these companies and I guess our starting point is the DPP has been running for a few years now, and

some may recall that there was a significant reduction in regulated revenues that arose out of that DPP.

For us, I guess, that's the question of where the rubber hits the road, and what we have seen is the gradual erosion of those reductions such that we're now back to where we were pretty much in 2013. So, effectively transmission costs have increased back to the level where they were reduced from by the Commission when the DPP was introduced.

The reasons for that seem to be related to demand. In effect, demand risk seems to fall entirely on the users and we are seeing changes in demand on the pipeline system, and the changes that have occurred have been attributed to the reduction in demand. So, effectively the share of cost is being spread to the residual users on the pipeline and that's having a significant impact on our users.

So, one of the issues that we have with this, and by the way, sorry, I meant to say that the DPP is based on a revenue cap so we have the experience of a revenue cap, one of our questions was understanding how gas users might benefit between a weighted average price cap and a revenue cap, and we've never really understood how those might affect outcomes for gas users going forward. So, it's a useful opportunity for us to understand that debate more because, you know, obviously we're mindful of the requirement to continue investment in pipelines.

But for us the key issue is around demand risk which from our perspective seems to be falling on the customer. So, our question is whether that demand risk is being appropriately dealt with within the IMs? That leads on to another question about the whole of the section 52A test, whether it's promoting the long-term interests of consumers, whether it's actually encouraging the infrastructure providers to sort of

invest and innovate, but being mindful of the fact that we are dependent upon an umbilical that is probably, it has its parallel with transmission but it is sort of reasonably unique. We're mindful of the investment needs that may be coming up there.

So, from our perspective we do have an interest in the DPP versus the CPP debate but we just don't know whether it's going to pop up. We assume our friends in the pipeline will be raising that at some stage but we're grateful to the Commission that that's actually on the agenda as well. We have an open mind around those two issues for any particular individual investments required on the pipeline. Thank you.

NATHAN STRONG: Good morning, my name is Nathan Strong, I'm the General Manager for Business Assurance, Unison Networks. Thank you for the opportunity to present at this forum and to provide Unison's views on the three key issues that we perceive with the input methodologies.

Before I describe those issues I would like to recognise that smaller lines companies are not actually represented in the speakers today and I suspect that they will have their own issues with that, and it may well be worth the Commission exploring with them what those are.

I would also like to say that although I Chair the Electricity Networks Association Regulatory Working Group, I represent only the views of Unison today.

So, as far as Unison goes, we're the fourth or fifth largest lines company in New Zealand, probably the fifth largest today because Greg has probably taken over with the number of attendees at this forum, but we serve the central North Island and Hawkes Bay regions of New Zealand and they are regions that struggle economically and socially. And so while we've got

pockets of growth and wealth for many in our communities, paying the power bill is a struggle, and in our consumer experience mapping, it's clear that many people just don't understand electricity and just want to be told what to do.

So, we're a mixed model business, being consumer owned, but we also serve the Rotorua and Taupo regions which are a pure investor play. So, we apply both a business and a consumer lens to our operations, and we're very conscious of the nightmare scenarios that Ralph described earlier, particularly around the haves and have-nots of solar and batteries in the future.

So, a key theme of this forum will be the impact of disruptive technologies on businesses and how the input methodologies should respond. So, one of our key points is policy settings, including the input methodologies, need to allow for pricing reforms, otherwise consumers and businesses will end up making costly decisions based on false economics to the detriment of New Zealand.

I'm aware of one study that is in development that quantifies uneconomic investment in solar into the billions of dollars, which is potentially the equivalent of Transpower's current RAB, ultimately to deliver exactly the same service that customers are already enjoying. So, we would contend that in a context of currently expensive disruptive technologies, the long-term interests of consumers measured in aggregate is to minimise the total system cost of delivering the energy services that customers want. So, that means we need to find good price signals to encourage solar at the right time, batteries at the right time, and to get people to charge their EVs off peak, and that's not going to be easy.

So, we'll need businesses, regulators, policy makers, all to commit to selling the benefits of price

reform to consumers and politicians. The Commission has an important role in that as an independent consumer watchdog to promote pricing reform.

So, the input methodology currently discourages pricing reform because of the regulatory risks associated with a transition in tariff structure change, so we would say that's our key issue, number one.

But in the long-term, even with pricing reform consumers will have economic alternatives to evade network cost recovery. Batteries we think will be the game changer in this respect, allowing price arbitrage, but not all consumers will be able to take advantage of this. So, the risk in the long-term is rising inequalities between consumers and consumer groups.

So, our second but very closely related issue with the input methodologies is we need to look at the timings of cash flow profiles simultaneously with tariff reform. We think it will likely be in consumers' long-term interests in aggregate to pay more now and less later, so that long-term marginal price signals are lower.

And finally, new technologies and business models are also opportunities for distribution businesses too, not just consumers, but the application of the input methodologies needs to allow technology neutrality to deliver the service and allow sufficient trade-offs between capex and opex.

So, our key issue, number three, is that the input methodologies particularly relating to what are called the IRIS mechanisms, these to be reviewed so there is that neutrality and people can make optimal decisions. Thank you.

RICHARD FLETCHER: Thank you, hello everyone, I shouldn't have sat at the end of the table because everybody has said what I was going to say. I'll say it again,

though, five minutes. I'm Richard Fletcher, I'm the General Manager Regulation at Powerco. I just quickly want to go through my three points, and I think you'll see a common theme. I think Alison and David both raised as their first point - and we would subscribe to that - is that this review should really be about advancing certainty of the regulatory framework. We've gone through a lot of change over the last few years bedding in the framework, and I think unless there's a really clear view that the existing rules and processes are inconsistent with the 52A and 52R purpose statements, then we should be really looking at incremental refinements rather than wholesale change. So, that would be our opening position.

I agree, though, that in order to actually define those problems you probably need to cast your net quite widely initially and look at a range of issues, and I think the Commission's initial paper does that. So, we do subscribe to a review of the impacts of emerging technology. I'm not an expert in this area, I do know there is a range of views as to how disruptive it will be, and it's particularly the range of views centre around the timing of that disruption and what that means, not just for asset stranding, for example, that tends to get a lot of focus, but in terms of what opportunities it creates for network companies and what additional investment such as R and D and new technology we might need to be thinking about now.

What I don't know is whether or not that disruption requires changes to the IMs now or whether it's for the next review. So, I think it's really appropriate to put it on the agenda, define the problem, try and get a consensus, and then map it against those purpose statement objectives.

And I would say the same for other things, such as cost of capital. I don't think we should go into this process with a view we should change it for the sake of it but we should definitely map the whole WACC methodology against those objectives.

And I think, as Mark said, we've got a really tight timeframe, we've got till December '16 to get a final decision. There's a lot of big issues. I think it's going to be quite a collaboration across all stakeholders and I personally favour the use of working groups to expedite that thinking, which has worked successfully in the past. I think we can quickly get those problems defined if we take that approach. So, that's my first point.

The second point, and I think this is more close to home, to Powerco, because we are, and I think as most people know, considering a customised price path, is an issue that Greg alluded to which is the current misalignment I'd say of the DPP and CPP cost of capital methodologies. I think, as Greg said, if you're considering a CPP you drop off the, you reset your cost of capital for the CPP period and that can expose companies, such as Powerco is experiencing now, to volatility around interest rate movements which are effectively outside of a company's control. It effectively means you're making a CPP timing decision based on where the current interest rate is, and from our view that shouldn't be the case. I think there needs to be an alignment between the DPP and CPP cost of capitals so that companies and customers are neutral to that interest rate movement, and a CPP then becomes around efficient opex, capex and quality outcomes.

Talking more about that tomorrow but at the moment where it stands I think that is a clear example where it creates a perverse incentive which is inconsistent with

the purpose statement. So, that's one I would put at the top of the list.

I also think that given we do have the uncertainties that we're going to talk about over the next couple of days around where demand is going to go in the future, I think it's appropriate to look at the form of control, revenue versus price path, look at the emerging exposure to demand risk faced by companies and consumers, look at whether or not it's getting harder for the Commission to forecast - one minute to go, thank you. That's quite clever, I like it - whether it will get harder for the Commission to forecast accurately, because effectively that's what companies are exposed to, is the difference between the Commission's forecast of future demand and actually where demand goes, and for us, and I think correct me if I'm wrong Ross, I think a 0.3% overestimate by the Commission of our demand during a DPP could result in around about $15 million revenue impact for us. So, it can be quite significant.

So, I think it's appropriate to look at the form of control, look at whether the average weighted price path or a revenue path better promotes incentives around demand side management, whether which of those forms of control allow us to send the right price signals under this new emerging market, and I'm pretty much open-minded at the moment and Powerco is open-minded. I'm quite looking forward to getting into a detailed debate on that. And I think I'll leave it there on my three points, thank you.

KESTON RUXTON: I think we've done quite well because we've saved ourselves some time for questions, so I would like to thank all the presenters for their thoughts. I certainly found it very interesting and I found it great to hear both from the consumer side, not just on the

electricity but also on the gas side, and to hear from Transpower as well as a selection of EDBs.

Nathan made the comment that there are a number of other smaller EDBs that haven't been represented and I think we will have a representative from PwC to some extent later in the agenda as part of talking about our complexity topic today on those things.

When I was listening to those speeches I guess I picked out a number of themes. We heard a very strong theme from the consumer representatives on the cost and obviously quoting us some of the big numbers that relatively small changes in the IMs can make to consumers. I think Ralph talked about a 5% change in allocations could amount to a $45 million per annum difference in cost for them. On the other side I think listening to what the EDBs are saying, and hopefully I'm reporting correctly, a real drive from their perspective on certainty in an inherently uncertain environment, saying the IMs have been operating and they are working, and that we should touch the things that we need to touch rather than touching things per se.

I think another thing that we couldn't fail to notice from the comments was pretty much every single person on the stage was putting the emerging technologies - some people call it "disruptive technologies", we like to frame it as "emerging technologies" - issue as being front and centre on some of the things they're considering, either from the perspective of how it's impacting the business, I think all of them are doing that, but also I was really interested in Simon's comments from Vector about the perspective of the consumer and what that means for what we're delivering the consumer, whether it's a network solution or it's actually investing in the current line services that we invest in now.

I also picked up on a number of comments around the CPP, and the CPP and DPP. Obviously it's very good to have Orion on the stage who are probably the only people in this room to have experienced the type of catastrophic event, and obviously the aftermath in the form of an application for a CPP. So, we will be picking those up tomorrow as part of our sessions on the CPP and DPP.

I also note the comments on the IRIS, and as part of our process the IRIS is currently being run as a separate process but that will be something that will be brought into a review at a later stage. So, thank you very much for all your comments.

I wonder whether we can open the floor now to the people in the seats over there and whether anyone has any questions that they would like to put to some of our panel members. If not it will be a very quick and easy process and we can all go to morning tea quite early, but if we can have some questions from the stage, we will.

RALPH MATTHES: I think one of the points that came out from the panelists which perhaps you didn't cover was that a few of us on the panel think that prices matter --

KESTON RUXTON: Yes, sorry.

RALPH MATTHES: -- to consumers, whereas I think other panelists didn't mention it at all. I don't know whether that's just because they hadn't thought about it or what.

ALISON ANDREW: Yes, Ralph. I would like to balance that, though, prices do matter and certainly maybe not top three but it's there. I think we also have to bear in mind the point I was raising too, that you need to have the balance right, there has to be the right signal on EDBs, Transpower, etc, to invest, because while you rightly point out the cost of having to pay for

electricity, there's enormous costs to industrials and consumers also for lack of supply or where there is no reliable power.

So, I think that there's always in this debate that balance. Have you got it about right to make sure that there is the investment signals where it's required, but not too early or not too much so it's in the wrong place, and I think we just have to bear in mind that there's that balance there, it's not just one-sided.

GREG SKELTON: Just to reiterate Alison's comment, price matters, customers do matter. One of the issues is price seems to sit across two regulators; got the Electricity Authority and the Commerce Commission, we've got to balance that across both, and therefore it makes up a block of what we need to do here but some of the market forces we need to discuss in a different regulatory forum.

KESTON RUXTON: And certainly to back that up, I think for us it is true that the Electricity Authority is responsible for a large number of the pricing questions, and the question for us really is how the input methodologies can feed into the considerations we need to make on that.

SIMON MACKENZIE: I guess my perspective is we can talk about price but it's very dangerous, in my view, to talk about it in isolation of, or segmenting it into lines charges, generation, retail, because from a customer perspective, and which maybe what Ralph's alluding to, they look at it in the total perspective, and the reality is now with a lot of the emerging technologies it's a total cost perspective that customers are looking at. So, I think there's very much a blurring of the lines now which is going to make regulatory certainty, if that's what people are looking for, extremely difficult.

And the other aspect is, whilst I understand the desire for certainty, I think one of the real challenges that we have is that the cost curves of a lot of the options are changing so dramatically and quickly that we can't necessarily afford the luxury of letting things bed in forever and a day, and I'm sure if we went back and asked people in the telco sector, maybe Stephen would attest to this, that, you know, we're facing - you know, we're right on the take-off point of that same type of trend, that's our view at Vector, and therefore the reality of how is it going to adapt, how is it going to reopen issues, because these input methodologies will be utilised in 2020 and the rate of change we see in cost curves is so significant you'll probably be needing another forum before 2020.

RICHARD FLETCHER: Can I just add one point, it's slightly pedantic, Ralph, but I think if you do map the changes that we make in the considerations back to 52A and purpose statement, long-term interests of consumers, incentives to invest, efficient outcomes, then you will get there. Pricing will come into that as well.

KESTON RUXTON: Any comments, Nick? I can see you down the back. I knew this wouldn't take you long, Nick.

NICK RUSS: Nick Russ from the Commerce Commission. I would be quite interested in the panel views around incentives for innovation. We talked a lot about incentives for investment but I'm just wondering about your take on the current arrangements and what the companies are doing around innovating and how the IMs could be, or is there an issue for the IMs around creating the right incentives for innovative approaches for managing and operating the network?

SIMON MACKENZIE: I'll just answer from our perspective at Vector. I think for me it goes very much back to, it might sound a bit odd but I think it goes back to

ownership perspectives. If we look at what's happened in the UK, the ownership models there have basically meant the regulators had to put up a 500 million pound fund to try and seek companies to innovate, which seems kind of perverse when that cost goes back on the consumers. So, for us it's around, well, certainly from our perspective we look at it as we have the incentives to innovate and that's fundamentally because we've got to find the best way to allocate our capital and deliver solutions to customers, and our mixed ownership model very much drives that with the disciplines between community and also being listed.

I think one of the risks is, as you've seen documented internationally, that the ownership of some organisations and their incentive to innovate or otherwise, may be actually misaligned with that because the current regulatory frameworks can incentivise you to keep investing in significant high capital costs so as to match the cash flow profiles of the actual owners. So, from my perspective there's nothing wrong with the innovation incentives, it actually comes down to commercial decision about what you want to achieve by way of capital allocation in a commercial environment.

KESTON RUXTON: Did anyone else want to comment on that question?

GREG SKELTON: Yes, look I think innovation is inherent in running any business today. If you look at upgrading your IT systems and how you operate some of your main supervisory systems and some of your data acquisition systems, then a lot of those are very innovative. You go and buy your kit these days. You can't buy the vanilla kit any more that's got no electronics and no IT or no IP in it. It's all integrated and therefore it's looking at how you turn on or the ability to turn on

that new IP platform that comes with what would have been very traditional gear otherwise.

So, it's inherent in what we do. Simon is quite right, there are funds in the UK that have brought forward, if you like, some encouragement to actually take away some of the large problems that would have been not thought about and turned them into some pretty stunning solutions, so tapping into some of those is useful as well, and at the end of the day there's a lot of stuff going around new technologies, whether it's using unmanned vehicles for the line patrols, there are those sorts of areas as well.

NATHAN STRONG: From Unison's perspective I guess one of the things that we've done is invest fairly significantly in the development of a smart grid and I think that's probably been in spite of regulation rather than because of it. One of the things that, you know, we've encountered is a huge upfront development cost associated with development of systems and processes and understanding technologies, and that's all about delivering over a very long-term a much lower level of investment in our network, we hope, but the regulatory regime essentially sort of matches your costs structure, so it rewards you for the money you did spend rather than the money that you didn't spend, and so I think the sort of five year regulatory framework is kind of a limiting factor in that regard.

RALPH MATTHES: Nick, I think you can't talk about innovation without recognising that in real markets companies that innovate also run the risk that they don't get their money back. That's not the way we see that the lines companies and Transpower works. I think Nathan is probably right, it's all about simply costs recovery, and I think that does go to the heart of perhaps what a few of us on the panel have said, are the input

methodologies actually the right tool here? If we had, for example, benchmarking of the performance of lines companies, those that innovated got rewarded, and those that didn't innovate and failed to keep up didn't get their cost of capital. Perhaps that's a better system.

KESTON RUXTON: Do we have any further questions from the floor that people wanted to ask?

NATHAN STRONG: If I could just respond to Ralph's point there about benchmarking. Having done benchmarking studies, if you want regulation to be a lottery, then go for benchmarking.

KESTON RUXTON: Great, well, I think we can break early. We'll come back at 20 to 11, is that the time? We'll come back at 20 to 11 for the next session. Thank you very much and can I once more thank our presenters for presenting to us. (Applause).

(Forum adjourned from 10.10 a.m. until 10.45 a.m.)

KESTON RUXTON: Welcome back, the next session has been titled on the programme "Decision-making framework". It is a little bit different to the other sessions we will be running today as it will involve more of a standard Commerce Commission style in that it will be all a presentation of the Commerce Commission.

The purpose of this session is to present the draft frameworks for the review, which were published by the Commission last week on the 22nd of July, to stakeholders for the first time. As part of that this session will involve presentations from Susannah Sharpe, who is a senior counsel within the regulation branch at the Commerce Commission, and by Scott Pearse-Smith, who is one of our senior analysts working on the IM review within the same branch.

We anticipate that most of this session will be taken up with presentations but due to the good timing

of Florian in the front row, if time permits we will have a short Q and A session at the end.

To start the session off I would like to welcome Susannah Sharpe to the podium to take us through her talk, thank you.

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SUSANNAH SHARPE: Thanks, Keston. My name is Susannah Sharpe, I'm senior legal counsel with the Commission. The intention of this session is to present on the frameworks for the Input Methodologies Review.

As Keston mentioned, this session format is a bit different, we will have a question time at the end, and in an attempt to make this a lively presentation we will swap over. I'm going to provide an introduction to the session and then I'm going to hand over to Scott Pearse-Smith who will provide the detail of the frameworks in the draft submission document which we published last week. In terms of the purpose of this session, it's to present our initial thinking on the decision-making frameworks for the IM review.

It's just worth noting at this point, when we're talking about the IM review, the scope for the current review includes all IM determinations except for Transpower capex IM. Those will be reviewed at a later date.

There's one other exception, the electricity distribution IRIS, or incremental rolling incentive scheme IMs are also excluded at this stage from the review as they are subject to an amendment process begun prior to the review and we anticipate that these will come within the review in the next few months.

In terms of the frameworks there are two aspects to this; the decision-making guide for the IM review, and how we consider IM changes in a wider context. Now, the

aim with this is to inform stakeholders for their written submissions after the forum.

The context for the decision-making frameworks began when the Commission put out its open letter in February this year and we had a number of suggestions back from stakeholders on the interests of us developing a decision-making framework. So, thank you for those comments, and this is very much a response to those requests. Some of the submissions on the open letter describe these ideas variously as a framework, policy approach or a set of principles, and I noted this morning, I think it was from Alison Andrew from Transpower, that there was another mention of an interest in the decision-making framework.

Some submissions on the open letter also suggested that we consider where the IM review fits in with making changes to IMs generally. There were also suggestions in submissions on our open letter that there's a need for an environmental scan to inform the review. Now, we see this problem definition phase of the review as very much fitting or being consistent with an environmental scan. In the problem definition paper we put forward our preliminary points about framework matters and then with the discussion document that we published last week we've developed our thinking on this some more. Both documents very much reflect our initial thinking and we're very interested to hear your views in submissions. The focus for the discussion document is very much the framework for the review but we realise there's some interest in looking at a wider framework for when we consider IM changes more generally and that's under section 52X.

Just like to move on to talking about the high level factors when considering a change to the IMs. We think these high level factors are relevant to both the

frameworks that we're putting forward in the draft discussion document. The high level factors focus on only changing the current IMs where it appears likely to promote the Part 4 purpose, that's the long-term benefit to consumers, more effectively, or to promote the IM purpose in section 52R, and that's certainty, more effectively without detrimentally affecting the promotion of the section 52A purpose.

Lastly, we are looking at changes that focus on only changing the current IMs where it would significantly reduce compliance costs, other regulatory costs or complexity without detrimentally affecting the promotion of the section 52A purpose. And I think this echoes what some of the stakeholders put forward this morning in terms of a need for certainty. So, those are the high level factors we'll keep coming back to when we talk about the frameworks, and they are relevant both to the review or changes made more generally under section 52X amendments. Scott will take you through how these factors fit with the framework in a bit more detail.

There are some other factors that we've put forward our preliminary views on and the details about these points are found in our problem definition paper and in the draft frameworks discussion document. I'm just going to touch on the key points here.

So, it's our preliminary view that there's no specific statutory threshold for changing the IMs under section 52Y for the review. Scott will take you through what we actually consider in practice. So we're not saying that there's no statutory considerations, we just don't hold to a specific threshold. And it's our view that this point applies also to changes made more generally under section 52X.

Another factor for us when considering IM changes is our preliminary view that we cannot create an IM on a

matter not already covered by a published IM. And that point would also apply to amendments under section 52X. Now, we acknowledge it can be difficult to distinguish between an IM on a new matter compared to an amendment to an existing IM to change it substantially, so we're very interested to hear your examples that might test this view. One example that we have put forward in response to stakeholder suggestions in the open letter, which I heard mentioned this morning, is pricing methodologies, and it's our starting view that we wouldn't be creating a pricing methodology IM through the review.

Before I hand over to Scott I'm just going to touch on the nature of the frameworks. So, we're informed by Part 4 considerations when formulating these frameworks, and that's the sorts of things that I've covered with the high level factors of considerations of the Part 4 purpose and the purpose of IMs for certainty. The frameworks are very much our initial thinking. They're conceptual rather than prescriptive or mechanistic. We just don't think that the evaluation by the Commission of IM changes can be reduced to that type of approach. Rather, it's guidance we're putting forward and the frameworks are pitched at a level which we hope will address a range of situations.

So, at this point I would like to hand over to Scott who's going take you through some more detail on the frameworks.

SCOTT PEARSE-SMITH: Thanks, Susannah. So, as Susannah mentioned, I'm going to take you through a bit more detail on the two draft frameworks that we released last week. The first one of those is a draft framework for the current review, which is our primary focus at the moment given its more immediate application. Then I'll turn to the framework for the wider review which we

think provides some interesting context for the review that's currently afoot.

The framework that we've put out in draft for the current review is organised along two major conceptual stages that we see the review process as involving. First of all is the review stage which is focused on answering the question, which IMs should we consider changing, and why? And then the second conceptual stage which is about answering the question, should we change the IMs and if so, how?

To tie that back to the process that we've described in the problem definition paper, the review conceptual stage is very much focused on the identification of issues and then developing those into problem definitions as they relate to the IMs - and we think at the point at which we've done that we should be in a position to answer the question about which IMs we should consider changing and why. The change stage then encompasses identifying and assessing potential solutions and ultimately deciding on the best solution - and in doing so, we will be answering the question, should we change the IMs and if so, how?

A couple of really key points that are central to this draft framework for the review. First of all, that we see the starting point for the review as being the existing IMs. We think that that's implicit in section 52Y which describes a review of published IMs. It also comes through in section 52R which describes the purpose of input methodologies as to provide certainty about the rules, processes and requirements applying to regulation. And finally, it's also worth keeping in mind that the IMs, the vast majority of them, have been tested by the Courts under merits appeal. So, all in all we think that the current IMs provide a really solid starting point for the review.

Starting from that position we then propose to only make changes, as Susannah has already alluded to, that will better promote the long-term benefit interests of consumers, that will better promote the IM purpose - that's to promote certainty about the rules, processes and requirements underpinning regulation - or to significantly reduce complexity and compliance costs. So, taking that as a whole you could perhaps describe our approach as, if it ain't broke, don't fix it.

To move on now to consider each of the two conceptual stages that we see the review entailing in a bit more detail, starting with the review stage, which again is focused on answering the question about which IMs should we consider changing, and why?

In the draft framework we put out last week we described a series of five questions that we might ask ourselves in helping to interrogate a particular IM to consider whether or not we should consider changing it. Those are up there. So, it goes back to considering the policy intent - whether it's still relevant; whether the IM in place is actually achieving that policy intent; whether there are opportunities for that IM to achieve the policy intent better; whether that IM could continue to achieve the policy intent but in a way that better promotes the IM purpose or reduces complexity and compliance costs; or whether changes to that IM might be required as a result of changes that we're making to other IMs as part of the review.

And then for those of you that have had a look at the paper, you will have seen that we've then broken those down into even further sub-questions that might provide some useful prompts for us in trying to answer the five questions on the board.

Taking the first one as an example about the policy intent, delving into that we might ask what the IM was

intending to achieve on its own or as part of the package in which it sits; whether the policy intent behind that IM is still consistent with section 52A, which is to promote the long-term benefit of consumers; whether the relevance of that policy intent might have been questioned by the Court, by stakeholders, or by us; whether any external circumstances may have changed, and where those provide assumptions underpinning the policy rationale, we might need to consider whether that policy intent is still relevant. There, by external circumstances, the kinds of things that we might consider are whether the industry's changed, whether relevant economic theory or practise might have changed, or whether any other external circumstances may have changed that cause us to relook at the policy intent.

We might also look at whether the policy intent could actually be achieved without the IM – whether that particular IM is in fact required; or whether any other evidence might exist that the original policy is no longer consistent with section 52A, being the Part 4 purpose.

I'll just pick one more of those - we'll go through number 3 which is about considering whether the current IM could achieve its policy intent even more effectively than it currently is. There, some of the prompts we might ask ourselves are whether potential changes have been identified either by stakeholders, by the Court, or by us, that might improve the effectiveness of the IM or that might reduce any unintended consequences that that IM might have; again, whether any external circumstances may have changed in a way that means the IM is not promoting its intent as effectively as it possibly could; again, whether any other evidence exists that a change might be able to better achieve the policy intent behind the IM; and finally, whether a change to that IM

is, in fact, required, or whether perhaps other elements of the regime could be changed to better promote that policy intent - for instance that could be through issuing guidance material.

To move on now to the second conceptual stage of the review, which is the change stage, and again that's focused on answering the question, should we change the IMs and if so, how? So, once we've identified those IMs that we'll consider changing, this is the question we'll be asking. And, there, I think it's really important to come back to Susannah's point, which is that we don't see there as being a specific statutory threshold that changes must meet. But in saying that, we do only intend to make those changes that promote the high level objectives for the review, which we've canvassed already. And we think assessing whether or not a change would achieve those objectives involves an exercise in judgement on our part, and that involves weighing up both the pros and the cons of the change. And, by that we mean taking into account any positive impacts that the change might have on the long-term benefit of consumers, and also any negative impacts that the change might have on the long-term benefit of consumers. And, we see that weighing-up exercise as being a qualitative exercise, though it might involve quantitative aspects where that's helpful or relevant.

Another useful point to quickly go over is the idea of considering some changes as a package. It might be that looking at a minor change in a sort of a stand-alone sense, that the pros that would come about as a result of that change wouldn't outweigh the cons. But it might be if we were to look at a series of minor changes to that one IM as a package, that those cumulative pros then outweigh the cons, with the cons largely being derived from even changing that IM in the

first place; whereas the benefits might continue to accumulate as we add those additional changes.

Finally, it's really important to note that the type of regulation the IM affects is a relevant consideration to this weighing-up exercise. As we noted when we set the IMs, the IMs for price-quality and for information disclosure have quite a different role. So, for information disclosure, the IMs are really focused on underpinning an assessment of profitability of regulated businesses; whereas the price-quality IMs to a large extent are focused on underpinning the setting of maximum allowable revenues for regulated businesses.

To take price-quality IMs as an example, when we're looking at a price-quality IM and considering a change, we'll be considering how crucial that IM is to the setting of maximum allowable revenues, if that's the role of that IM. And obviously the more impact that IM has on the setting of allowable revenues, the more that even a small change to that IM might have a big impact. So, really, what we're concerned with here is not the size of the change but the impact of the change.

So, that was a brief run through of the draft framework for the current review. I'm now going to turn to the broader framework that we also issued last Wednesday, and this is really about exploring the wider context for the current review.

As it says up on the screen, in developing this, our initial thoughts on what a wider framework might look like, we were really hoping to provide some context for the review and really situate this review within the wider set of avenues through which we might make changes to the IMs over the longer run.

At the back of the discussion document we presented a table which set out four potential categories of IM

changes. I'll first talk you through how we developed those categories and what they mean.

So, we began with the two statutory powers under which we can make changes to the IMs, the first being section 52Y - which allows us to make changes as a result of a review, such as the one that we're currently in the midst of - and the second statutory power we have to make IM changes is under section 52X, which is about making changes outside of a review context.

Section 52Y gives us our first category which is about changes made as a result of an IM review, which leaves us with three categories under section 52X.

Within section 52X, that provision distinguishes between material and non-material amendments, the difference being that non-material amendments aren't subject to the same consultation requirements. So, there we've split out non-material amendments as their own category, category 4, leaving us with categories 2 and 3 under section 52X. These categories both concern material changes to the input methodologies. This distinction between category 2 and category 3 isn't found in the Act, this is something that through our experience over the past four or five years we've noticed that IM changes could broadly be grouped into one of two categories. And, that is first of all category 2, pre-price-setting changes, being those changes made in the context of an upcoming price-setting event. So, for price-quality regulation, that's really about those changes that might be made prior to a price-quality reset in order to allow us to implement incremental change or an innovation into a price path for the following regulatory period. And, perhaps an example of that is, last year prior to the electricity reset, we made some IM changes in order to allow us to introduce a quality-linked revenue scheme as well as

energy efficiency allowances. We see category 2 as also having application to airports, who also operate on a five year pricing cycle, and again there we might under category 2 make changes to implement incremental change ahead of an airport price-setting event.

Moving on to category 3, which are changes to improve workability, effectiveness or predictability. Really, this category is about making changes that have immediate value. For information disclosure we see that as being to make changes to the IMs that underpin information disclosure to address a concern about workability or effectiveness, and we see the same applying to the IMs that underpin customised price-quality path applications where we might make changes to improve the effectiveness or workability of those CPP requirements prior to an application.

We see category 3 as having more limited application in the realm of default and individual price-quality regulation. There we see this category just being used where predictability would be enhanced by clarifying any uncertainty about the price-quality IMs early rather than waiting until immediately prior to a price-quality reset.

So, those are the four categories that we've developed in our initial thinking and we're really interested to get your feedback on what you think about those four categories.

In terms of what the draft framework then tells us about each of those categories, it really answers two key questions. The first being, what types of changes would be likely to fit within that category? And in doing so that also provides guidance on when we're most likely to consider those types of changes. And second, once we're looking at a change in a particular category, what are the factors that we might take into account in

deciding whether or not to make that change? And again, that comes back to those key high-level objectives that Susannah outlined and we've been through a number of times already, about promoting the long-term benefit interests of consumers, promoting the purpose of IMs or where there's an opportunity to significantly reduce complexity or compliance costs. And it's also worth noting it's also relevant to think about whether there are any non-IM solutions.

So, that was a run through of the two draft frameworks that we released last Wednesday. If you're interested, I would recommend going away and having a look at those. They built on the initial thinking we put out around frameworks in the problem definition paper, and of course submissions are open until the 21st of August on that paper and on the frameworks which build upon it.

In the paper we released last week we did put forward some additional prompts or questions that we were particularly interested in your views on; those are reproduced on the board there. We've still got a few minutes, so if anyone wants to offer their early views on those questions, or if you've got any questions for Susannah and I, we're happy to take those now. Also, Susannah and I - as well as Calum Gunn and Rob Bernau - will be floating around over the next couple of days, so if you want to catch us as a smaller group or on our own, you're welcome to nab us and take us aside. So, with that I'll hand over to Keston who's going to facilitate any questions.

KESTON RUXTON: Thank you, Scott and Susannah. We've got about five minutes now so we thought we've got time for one or two questions if anyone had anything they were dying to ask?

IAN FERGUSON: Ian Ferguson, PWC. I just had a question. You were talking about changing the IMs to better promote 52A, 52R or reducing complexity, is there any reason 54Q isn't on the list?

SUSANNAH SHARPE: Those are the high level considerations. We would definitely be looking at other sections in Part 4 where they are relevant, so it's not saying that we're not going to consider 54Q.

KESTON RUXTON: We have another one over here and then we'll have David Freeman-Greene. Next, Mark Toner from Webb Henderson.

MARK TONER: Thanks, Susannah. I thought that was a really good run through. I apologise I haven't read the paper yet but the Commission's view was no new IMs in this one. I just want to clarify, in the future when you do need a new IM, do you have a statutory tool to do that? Apologies if it's in the paper.

SUSANNAH SHARPE: We have put forward some more detail on the thinking around that in the papers and we've given the example of pricing methodology. I guess in the context we're in at the moment, we're looking at the IM review and our view is that we're reviewing the published IMs as they stand, and they've been already set in 2010 and tested by merits appeal, but I think there's - we acknowledge that there's potentially a subtle difference between amending an existing IM on a matter that's already standing, versus introducing a completely new IM on a new matter, and by "matter" I'm referring to section 52T. It might be that others in the audience can contribute to this discussion. I can see Rob putting his hand up.

SCOTT PEARSE-SMITH: Just to be clear though, Mark, it is our preliminary view that we do not have the power to create IMs on new matters, be it as part of 52Y, 52X, or any other provision, except in the context of Part 4

inquiries where we're required to set input methodologies at a certain point in that process.

ROB BERNAU: Mark, one of the points I just wanted to make, but I think it's applicable to everybody in the audience, is we absolutely accept there's some greyness around what's new and what's not new, and we've put the preliminary views out there because we think it's useful that people see where the Commission is coming from. The aim's very much not to engage in a sort of abstract debate of lawyers at 15 paces around what generally you can or can't do. For us we see this as a much more useful discussion to have in the context of problem definition, in terms of what are the problems that stakeholders see with the IMs at the moment?

If the solution to a problem is creating something that looks like a new IM, then we'd much rather try to answer that question as a very specific question and see what it is we can and can't do, where we would be stretching the framework and in the worst case scenario if we genuinely believe we can't do it, is that something we test at Court level, or is that something we seek legislative change from MBIE for? It's a much more useful debate to have in the specific - here's the problem we're trying to address - and frankly it’s going to engage law makers a whole lot more if they can see something the framework doesn't do.

KESTON RUXTON: Thank you. One more question from David Freeman-Greene down the back and then we'll have to move on unfortunately.

DAVID FREEMAN-GREENE: Yes, David Freeman-Greene from Orion. I think this is a great step in the right direction and to my point earlier on, around certainty, it all helps us steer in that direction, but I was just wondering whether there could be more done in this regard because the categories are good but it just allows I think, from

the brief overview that I've seen, it just allows you to place sort of your views on IMs in certain categories, and I think this process or the review could be enhanced, and particularly reviews pre broader IM reviews, could be enhanced with having further detail about thresholds and materiality to address some of the issues you see with IMs as opposed to broad discretion that still seems to be reserved, and I'm not quite sure that hits the mark in terms of the certainty purpose.

SUSANNAH SHARPE: I mean, we've very much put this forward as our initial thinking and we're open to written submissions on how it might be improved. So, we would be interested to hear your views on that. I don't know if you want to add on the categories?

SCOTT PEARSE-SMITH: No. I mean, as we said, the categories were derived from a mixture of statute and prior experience. If you think there are additional categories or things that should be split out into separate categories, we’re also really interested to hear your views on that. As Susannah mentioned, this is just our initial thinking but we did see real value in sharing it at this stage to hopefully elicit some really high quality submissions in this area.

KESTON RUXTON: We're going to move on now. I got the feeling there is actually quite a few questions in the audience about this topic and, as Scott has said, we are around for the rest of today and for tomorrow. Please feel you can come up and talk to us if you have any questions. Also I guess, the next avenue after that is to please put any thoughts, concerns, comments you have in the submissions that you will be putting in, in August. If we can change topic now, I would just like to thank Susannah and Scott for their presentations. (Applause).

I now welcome to the stage Calum Gunn who is a principal advisor here at the Commerce Commission. I think also we're going to see James Marshall, a senior economist in our regulation team as well. They're going to take a session on risk allocation mechanisms under price-quality paths. This session is intended to give a holistic context to issues of risk allocation in those price quality paths. I'll hand over to Callum, thank you.

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CALUM GUNN: Thanks, Keston. In fact, I'll invite the rest of the panelists up to the stage so I can introduce you all at the beginning.

Okay, so I'm very pleased to introduce this first of two panel sessions that's on the general theme that we set out in the problem definition paper, about improving the IMs under price-quality regulation in respect of risk allocation and incentives, and so the second session after lunch, I'm sure you're all aware it's sold out for tickets, is on emerging technologies.

We thought before going to that session it's useful to sort of step back a little bit and look at the wider context of risk allocation and look at some of the existing mechanisms actually in the IMs and the price quality instrument to provide the context of that discussion, because ultimately for us that context and problem definition has ultimately, as Susannah and Scott have indicated, that needs to come down to us asking which IMs are we going to change and why, and then how are we going to change those? So, ultimately we need to come down to that short list of what we're thinking is worth changing and how that fits into the wider context.

So, we've got a great line-up of speakers on this topic today. We're starting off with James Marshall, who is a senior economist with the Commission and he's

going to provide a recap of the topics and issues in question of risk allocation we set out in our problem definition paper in June.

That will be followed by Megan Willcox. You will have heard in the quick fire definition this morning a number of speakers, one of their top three issues was on the form of control and that's Megan's topic. She's going to share with us some of the experience from Australia and the UK. And we heard from Greg also at Wellington Electricity this morning that that being one of Wellington Electricity's top issues.

Then Nathan Strong from Unison is going to provide a bit of perspective about, from a business point of view how do you manage risk in an uncertain world, and he will touch on some of the issues that are going to be very pertinent to the after lunch session in how business models are changing in response to emerging technologies. So, we get a little bit of a taste of that emerging technology flavour in this session as well.

Then Greg Houston is back again after being at the Competition Matters Conference and he's just come in from Perth and Sydney, so he's back in the same room again. He's going to provide another topic that came up this morning, was on the timing of cash flows, and that relates to the indexation of the regulatory asset base. So, that's something also that's interesting to see is one of the top three issues for a couple of people that spoke this morning. So, he's going to talk about that and also provide some commentary on the matters raised by James, Megan and Nathan.

And, finally, we've got a joint session from Ralph Matthes and Richard Hale from the Major Electricity Users Group and Major Gas Users Group

respectively, to provide the major consumers' perspective response on those issues.

So, we'll see how we go for time. Depending on whether we're ahead of schedule or not I may open up to questions after each speaker, but we've got to finish by 1, but if there is enough time at the end hopefully for questions of any of the panelists, but I'll keep an eye on how the timings are doing. So, with no further ado I would like to invite James to come up and provide an introduction to this session. Thanks very much.

JAMES MARSHALL: Thanks, Callum. So, this session is called "Risk allocation mechanisms under price-quality paths" and how they impact on the allocation of risk between suppliers of regulated services on one hand, and consumers of regulated services on the other.

So, in terms of the purpose there's three aspects. Firstly, we really want to encourage people to consider risk allocation in a holistic way. I think it's quite difficult to think about specific areas to do with risk without looking at the bigger picture and the whole package related to risk.

We secondly want to identify views regarding the existing risk allocation under the IMs and under price-quality paths, are there problems under current arrangements, and direct to that if there are problems, what are the changes we could make to IMs that could provide a more appropriate solution?

Then thirdly, just as a result of the open letter on the IM review and other engagement with stakeholders we've identified a couple of topics to discuss in more detail. The first of those is the form of control of the price-quality path, and secondly, whether to index or not index the regulatory asset base.

So, firstly we're here to talk about risk but what is risk and where does it come from? I think it's most

easily categorised as the uncertainty of outcomes and particularly in the context of a price-quality path, well in the context of a price-quality path what we really mean is the uncertainty around what's going to happen over the course of the price-quality path when we're setting the price path at the start of the regulatory period.

There are a number of sources of risk related to the supply of regulated services, and I've put down on the diagram here what I consider the sort of main six areas that have the biggest impact on costs and revenues to suppliers and consumers of regulated services.

So I've got them down as demand risk, financial risk, input cost risk, inflation risk, general inflation risk, business operational risk, and regulatory/legal risk. You may be thinking of others but those are the ones that I think are the main issues. What I have not included in here are risks associated with specific events or specific circumstances. So, often think about catastrophic event risk, risk of emerging technologies, I've thought those were drivers of these other types of risk but when there are specific events or changes in environments that really have a big impact on risk, then also it's obviously legitimate to consider those by themselves and how they impact on the overall level of risk. But whichever way we categorise it, really just want to make sure that overall, all the main areas of risk to suppliers and consumers are considered.

So, the next question is who should bear this risk, who should bear the costs associated with different types of risk? And, this question generally boils down to how should the risk be shared between consumers on the one hand and suppliers on the other? And, when we think about it at the Commission, we tend to follow a couple of guiding principles.

Firstly, we seek to allocate risk to those best placed to manage them, and there's three facets to this principle. Firstly, ability to control the probability of occurrence. So, if we use demand risk as an example, the ability to control demand, ability to control output; the second facet is really about the ability to mitigate costs of the occurrence. So again using demand as an example, not now the ability to control demand but the ability to control costs associated with demand out-turn that's different to what's previously been predicted; and then thirdly, when there's no ability to control outputs and there's no ability to control costs, who's really in the best place to absorb additional costs associated with risk?

And, I guess the second principle we have is that we really think it's important to provide incentives to suppliers to manage risk over which they have at least some degree of control because it really does lead to more efficient outcomes, more consistency with workably competitive markets, and ultimately that's in the long-term interests of consumers which is the rationale for Part 4 regulation.

So, those are the kind of principles. How does it work in practice? How do we manage risks under a price-quality path? If we think of it from the point of view of a supplier, a price-quality path provides two things. Firstly, it mitigates risk to a certain extent, and for any risk that hasn't been mitigated it provides compensation where it's appropriate.

So, firstly to expand on that. There's a number of risk mitigation mechanisms under price-quality paths. So, for example, things like the ability to reopen price paths under certain circumstances, the ability to pass through certain types of costs, and these are all mechanisms that help reduce the risk on suppliers,

reduce the volatility of returns under a price path to regulated suppliers, and we do think that that's a good thing. It's important because these are suppliers of regulated services, essential services. It's not in the long-term interests of consumers for them to have very volatile revenue streams because we want them to be relatively financially stable, we want them to be able to invest in the networks and provide services consumers want. So, that's the first thing, but the risk mitigation mechanisms themselves don't eliminate risk, they just reduce risks so there still is a residual risk on suppliers, and we know if we want investors to keep investing in regulated businesses then we'll need to provide compensation for that risk.

With investors themselves, they generally only expect compensation for systematic risks, risks associated with the general economy. What they don't generally require is compensation for non-systematic risks. So, businesses have sector specific risks but they're considered diversifiable for the investor. The way that we compensate for systematic risk is through the regulatory WACC but we don't necessarily compensate for non-systematic risks.

Third thing that is being considered under a price-quality path is the impact any asymmetric effects, and because we have a cap on prices, it means there's a limit to the revenue upside to a supplier. So, we need to consider whether there are any significant material downside asymmetric impacts that could be mitigated either through regulatory mechanisms or potentially other forms of compensation.

And fourthly, we need to continue to focus on the long-term benefit to consumers. So, there may be opportunities to provide other forms of compensation through ex ante or ex post allowances when we think

those, the costs of managing certain types of risk are to the benefit of consumers.

So, examples on this front might be provision for insurance allowances. We also have in the current IMs the term credit spread differential, TCSD, that allows recovery of costs associated with managing financial risk in a prudent way, and I've got a quote on the slide which is from the problem definition paper which I'm not going to read out, I think it's paragraph 107, which just gives a view of how we think about these kinds of, create a conversation for different types of risk.

So, it's clear that regulatory design has an impact on the risk exposure to businesses. This table provides a summary of various design issues and how we currently approach them in the IMs. So, firstly, to the RAB recovery. We allow actual capex to enter the RAB from the next period even if it's over the regulatory capex allowance. We don't have ex post prudency effect assessments that are sometimes seen around various jurisdictions.

In terms of RAB indexation for EDBs and GPBs, we have a CPI indexed RAB, for Transpower we have an unindexed RAB, and that could affect the risk profile investments.

In terms of asset lives and depreciation, we use physical asset lives as listed in the IMs, straight line depreciation, again has an impact on risk.

In terms of form of control for EDBs and GDBs we have a weighted average price cap indexed by CPI. For Transpower we have a revenue cap and for GTBs we have the option of either within the IMs but the current DPP uses a revenue cap. We have options for reconsidering the price path which is available in four types of circumstances, catastrophic events, legislative regulatory change, error, and fraud, although there's

a materiality threshold of around 1% of revenue. And then we similarly have options for customised price-quality paths, pass through allowances, risk management allowances that all affect the risk exposure to regulated businesses.

So, what's the issues with the current approach? Actually we think that they're not too bad, we think they're broadly appropriate the current IMs in terms of allocating risk under a price-quality path and to promote the long-term benefit of consumers, but we're obviously very interested in other voices, whether you agree or disagree on that statement, but we have, as I've mentioned, had a couple of issues that have come in, in response to the open letter that people have suggested that could potentially be improved and we should evaluate, and these were the form of control and the indexation of the RAB, and there's going to be more detail on these issues from the presenters following me but I'll just quickly summarise the issues.

In terms of form of control, it's generally characterised as a revenue cap versus a price cap whereby price cap exposes suppliers to the risk that demand and revenue over the course of a price-quality path is different to that that was forecast at the reset.

Moving towards a revenue cap would transfer this risk away from suppliers, although the extent depends on how the revenue cap is designed, and the suggestion from stakeholders and suppliers has been that a move to revenue cap would be beneficial because suppliers have an ability to control demand volumes, it's actually quite difficult to accurately forecast demand and consequently changes in demand expectations can have quite a big impact on revenue. And, related questions that come up, what would be the impact on WACC, if any?

If there's a change in demand risk you would expect to have at least some effect on the systemic risk to suppliers.

Second issue is around RAB indexation, some submissions on whether the value of the assets in the RAB should be indexed or not. The decision ought to be NPV neutral but it effects how quickly costs of assets are recovered and cash flows, which might have an impact on the risk profile of the investment, and again there's a link to emerging technologies so we might hear about that later.

A secondary related issue when the RAB isn't indexed by CPI we need a forecast of inflation risk and there have been some question marks over the risk that this exposes suppliers to. On the whole we think this is broadly hedged because of the way, or as long as the forecast for inflation are used on a consistent basis with setting the nominal WACC at the start of a price path, but we're interested again in people's views on that and similarly what the sort of general hedging impacts are of moving towards an unindexed RAB?

So, just in summary, from the presentation a couple of things to takeout, just another reminder, I think it's important to have a total package, a complete approach to risk allocation, or consider a total package approach to risk allocation when evaluating potential IM changes. I think there's always going to be some element of judgement required in the trade-off between providing appropriate incentives for suppliers and then their exposure to risk over which they have less control. Thirdly, once appropriate allocation for material risk exposure has been determined, we can provide appropriate compensation. We do that through the WACC for systemic risk but we also have the options to provide ex ante allowances/ex post compensation for

risk management costs when they provide long-term benefits to consumers.

And then the question is just really to consider over the course of the session, do the current risk allocation mechanisms under price-quality paths as determined by IMs appropriately allocate risk between suppliers and consumers, and then also what changes could be made to price quality regulation that would reduce the overall risk to suppliers or consumers, or change allocation of risk between suppliers and consumers to better promote the long-term interests of consumers. Okay, I'll leave it there.

CALUM GUNN: Thanks very much, James. I would like to invite Megan now to elaborate on the topic that James mentioned on the form of control.

MEGAN WILLCOX: Thank you everyone and thank you Calum for the introduction. Today I'm going to talk form of control and, James, you've nicely covered off some things I was going to say so I won't have to explain those.

So, just as a brief overview, first we're going to cover the theory of form of control, so that's really looking at the different risks and incentives and broader considerations and how these are different under different forms of control. Also risk mitigation opportunities, particularly under a weighted average price cap. I'm then going to draw on a little bit of the Australian experience as well as some of the UK experience in moving from different forms of control towards a revenue cap, and I should explain that in my role I advise Wellington Electricity as well as Victoria Power Networks and that's how I can draw on the Australian experience and we also have sister companies in the UK and they've been able to provide us with some information around the UK experience. Finally I'm going

to talk about the interaction, if any, between the form of control and the return on equity.

So, firstly, I just want to talk a little bit about that form of control is not a binary decision, there's actually a spectrum of different options. As you move along the spectrum, the risks and the incentives change. So, today I'm really going to focus on two forms of control, that is the weighted average price cap which is currently applied to electricity distributors in New Zealand, and a pure revenue cap which is applied to electricity distributors in Australia in the current regulatory period which they're just entering now.

There are various different forms of control in-between those, and the risks and incentives that I'm going to mention today, they will to some extent be applied under the hybrids as well. So, just as an example, if anyone is not familiar with hybrids, SA Power Networks in South Australia has actually been under four different forms of control across four different regulatory periods, so they've got a lot to say on form of control, but one of the really interesting form of control they had is they were subject to revenue yield which is a dollar per unit of electricity distributed, and then there was a wash up around that. So, there was a cap and collar. So, they absorbed the demand risk within a certain range. Outside a certain range there was a wash up, an adjustment to revenues. So, really - I'm going to keep going - various different forms of control, and I'm covering these two today but just bear in mind they do range if you use a hybrid in-between those.

So, turning to the risks and incentives. Under a weighted average price cap suppliers risk revenue under-recovery if actual volumes deviate significantly from the regulated forecast and actual volumes are lower

than the regulated forecast. Conversely, consumers bear the risk of the regulator under-forecasting volumes that leading to higher revenue recovery above the regulator's allowances or their efficient cost build-up if forecasts are below actual outturns.

Additionally, over the long-term consumers also bear the risk of suppliers under-recovering revenue at a material level over a prolonged period of time because that will have an impact on incentives for investment with long-term impacts on the quality of supply delivered to customers. Importantly today I'm not talking about whether volumes are increasing or decreasing, what I'm talking about is actual out-turns deviating from the regulator's forecast. I just want to give you a quick example here and this is an Australian example.

This graph shows the difference between the regulator forecast and actual volume out-turns across two regulatory periods for those distributors that were subject to a weighted average price cap in Australia.

So, what you can see on the left-hand side of the chart is where the regulator over-forecast volumes and that enabled a revenue under-recovery. On the other side of it you've got where the regulator under-forecast volumes enabling a revenue over-recovery. I say "enabling" because in a minute I'll talk about there are risk mitigation strategies that can be used.

What I really want to point out in this is that forecasting volumes is actually really difficult and these are not immaterial differences. So, you're looking at Ausgrid up there with over a 10% difference in the forecast and actuals over a five year period. That's a big impact and it's a material impact on revenue outcomes. I also want to point out that these are windfall gains and losses, so these don't reflect

efficiencies and changes in what suppliers need to invest in the network. It's windfall gains for consumers, it's windfall gains for distributors.

So, just quickly covering risk mitigation options. If you are under a weighted average price cap. In theory there are options for distributors or suppliers I should say, for mitigating the impact of revenue losses resulting from volumes less than forecast. So, there are options around tariff rebalancing and really interesting, the AER undertook an analysis of how distributors have been performing under that. What they found is that even when distributors' forecasts were below the regulator's allowance, they were able and were rebalancing tariffs to such an extent they were able to still over-recover revenue relative to the forecast allowances.

In New Zealand, however, the context is a little bit different and the low fixed user regulations significantly limit their ability to rebalance tariffs and I want to talk about Wellington Electricity's case in particular, because it's a high residential network, 56% of total customers are eligible for low fixed user tariffs. That means that we cannot change and rebalance tariffs for those customers. Only rebalancing can occur for other customers.

So, I just want to continue on with a bit of theory and now we've talked a lot about the weighted average price cap and the risk of over and under recovery, those risks disappear under a revenue cap. So, suppliers become risk neutral with respect to energy volumes. There's plenty of other risks and opportunities under the general regulatory regime but the risk of energy volume out-turns resulting in declining revenues is removed. This also removes the risk to customers that distributors under-invest in the network as a result of

revenue losses over a prolonged period of time. It also removes the impact on customers of over-recoveries of revenue, that windfall gain if energy volumes exceed the regulator forecast. This was one of the reasons that the AER moved to a revenue cap. They could see that the weighted average price cap was not delivering on the theoretical benefits of having efficient tariffs.

So, I just want to move off from risk now and cover energy efficiency and demand side management. There's been a lot of talk today about emerging technologies and the form of control is actually really important in how it influences incentives to invest in these types of initiatives.

So, under a revenue cap suppliers are neutral with respect to energy volumes. So, there is no revenue impact of these emerging technologies in terms of its impact on volumes and revenue but there is an opportunity for suppliers to officially defer or reduce capex. Because they're under a revenue cap, any reductions in capex are retained for a certain period or a certain share depending on what your incentive scheme is. So, when I say the benefits are to suppliers of deferrals, there are also benefits to consumers because consumers benefit in that capex is not being rolled into a RAB.

Conversely, under a weighted average price cap there is a direct disincentive for suppliers to invest in energy efficiency or demand side management activities because reduced volumes resulting from those go directly to a revenue impact.

So, while in the New Zealand context an energy efficiency incentive scheme has been introduced to try and off-set some of those disincentives, we believe it's only a partial solution as it only acts against disincentives, it doesn't allow for incentivising, and

also there's a lot of uncertainty regarding how much of that revenue loss will actually be recovered once the review and the application process has been completed.

So, just moving on to the third row there which is on tariff structures. I've briefly mentioned before that the weighted average price cap is intended to promote efficient tariff structures on the basis that tariffs reflect relative customer demands.

This theory, however, relies on quite a number of assumptions. It relies on distributors having a good understanding of customer price sensitivity, it relies on their being no constraints on the tariff setting process which here in New Zealand we have the low fixed user regulations which act as a constraint. It also relies on price signals being passed through from distributors through to retail - from retailers, through to customers, and also on consumers having good information and having the motivation to respond to those signals. So, all of those assumptions are required for the weighted average price cap to deliver efficient tariffs in terms of demand reflective tariffs but those assumptions are quite heroic in terms of we don't actually see them occurring in practice.

Under a revenue cap, however, suppliers are quite neutral to how tariffs are set, with respect to revenue recovery that is. So, there's opportunities under a revenue cap to move towards more cost reflective tariffs. Now, a revenue cap doesn't give you cost reflective tariffs but enables suppliers to move that way without having a disincentive in terms of the impact on revenue recovery.

So, under a revenue cap the ability to potentially move to more cost reflective tariffs, it has the potential to send much better price signals to customers regarding the true economic costs of using the network.

It also tells them potentially about the cost of using the network at different times and about the relative costs of using the network versus non-network alternatives.

So, very briefly, in the fourth row there on price stability, both forms of control have elements of price instability. In aggregate a weighted average price cap is more stable within period as prices in aggregate increase by CPI. However, tariff rebalancing to the extent that it happens can create instability for particular customer groups.

Under a revenue cap there is also potential for price instability if suppliers forecast inaccurately. So, the onus, or the burden really now comes onto suppliers to forecast energy volumes more accurately but we think suppliers are well placed to do that, they're observing what's happening on the network on an annual basis, they can update those forecasts. The other thing is that, and something we're experiencing in Victoria Power Networks already, is your finance team really want you to get your forecast right because they're concerned about cash flow volatility. So, we're moving to a revenue cap for the first time next year and already there's coming under a lot of pressure to say you've got to get your forecast right.

So, finally I just want to cover briefly admin cost. Under a weighted average price cap the regulator does have to do a forecast of volumes quite far in advance so they have to forecast it, and you've almost got six years and there's a lot of uncertainty. We've talked about today a lot of uncertainty about emerging technologies and I'm not going to claim to know more than anyone else about what's going to happen in the future under emerging technologies, so that makes the regulator's job even more difficult in trying to

forecast energy volumes. Under a revenue cap that's not required.

So, I just want to move on now to the Australian experience.

The first round of resets where the AER became the regulator for all the different jurisdictions and states in Australia, the AER really retained whatever form of control was previously imposed on those distributors by their jurisdictional regulators. You can see there that Victoria, South Australia and New South Wales were on a weighted average price cap in the first round of controls. After having had the jurisdictional power over these states for regulation for five years, the AER then reassessed how it would do the form of control and it's moved every state to a revenue cap. The AER has given a number of reasons and they really reflect the reasons I've already mentioned today, and that is they consider there is a higher likelihood that revenue recovery reflects the efficient costs. They even go so far as to say that the weighted average price cap does not provide a high or even reasonable likelihood of efficient costs recovery.

Other reasons are those we've already discussed, including incentives for demand side management. The AER here was really interested in promoting the distributors' I guess participation in demand side management. So, distributors are really well placed to participate. For example, in Powerco Australia we are doing battery trials, large scale commercial battery trials as well as residential battery trials, and because of our knowledge of the networks, our knowledge of peak demand constraints, we can actually invest in those non-network alternatives and overall that provides a benefit for customers. If that's a more efficient way of doing things, of using battery storage, of using

non-battery alternatives rather than continuing to augment the traditional networks, and we've got an incentive to do it because as we reduce our costs we've got no impact on the revenue and that has a flow-on benefit for us in the short-term and for customers in the long-term.

I also want to mention there that the AER stated that in terms of efficient tariffs they didn't believe a weighted average price cap had had the theoretical advantages because of these assumptions have not held in practice. At the same time, while the AER is not the setter of price-setting, actually similar to here where the Commerce Commission doesn't determine the framework for the actual price-setting, the AMC in Australia was moving towards a programme of rolling out more cost-reflective tariffs and the AER saw the revenue cap as supporting that. So, it doesn't guarantee it but it supports it. Finally, the AER also acknowledged price inability occurs under all different forms of price control.

So briefly on to the UK experience, and I'm not going to go through the reasons why the UK regulators moved from price cap to regulated cap because actually they're very similar, particularly a concern around demand side management and energy efficiency. Interestingly about the Ofgem moving to a revenue cap for electricity distribution is that it accompanied the revenue cap with flexibility in the allowances for network connections and general augmentation works. That was because of a potential risk that a lower forecast of, I guess the allowances did not cover the amount of new connections that occurred or the amount of general augmentation; when I'm talking about general augmentation, that's not customer specific augmentation. So similarly the gas distribution. For gas distribution

Ofgem included a reopener, so if large new connections that were not included in the forecast allowances came along, then they could reopen the decision to account for that.

So, the purpose of these additional regimes that were added with the revenue cap was to deal with unexpected new connections, particularly for distributed generation. So, there was a lot more connections of distributed generation which required the network to support that through further investment.

So, just finally I really want to talk about the interaction with the return on equity. There have been a lot of questions raised about whether there is any interaction between these two. So, we consider there is actually no basis for adjusting the asset beta for a change in the form of control and there's really four reasons for that. One is that we're not aware of any evidence that the form of control materially influences the systematic risk of the business or the asset betas of businesses. Further some statistical analysis undertaken by CEG in 2013 found no statistical difference in the asset betas applying to regulated utilities that were subject to different regulatory regimes.

Additionally, the asset beta in the IM was set with reference to a sample of firms which have a mix of different forms of control.

Finally, we note that in both of the examples that I gave you internationally, the Australian regulator and Ofgem in the UK, neither of them adjusted the return on equity as a result of changing the form of control.

So, just in conclusion, we believe a revenue cap better promotes the purposes of Part 4 for all the reasons we talked about today. It promotes the benefit to consumers through ensuring that revenue recovery

reflects efficient costs and allowances set by the regulator. It promotes incentives for energy efficiency and demand side management and we've talked a lot today about we don't know where this is going, and maybe we don't know where this is going but a revenue cap allows it to do whatever it's going to do so there's no market distortions and no direct impacts on distributors from doing that, and it allows consumers to respond to the market changes without having any distortions.

So, it also enables a future move towards cost reflective tariffs. That again sends better signals about the relative costs of different investments, network, non-network, and a revenue cap is also consistent with a low cost regulation which is appropriate in the New Zealand context.

We really feel that a revenue cap is a no regrets approach. From what I've been through today, we've listed and discussed that there's a lot of positive incentives and positive reasons for moving towards a revenue cap given what we've seen under a weighted average price cap where there can be large variations between the regulator forecast and out-turn volumes, that we're not seeing the theoretical benefits of a weighted average price cap I'm struggling to see what the benefits are of retaining a weighted average price cap relative to all the benefits that are available under a revenue cap, and I'm going to end there. Thank you.

CALUM GUNN: Thanks very much, Megan. It's great to have that experience from somebody who's working across two different jurisdictions. So, I would now like to invite Nathan who is going to provide Unison's perspective on managing risks in an uncertain world.

NATHAN STRONG: Thanks, Callum. So, I'll start with an apology to those in the next session, although this is a

session about sort of risk management and risk allocation, it's impossible to talk about that in a context where we've got, you know, significant risks associated with disruptive technologies. So, I hope I don't steal too much thunder.

Pre-dating the start of the input methodology reviews Unison started an internal strategic review around how we would respond to disruptive technology given a growing discourse about that, and obviously experiences overseas with particularly solar disrupting business models, and it's fair to say that as a business Unison is still at a problem definition stage ourselves and we're yet to work through to any key conclusions in terms of how we're going to change our business model. But, as I say on the slide there, our key assumption now is that the concept of enduring monopoly is no longer applicable and that we will have to change our business model.

So, that's not to say that we think that there are material risks of things like asset stranding over the planning horizon. The grid will still be very useful to consumers. We think that, you know, clearly solar won't provide consumers with energy self-sufficiency given the characteristics of New Zealand being a winter peaking requirement, but we do see that battery storage will be the game changer that will really help consumers to evade paying or contribute to paying for the grid, and that's the risk that we need to manage. So, people will have more choices and control over their energy use.

So, we would see that solar in many ways is a bit of a sideshow, or at least that's what it should be given its characteristics, but batteries will be the main thing that will have to drive our commercial models within the planning horizon we're looking at, which is

given the current regulatory approach to RAB recovery, the 40 plus year time horizon.

So, the key issue for us is how do we evolve business models particularly, pricing in particular?

We haven't yet formed a view around electric vehicles but I guess one of the key questions in our mind is if we want consumers to charge their vehicles off peak and therefore avoid having to reinforce networks at the peak times, what does that price signal look like? And although we might have a few more kilowatt hours going through the network, if we're effectively having to incentivise that with very low rates off peak then we haven't really enhanced the revenue generating capability of the business.

I think it's also important that we don't lose sight of things like home automation energy efficiency, as well as conventional alternatives like gas and LPG. So, as we think about how we shift our tariff structures people will have sharper price signals to react to and some of those things will come into play much more.

So, when we think about it in terms of our business I think one of the really important things to recognise in this area is that it probably is, disruptive technology is quite context specific.

So, for us we've got a few things going against us in terms of aging populations, low incomes on average, quite significant income disparities in Hawkes Bay and central North Island, and I guess, as we see it, fairly modest economic growth prospect. So, we don't really see a need to have strong peak demand signals and I guess our ideal tariff structure would be having like a much greater proportion of fixed charges with a little bit of price signalling around peak periods.

But that I imagine is quite a different scenario to a place like Auckland where you've got strong economic

growth, strong pressures, I guess, on network capacity where new technology may well provide much more benefits, whereas we will probably see them as things that are helping consumers trying to evade paying for the sunk costs of our existing network.

So, we see the immediate challenge is to move away from current flat rate tariff structures but that's not an easy prospect, and I guess this issue sort of transcends the input methodology review. There's a whole lot of activity that needs to go on across the policy space and customer education to enable businesses to move towards more cost reflective tariffs, but certainly, as Megan explained, the weighted average price cap approach does currently make tariff structure changes quite risky. So, because of our requirement to use historical volumes to set tariffs, if people make material changes to their behaviour you can't recoup the foregone revenues within the regulatory period, or indeed ever.

And the Commission expressly excluded tariff-based measures from the DPP energy efficiency and demand side management incentive scheme. So, at the moment what we're evaluating is the risk of more people taking up solar and avoiding use of, or consumption going through the network and the risk of that increasing over time, versus the risk of the sort of behaviour response, and so we're trying to work out basically should we act now or wait until 2020 where we're hopeful that something will be done, either a revenue cap or some other mechanism to manage this issue.

Just to complete that story, so we see the short term challenge is to try and get pricing approaches at the retail level where people are facing something that's much closer to the marginal costs of energy, around say 10 cents compared to the current of 20 to 30

cents that people currently see, and that's creating what we would say are artificial incentives to invest in things like solar. But over the longer term we would see that solar and battery storage will become a lot cheaper and that people will have much greater ability to essentially arbitrage pricing methodologies and so how do we think about managing that risk?

So, we're sort of thinking through the different sort of pricing options that are available. Clearly one option is around fixed charges and capacity charges. As Megan said, we're quite limited in that space in New Zealand in the residential market with the low fixed charge tariff option that we must make available, but even if that weren't a restriction currently, those kinds of methods tend to be unpopular with consumers and politicians, and so, talk to Grey Power, they're very keen to see the low user regime continue and that's notwithstanding perhaps an understanding that it does have some undesirable properties.

So, then if we think about demand charges. At the moment the residential space is probably the most prone to being able to react to a demand charge where you look at the ratios of peak to average use. So, with batteries people, you know, if batteries are cheap enough, then you can store electricity when it's off peak and bring down your peak demand. Similarly with time of use charges that are still kilowatt hour based, people will be able to self-generate with solar, store in summer, potentially make very little contribution to the costs of the network, and in winter the thing that we have to ask ourselves is if we're going to start ramping up the peak rates what does that then do to people's incentives to invest in alternative technologies and conventional technologies like your LPG heating, gas heating, etc.

So, one of the things we worry a lot about is how social concerns might constrain our evolution of tariffs over time? And, I guess this is just trying to illustrate the story that from a residential perspective this is the profile of demand across the course of a day. Ignore the scale on the right-hand side, it's in half hours, it would have been better to be in hours but essentially you've got an average level of peak demand at 3.6 kilowatts and 2 kilowatts average demand. So, with a battery, and we work out that the sort of 12 kilowatt hour unit will allow you essentially to smooth consumption across the course of a day. So, if you're thinking about setting - so at the moment we set, or we're recovering about $700 a consumer. If we went down a path of setting a capacity charge based on, say, an average 3.6 kilowatts, then people would face a price signal from our side of things, of $150 per kilowatt per year, and then on top of that you've got your energy costs.

So, that's sending quite a strong signal for people to think about alternatives to electricity and that's not necessarily what we want.

So, we would see that in terms of stating it from a risk perspective that there are risks between consumers that need to be managed, and I think Ralph sort of talked this morning about his nightmare scenario. You've got the haves and have-nots in terms of people with ability to invest in batteries and potentially solar, so at the end of the day people that are perhaps more vulnerable end up being asked to make a much bigger contribution to the network while those that are potentially more well-off reduce their level of contribution, and I think that's an issue for consumers.

For distributors I guess one of the questions is, even if we can ultimately move to more cost reflective

pricing, there's a risk in the longer term that if those vulnerable consumers start to get some political momentum then it puts at risk what we would see as the current regulatory compact where in order to, so we have no stranded asset risk, so no optimisation risk in terms of the RAB, but a low WACC in response, that that might come unstuck.

So, what we would say in terms of the IM review is if you apply Ramsey pricing principles over time, then it says that you should recover generally more from inelastic customers, which we would still say are today's customers, and less from elastic customers which we would say are tomorrow's consumers when there's greater choice. So, the question we would put to the IM review is, would it be better to think about tilting the recovery of the RAB so that you've got currently a big pool of consumers, a pool of kilowatt hours and kilowatts that you can effectively tax, and we think over time that's going to shrink.

I guess a question that relates to that too is what's the timing of when we might think about this tilt? Obviously the changes that we're thinking about potentially of the IMs now would apply from 2020 in the next reset. Could we wait until 2025? So, we think there's a reasonably complex modelling challenge to this about what does the revenue requirements look like for distributors over the longer term as we sort of transition to an energy landscape where there are more choices, more economic choices for consumers, and how do we think, model that in the context of what are the costs of alternatives?

So, I've just tried to illustrate that. So, the red line that sort of cuts across the middle illustrates the way in which we currently recover our costs, I guess in real terms is a fairly flat profile. It's probably

actually growing given that capex tends to exceed depreciation at the moment, but consumers currently with the blue line sort of value the network highly but over time we would see that that constraint, that the constraint from alternative technologies will be the real binding constraint on the way in which we set our prices as opposed to regulation. There's clearly uncertainty of the timing as to where that cross-over point exists but in terms of our businesses we have to think about those issues now and make decisions about what's the optimum way to invest in our networks.

I guess when we think about it from a risk perspective as well, there are what we see as two key regulatory constraints on our business. We've got the low user fixed charge tariff option that we must apply to consumers or make available to residential consumers, and I guess in testing whether there's a political appetite for change, I guess the very clear message that we've had is that that's not on the agenda, and that's a shame and we've got to find a way to get it on the agenda, but it is a pretty clear constraint that does increase the risk profile of our businesses.

The other issue that we also face is that we, in terms of potentially being able to use some of these technologies to provide more cost effective solutions to consumers, particularly in those more remote rural regions, there is an obligation to supply with line services all customers that were connected with the network pre 1993.

We had a recent example where we could offer - where we had a number of lines come down in a snow storm. The best way of meeting that customer's demand was through a combination of alternative technologies, they would have cost $70,000, costs $166,000 to replace the line. The customer said, we

don't really want these alternatives. We can't force them to put them on their property and so we spent $166,000 and we can't - and so but next week that customer could - if we start trying to reflect that through in their pricing that customer could next week say, we don't really like this price, we might go with that alternative now. So, in terms of a stranding risk we've got no ability to really manage that particularly well.

So, out of that we would just say that pricing reform is critical, and associated with that we really need to think about what is in consumers' interests over the longer term in term of recovery of the RAB, and we need to start looking at things like accelerated depreciation, I guess that would be our preferred approach, relative to things like non-indexation of the RAB which can have similar effects in terms of bringing forward RAB recovery.

So, there's a couple of other issues which we think are also important to consider from a risk perspective, somewhat more technical. We don't think that we are being compensated for catastrophic event risks. So, at the moment if there is an earthquake or tsunami in Hawkes Bay, we lose, we've modelled that we think we could lose about $30 million to $40 million in revenues between the event and being able to successfully apply for a CPP. We don't think we're compensated on an ex ante or ex post basis for bearing that risk.

I guess one of the things in terms of our business model that we're putting a lot of thinking into is, how do we create more interactions with customers and employ a lot more demand side management methods, pay people to reduce their peak demands? That's an operating cost that can help avoid a capital expenditure. Do we have the IRIS mechanism set right so we can make those

trade-offs officially? And, that's a modelling question that we need to ask ourselves, but it's fairly complex and I'm not sure that we really fully understand how that really plays through at the moment.

Then finally I guess one of the things that we're quite interested in through this process of reviewing the IMs is just how the Commission credibly commits to what we would perceive as the current framework where, as I said before, in exchange for what we perceive for a low WACC we don't bear the stranded asset risk or optimisation risk in terms of the RAB roll-forward methodology? And, I guess what we would be looking at as coming out of that process is the Commission clearly signalling a commitment to that framework, and if that doesn't exist, then that just adds to our perceived assessment of the risk situation.

CALUM GUNN: Great, thanks very much, Nathan. It's great to get that whole of business perspective about risks more generally and some careful thought about what that actually might mean for our review and for potential changes for the IMs.

So, I'll hand over now to Greg Houston who is going to talk a little bit about indexation of the RAB and some observations on some of the earlier speakers. Thanks, Greg.

GREG HOUSTON: Thank you, Calum. It's great to be back in Wellington for the second week in a row. Although, I must say when I was about midnight last night, when I was somewhere over the Marlborough Sounds being buffeted by what seemed like the mother of all electrical storms I wasn't feeling so great then, but anyway, thanks for good piloting, I'm here.

I want just to say, make a couple of observations on what's gone before just to kick off, and the first is on the form of control, and I'm also, for those that

were here last week and we had some discussions about new technologies, and there's going to be a discussion this afternoon of which a key theme Nathan has already raised is, tariff reform, and I think it would just be useful at this point to make the connection
in discussing the form of control and revenue caps versus price caps and the risks, between that question, which is very squarely an IM review question, and the whole concept and idea of tariff reform. Because the key risk that's being managed in the decision of whether to go to a revenue cap is actually, as Megan helpfully pointed out, demand forecast risk. But when we say "demand forecast risk" what we're really referring to is energy delivered forecast risk, and we are presupposing that tariffs have a strong throughput element, which they do at the moment, here and in Australia, but we're also presupposing that those tariff structures will remain exactly as they are, hence that demand forecast risk which price caps or revenue caps might or might not manage, will remain a risk. But I have to say, again not to steal from this afternoon but with the development of new technologies, irrespective of the form of control, I don't think it's really sustainable for tariff structures to remain as they are. So while Australia has moved to revenue caps, and I can see there are good reasons to do that, some of those reasons should dissipate over time if the right things are done on the tariff side.

One other observation just on a comment that Nathan made about catastrophic event risk, and it's pretty clear that under the current weighted average price cap and the delay to get the move from a DPP to a CPP, that if you're in the situation that Orion was a few years ago that there is a sort of major financial risk arising

from catastrophic events, just through the delay in the process of getting a CPP in place and applied.

But one question for the IM review process is, if you move to a revenue cap, depending on how that's specified, that catastrophic event risk may disappear because under at least the Australian style revenue caps, you do have a revenue cap and you have what I think in Transpower you call an economic value mechanism, we in Australia just call it an unders and overs mechanism, but under the strict application of that unders and overs mechanism you are effectively guaranteed your revenue. And, so if a decent proportion of your customers get wiped out by an earthquake and so your revenue is under a price cap, then at least under Australian style revenue caps those customers that remain the following year would have a big bump up in their tariffs to make up the revenues you lost last year.

Now, whether or not you think that's a good idea and who should bear what risk and how they should all be paid or compensated for that, in thinking about moving to a revenue cap that's an important question as to how a revenue cap would deal with that situation, and I know, as I understand there's actually two different mechanisms which is the presence of an unders and overs mechanism, and the absence of an unders and overs mechanism under the revenue caps you have here. So, I just point out not to forget that.

Just on the question of the weighted average cost of capital and its implications for, or the implications for the regulatory WACC of one form of price control or another, and I think Megan set that out pretty clearly but I think what I would observe is that the CAPM framework which drives the regulatory cost of capital here, and in most places, does tell us in theory that

systematic risk, lower systematic risk means a lower cost of capital, and you might be tempted to think, as the issues paper has said, well, if we move to a different kind of price control what would that do for systematic risk and would it not lower it? Yes, it's true that, and first of all there's no empirical evidence been found of that; and secondly, regulators in Australia have never found a reason to alter their approach to the cost of capital and the setting of beta because of that issue, but I think the one thing I would offer, that is the reason that might be, is that most of risks under a weighted average price cap, while they might seem systematic in the sense of the economy grows, your revenue grows and you get more earnings, what I think the reality of weighted average price caps is that actually the risk is a demand forecasting risk.

So, whether you even achieve your revenues no matter what happens to the economy is a question of what you forecast would happen to the economy and what does happen to the economy, and that has very little to do with systematic risk. So, that systematic risk that we think affects beta is a much more longer-term observation and is not affected by the sort of somewhat artificial process of only setting price caps for five years at a time which is at a very minimum disruptive to what you might first think is the sort of systematic risk enhancing properties of the weighted average price cap. So, I think that's the explanation why we do see no relationship and shouldn't pursue that idea for too long.

I just want to talk briefly about indexation and I must say in sort of reading around this issue in preparation for this I've been a bit puzzled by the state of play in the IMs, and I'm not going to pretend to understand them because, frankly, I don't as to

exactly how they work, but what I have figured out is they work differently from how RAB indexation works in Australia, and I'm always reluctant to come along and say, we in Australia have got this great way of doing things and you should adopt it, because it's often not the case, but what I'm going to do is explain what happens in Australia. Hopefully you might say, well, that's what happens here in which case the issues it seems to me don't arise, or you might be able to take some useful insights from that.

Now, in a sense what it seems to me that the most important property of the part of the question in relation to indexation, and I'll come on to the time profile of prices next, but the most important property is the question of dealing with forecasting, the risk of forecasting or misforecasting inflation, and the discussion paper talks about the existence of a natural hedge in the current arrangement which is what I'm struggling to understand, how that operates.

But what I think it's useful to point out is stand back and go back to look at the fundamentals, and the fundamentals, it seems to me, in a price cap regime where prices are linked to the CPI, and they're linked to the CPI with a lag, so prices next year adjust by the out-turn CPI from one and a bit years ago, and that's a pretty standard arrangement. Under that regime the intrinsic risk of inflation being different from forecast it seems to me is minimal. Prices go up every year. The price that consumers pay are linked to out-turn in inflation, so there is no forecasting risk for consumers at all.

But of course the maximum allowable revenue which is at a CPP or Australian concept but it's sort of implicit in the DPP process as well, that's set for five

years by reference to a forecast of inflation and that forecast is for sort of all the variables.

Now, when I say all the relevant variables, you've got a forecast of inflation that will go into operating costs, you've got a forecast of inflation that will go into revenues, you've got a forecast of inflation that will go into your RAB indexation adjustment, and that same indexation adjustment will be netted off your revenue so it will also go into your achieved return, it will also go into your WACC. So, the same forecast goes into all those variables, that's the CPP framework. But then not dissimilar to that you've got the DPP framework which has got much the same principles, just not the same detail.

So, out of that you get an X which is your price gap, CPI minus X. That's at the beginning. At the end of that five year period what's actually happened is that all of those variables have unfolded by reference to out-turn inflation. So, the prices that customers paid will have gone up by out-turn CPI, your opex putting aside efficiencies will also have gone up by out-turn CPI, and the out-turn return, which is exactly what investors would be in any market, the investors might have had an expectation about inflation when they were working out their right of return but what they get will always be governed by out-turn inflation, that's what investment, that's what happens with investment.

So, the only outstanding question is well how then should we index our RAB to essentially set the RAB, if we get to the end of a five year period, we've got the RAB as it was at the beginning of that period we have to at least, at least this is how we think about it in Australia, you roll it forward so you get to the RAB at the end of the last period which is the RAB for the beginning of the next period, and it's rolled forward

without question by the out-turn CPI. So, while everything was a forecast at the start of that period, by the end of the period everything is rolled forward by an out-turn CPI.

So, I'm struggling to understand what seems to be the case here, if I've understood it correctly, why you would index your RAB in order to roll it forward by, anything other than the out-turn CPI, so that the end result of all that is that investors and consumers are protected from inflation forecast risk. The whole system sort of rolls along on the basis of out-turn inflation. And, you can see all that, if you want to take the trouble of looking at the National Electricity Rules in Australia, it's a bit like your IMs, you need to be steeped for months if not years in trying to understand the fine detail but if you do look to the PTRM and the RFM models, post-tax revenue model and the roll-forward model which together the PTRM gives you the five year look-ahead maximum average revenue and the RFM moves the RAB from the beginning of one period to the beginning of the next. So, if you look at the detailed mechanics of how they work you'll see that at the beginning it's all forecast inflation, and after the fact it's all out-turn inflation, so the end result is there's no asset valuation inflation risks arise.

And maybe that's different to how it works here, maybe I just haven't understood it but it seems to me to be pretty simple and it might be something we can learn without having to worry about the kind of discussion I can see in the paper about debating about whether there's a natural hedge, you'll get more inflation than you thought, you'll get your win on this parameter and lose on that parameter. I think you can actually just get what turns out to be without being too complicated.

Which then leads me to the final observation, which is often where people come to the indexation question and I should say just if we go back in time in the history of regulation in Australia, at some point sort of probably 15 years ago, one regulator, which was the Central Service Commission in Victoria which is sort of at the leading edge mostly because assets in Victoria were privatised before anywhere else, sort of took on the task and were probably what you might call over-influenced by economists and the attraction of tidiness and having everything in constant price terms, decided it would be a good idea to index the RAB, and over time virtually every piece of infrastructure in Australia, every kind of infrastructure, whether it's airports, whether it's railways or electricity, or gas networks or water networks, have come to index their RAB, because economists I think primarily thought that was a neat and tidy thing to do, but what has become apparent across the Tasman, and obviously it's also become apparent here, one effect, an important effect of that is to push - apart from it really nicely manages inflation risk if you do it the way it's done in Australia, you have this very strong back-ending of cash flows into terms of the returns that you get in cash on an asset. And, as a rule of thumb, if you've got 2% inflation and you invest in a 50 year asset, then in the first year your return of capital is 1/50th of your dot straight line depreciation, which is 1, but of course if you've got 2% inflation and you index it that's 1 off your revenue so you actually end up getting zero return on capital and then a rate of return, so you get no cash back from your investment, you get a rate of return that's equal, in cash, that's equal to your inflation, the WACC net of the real WACC, the WACC net of inflation.

And then slowly under this system the cash in terms of return of that capital starts to grow from zero, and it gets bigger and bigger over time. So, in real terms prices are quite flat over the life of the asset. Of course if you have a 100 year asset and they're not so common in electricity networks but they are very common in water businesses. In fact, 80-100 years is sort of the much more typical asset life in water years. You find that you are investing an investor sort of $100 million in water assets. You find that not only do you get a return that doesn't include inflation, but you actually get a deduction from your revenue that's more than the depreciation you get. So, suddenly as there's been more and more investment, these businesses with long-term assets in Australia are saying, hang on, I'm investing all this capital and then I find out my revenue is going down as a consequence of making that investment. And, that's led to some quite deep discussions about whether that's a good idea and will investors stand for that, and you've got some water businesses making a big proportion of their RAB as being invested and they're going backwards in terms of revenue which is creating enormous financial challenges.

So, what I think is important to say, and we're going to come on to technologies this afternoon, is that while indexation is great for managing inflation risk, it does have this other effect, but it needn't have that other effect because all of the story I've just told you is in the context of a presumption about the adoption of straight line depreciation. So, the question of how quickly and the time profile of which you depreciate assets for regulatory purposes is completely disconnected and is completely separate. It's not disconnected, it's separate and quite a proper stand-alone question from the question of whether you

should index your asset base for inflation risk management reasons.

So, I would invite consideration in the input methodologies review when talking about the indexation question to confine that, I think this largely is the case, to an inflation risk management question, and to focus the whole idea of the time profile of cash flows when you invest in an asset on the depreciation question, and this is something that you necessarily shouldn't take from across the Tasman, is that all of the rules in electricity and gas in Australia have set up a very strong presumption that straight line depreciation should be what applies, and I'm actually involved in a litigation at the moment where we're trying to overturn that presumption. It's an uphill battle. So, I wouldn't advise taking that lesson, but providing that you keep indexation and keep depreciation separate, separable issues, focus on depreciation for the good and proper reasons, technology, all the other kinds of risks, then I think you can deal with two risk issues and each with tools that are appropriate for them, and actually very not only appropriate but have a lot of flexibility.

So, that's all I want to say and I hope that might have one or two useful pearls.

CALUM GUNN: Thank you very much for that food for thought, and our final set of speakers are Richard Hale and Ralph Matthes. You're going to speak from there?

RALPH MATTHES: Yes.

CALUM GUNN: And after that we should have some time for questions. So, over to Ralph and Richard. Thanks very much.

RALPH MATTHES: Thank you, Calum. This has been a very useful session from Megan, Nathan and Greg. I've only got one slide and I'm going to take it back up a notch

at the higher holistic level, if you like. At the end I'll make a few comments about the discussion on the specific topics of form of control and indexation.

So, I've only just got four bullet points here. A lot of this is pretty standard stuff but I think it's just important to remind everybody about allocation of risk as we see it from a high perspective.

First of all we think it's difficult to separate the problems from the solutions because you actually need a factual, the possible solution and the counter solution, probably the status quo, to evaluate the materiality on the change to the long-term benefit of consumers. So, a lot of the specific topics that we've just heard about are actually the possible solutions trying to work out what is the difference or what's the benefit or change relative to the status quo? So, I think we do have to be realistic in this discussion. Yes, we're all here to try and help the Commerce Commission to define the problems but I think part of that is actually understanding the options as well as the solutions.

Second bullet point, probably a little bit harsh but unsurprisingly I think that suppliers do take their own business point of view and really encourage them to quantify perceived problems in terms of the change to the long-term benefit of consumers.

The previous session to this actually talked about the decision-making framework and I was very interested about how the Commission might weigh the pros and cons of changing the input methodology, and as I recall the presentation actually talked about taking a sort of qualitative approach, and if there was evidence then also using a quantitative analysis. I guess we would actually see it around the other way, the Commission should always take a quantitative approach to

considering the long-term benefit of consumers. The Commission I think again sort of stepped up a notch in terms of its techniques for analysing changes to input methodologies with the rate percentile discussion last year. There was a lot of emphasis on evidence and we think that was a good shift. So, we would rather see any changes to the current input methodologies be about quantifying the changes, and qualitative effects are a secondary consideration.

It's also the timeframe. I think the discussion is around long-term and that's really the problem that suppliers have here, which is they're making long-term investments, and equally I think the Commission's assessment to changes in input methodologies have to be about long-term, so that's beyond the current five year or the next five year regulatory control period.

A third bullet point, for every claimed problem we always ask whether it can actually be solvable by the industry itself using a range of risk management tools and the problem definition invitation paper set out quite a list of those and I'm not going to repeat those but the distributors are the people in the field, they do have and they can innovate around how they can manage their cash flow risks.

Secondly, you can always apply for a CPP. If you have a particular demand risk, that is the generic low cost DPP estimation of demand doesn't fit your particular circumstances, go and apply for a CPP, at least I mean that's the question we would always ask. Or perhaps the problem, as stated by a supplier, is simply part of the ebb and flow of uncertainty over a number of regulatory control periods. It just so happens at the moment that we have seen the risk free rate decrease substantially since the IMs which have

been just set, but we are talking about long-term investments here I think.

And finally not surprisingly, from our point of view we're always wondering whether or not this is simply a self-interested attempt to de-risk their position? That's just a healthy scepticism but it is something that we always put a lens on.

The last bullet point, apart from where we think there is an obvious anomaly in the matrix of how risk is currently allocated, for example cost of capital and the Commission's June paper specifically recognises that there is an anomaly in terms of the simplified Brendan Lally estimation of CAPM, or if there is a material change in the sector that hasn't been considered and that's really the impact of emerging technologies, our starting position is that it's a zero sum game, and any proposal by a supplier to reallocate risk requires an adjustment elsewhere, and no doubt we are going to get into quite complicated discussions around what happens to systematic risk and what's the evidence etc. We're up for that, I mean that is part of the problem definition. We're happy to have that discussion.

I haven't got any particular notes or comments on the specific topics of form of control or indexation of the RAB apart from I probably learnt quite a bit this morning, thank you very much, got a few more questions on those, but things like, you know, with demand risk, and I think also the issue about possible barriers to, or the influence of the low fixed user charges, those are all solvable in other forums, and again I think it's in our interests to look to solve those.

So, again, don't look just in this room around changing the IM to fix everything in the world, we too

want to solve some of those other problems. So, that's me.

CALUM GUNN: Richard?

RICHARD HALE: Thank you, can you just flick through to the other slide. I just want to talk about the impact since the DPP was set in terms of the adjustments that were made in the regulated revenue and what that now means in terms of as a reflection of declining demand for suppliers.

So, we're seeing the sort of benefits granted which have been eroded effectively, and given that this is a, sort of a two year lag and we know what's going to happen in terms of demand, then this is only going to sort of compound itself I guess. So, it's kind of challenging and alarming from a major user's perspective to know that these sort of costs are going to continue.

So, I guess I just wanted to repeat what I've said before, that the regulated revenue being spread over a residual demand and, as I said before, we have seen increased Vector charges for this year, are increasing by 13%, and that's reflected in those numbers, and it looks like it's going to continue because we're seeing a decline in thermal generation and that looks set to continue as generators shift to more peaking capacity located closer to gas supply. We know that there is a thermal station closing at the end of this year in Auckland and we're uncertain about the long-term future for Contact's thermal station.

So, our sense at the moment is it's the form of control which is a revenue cap, so we're on the other side of the experience you could say, we're on the other side of the Rubicon. Our feeling at the moment is it provides little incentive for suppliers to innovate, and there is a question there whether that is promoting the

long-term benefit of consumers or outcomes that are consistent with a competitive market.

I was just interested to reflect on some of the comments made because I, like Ralph, have learnt a lot from that discussion and it is quite a complex discussion but I'm thinking I'm picking up things.

I was interested in Megan's comment about it being a hybrid revenue cap. I guess my reaction was it doesn't fully characterise the impact on users to say that, you know, actual revenue depends on out-turn volumes, there's no correction mechanism. Well, we see that in price which is basically what you're seeing there.

So, what I'm sensing is that in the context of this review it's important for the Commission to characterise the gas market according to its individual circumstances, so it needs to understand the nature of that market and how it operates as a particular part of this review. I think that's the message that I'm beginning to hear from this discussion.

An example of that is pricing methodology where one of the suppliers, Vector, has moved its proportion of fixed variable from 60%/40% variable to 90%/10%. Now, the practical implications of that is if you're a base load customer, that's okay. If you are looking to establish something that might be peaky in its demand, then you're arguably going to disincentivise that kind of demand profile. So, in the context of declining demand we have a concern about the way in which those sorts of mechanisms are influencing the full utilisation of the pipeline and ultimately the impact on us as existing users.

My parting comment I guess is to the Commission to characterise the actual model, I think hybrid is a good way to describe it, but to its fullest extent to

understand what that means for any changes to the IM structures.

CALUM GUNN: Great, thanks very much. So, we've got a little bit of time for some questions before lunch. Any questions from the audience for any of the panelists? One right at the back there, is that Tim? Please state your full name and organisation for the record please.

TIM SPARKS: Tim Sparks, Electricity Authority. My question is on the form of price control. I guess we've heard some useful experience from Australia and the United Kingdom about their shift from a weighted average price cap to a revenue cap, and we've heard that there's at least one important difference I guess in New Zealand on the regulatory side with the low fixed charge regulations that apply here. I guess my question, which could be for anyone on the panel, are there any other relevant differences between New Zealand and those other jurisdictions that might change the analysis here?

CALUM GUNN: Greg or Megan perhaps have a go at that one?

GREG HOUSTON: It's an open question, I'm not -

NATHAN STRONG: I think the obligation to connect is different here.

MEGAN WILLCOX: True.

NATHAN STRONG: The obligation to connect is different in New Zealand to other jurisdictions so I think typically under a revenue cap there is an obligation to connect as part of license conditions, whereas we don't have that here. So, you would need to solve that. So, if you went down a revenue cap approach you would need to address how you make sure that there is still incentives to connect all customers.

GREG HOUSTON: Maybe you can be more clear, Megan, but I'm not sure that there is an explicit obligation to connect. I mean, if you're in a remote place and you want electricity supplied, then put it this way, you

don't have a right to connect at the existing average tariff, you're likely to be up for capital contributions and things that would make giving you the existing uniform tariff more palatable.

So, I'm not exactly sure where that obligation of Vector's in a hard and fast form exists either, but it is a relevant question in a revenue cap, is how those higher cost connection aspirants get dealt with.

MEGAN WILLCOX: And I think in the UK example, is why they looked at flex around the capex allowances for new connections was so that distributors weren't I guess potentially out of pocket as a result of increased connections. So, my understanding, and perhaps it's an estate based distribution code for Victoria that we do have to connect, but there is a capital contributions policy that really looks at sort of costs and versus tariffs or revenue over time to look at what the capital contribution would need to be for a new connection, so that it would be partly self-funded by the customer and partly funded by the network.

CALUM GUNN: Question here from Bill.

BILL HEAPS: Bill Heaps, Strata Energy Consulting. Interestingly I think my question is going to answer the first question, because my understanding under the NER and also for Ofgem, under their legislation that they work under, they have quite different tool boxes than has been provided for the Commission under our legislation. So, one example would be both Ofgem and the AER use benchmarking in the use of modelling to help them in meeting the determinations for the revenue caps, for the revenue determinations. So, you can find examples of that in the recent New South Wales determination and also the draft decisions in Queensland.

The Commission currently doesn't have that ability under the legislation so I think that one would maybe mean that moving to a revenue cap is, it needs quite broader changes through legislation rather than just the input methodologies. So, have you considered that, Megan?

MEGAN WILLCOX: No, I haven't really thought about the link between that because I guess I'm struggling a little bit with the link between the revenue to a company and efficient opex and capex use. So, benchmarking usually looks at the, an efficient - well, how distributors' opex or capex, or it could be totex, relative to things like customer numbers, energy through-put, those sorts of things, and in our experience in Australia with the recent benchmarking reports that have been released by the AER and the analysis that's been done by their consultants, is that what benchmarking really struggles to pick up is inherent differences between networks, and I can say that because our companies benchmark really well. So, I'm not saying that because our companies don't benchmark well, they do, but we're still aware that there are such differences that you can't pick up between networks that are based on just customer numbers alone. And so benchmarking really suffers from when you change the different things that you're benchmarking against you get massively different outcomes, so I don't think benchmarking itself is a solution.

But I think you mentioned about, I guess you're really trying to drive at how do we ensure efficient opex and capex and a revenue cap would support efficient capex because there's an incentive for suppliers to defer capex where it's efficient to do so if they can use non-network solutions, and that is not encouraged under a price cap because of the revenue impact from doing so.

So, I'm not sure I've answered your question there but hopefully given some further thought.

BILL HEAPS: I think my question is really around establishing that the revenue cap, the revenue thresholds that are there, that better regulations given the AER have a different toolbox than the one available to the Commission, so I presume that is really outside the IM methodologies review, is if you are proposing a revenue cap methodology that's sort of considered, then it may need wider legislation changes.

GREG HOUSTON: I just agree completely with what Megan said. There's no connection I've seen made between the role of benchmarking and the price view revenue cap question in Australia, or even elsewhere, because the need to determine the building blocks, which is what goes into the allowed revenue calculation is separable and is, there are incentive questions that, positive incentive properties from a revenue cap but are there probably more important incentive regimes that drive costs outcomes, and the input process is really independent from the risk questions around how the price cap is operated.

I think it also is important to say that better regulation and benchmarking are used in the same sentence by the AER but they're not used in the same sentence by a great many other people. The benchmarking is actually not without substantial controversy in Australia, it's only just started this year. We've had price revenue cap debates for a decade or two and I think the future of benchmarking is something that's far from concluded, so.

MEGAN WILLCOX: Mmm mmm.

CALUM GUNN: Time for one more question before lunch? Someone else? Okay, Nick.

NICK RUSS: Nick Russ again from the Commerce Commission. I'm not sure why Callum was so reluctant about my question. I would quite like to hear the panel's answer to James' initial proposition about looking at this holistically, are we comfortable broadly with the allocation of risk between consumers and the business? So, we've heard a lot about individual issues but just as a package how do we think it does stack up, and really engaging with that question that James was asking at the start of his presentation.

GREG HOUSTON: I'm happy to make a sentence or two up. I think it's a difficult question because of its broad brush nature but I think if you might look at the last, the experience of the first five years of this regime and with perhaps one or two exceptions, and you could perhaps point to the earthquake-related issues that arose in Christchurch as being a good exception but with some exceptions I think you could perhaps conclude that there was a broadly acceptable balance between the risk profile and inevitably the return profile.

But I think the real issue is, what are the risks coming in front of us and are the settings right in light of those, which perhaps is where this afternoon's session might be focusing. So, I'm not sure that you can look at the past and conclude that everything's fine for the next five or ten or 15 years. So, I think that's where the harder questions are.

CALUM GUNN: Okay, I think we'll wrap up at that point. I mean for me I thought that was a really excellent session. The form of control discussion obviously is very much a live debate. I think it was useful to hear that there are a number of different flavours on the spectrum between price cap and revenue cap, and Greg also raised what some of the practical outcomes and implications might be of a shift to that, and certainly

Ralph raised the challenge, from our point of view this always needs to be brought back to the long-term benefit of consumers. So, to the extent that in submissions evidence that you can put as to what the kind of effect and incentives that it's actually had in a concrete way on suppliers' businesses and how changing that might have a concrete benefit for consumers, that will be really helpful to us I think.

On the indexation of RAB I think we're challenged there on, is that actually the right question? Both Nathan and Greg highlighted the issue around the time profile of capital recovery might be better addressed though accelerated depreciation rather than changing the indexation of the RAB. I think there was quite a bit of debate about the indexation at the time we set the original IMs, but there was generally, the groundswell of opinion went, well, it's useful to try and keep the asset base tracking against inflation, but I think there's been a challenge there, as there has been in Australia, to that presumption of using straight line depreciation, and so that's some useful food for thought for people in submissions as well. So, please join me in thanking very much all the speakers who have taken the time for the presentation. (Applause).

I'll just hand over to Keston who will explain lunch and the session after lunch.

KESTON RUXTON: Thank you also to you, Calum, for facilitating the previous session. We'll break now for lunch and we'll come back at 1.40 and at that time we'll be ready to discuss emerging technologies which hopefully a number of people are looking forward to. Thank you.

(Adjournment from 12.59 p.m. until 1.42 p.m.)

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JOHN GROOT: Good afternoon everyone, I'm John Groot, principal advisor for the Commission. I'm going to be introducing speakers for this session, "Emerging technology". We've already heard a number of things about the topic, why it's so important, a number of issues have been raised up in terms of challenges for suppliers and interested in them. Talking about the challenges these issues pose. We've heard about some of the pricing issues and different context for different businesses in thinking about their different strategies.

I think it also poses challenges for a regulator. We're not experts in understanding these technologies or how they're going to impact on business networks, and we're also conscious the contexts differ for different companies, and in fact New Zealand and other countries, so this is one area where I think we really will look to stakeholders to help inform the process and to some extent drive the process. It's probably an area where we're going to need to rely more on submissions and the insights that other parties can bring.

I think in thinking about this session that's one of the things which influenced the structure of the session. We think there's some real value in hearing from a range of parties and in terms of trying to articulate what are the problems and trying to define what are the problems that we need to address urgently, what are the problems that can potentially be addressed later. But just that clarity on problem definition I think is really important to us in terms of thinking about the process for the IM review.

We are going to start with some presentations from the Smart Grid Forum and prior to that from the Commission itself, and the hope is that this will set some of the context for the discussions which follow, the presentations which follow. I think when we get to

the second part of the forum we will focus more on the distribution and transmission businesses, and people's take about what these technologies mean for them and also what it means for regulation, both under Part 4 and specifically with regards to input methodologies.

We've got about two hours set aside for this topic. I think we've got quite a range of presenters, seven I think in total. We'll see how we go for time. Hopefully we'll get through everything comfortably. There is a time slot set aside for questions, for people who wish to make observations on what they've heard.

Can I start by introducing the presenters for the first session. On my far left is Diego. Diego is a senior economist on the Commission, recently joined from Ofgem. We've also got three representatives from the Government's Smart Grid Forum, we've got Paul Atkins, Ryno Verster, and John Hancock. Can I first turn over to Diego to introduce some of the Commission's thinking on this topic.

DIEGO VILLALOBOS: Thanks, John. Good afternoon everybody, I'm Diego Villalobos. I see that John didn't attempt to pronounce my last name, surely one of the hard problems for this project. As John said, my job today is to set the scene and introduce the panel that is to follow, so I will do so by sharing some perspectives on two things.

One is how we at the Commission see our role in this exercise of thinking about emerging technologies, what we're trying to achieve as the regulator. The second thing is to share in a humble way some of our current understanding of what is going on in the sector.

So, really the purpose for this session, to remind people, is to discuss the implications of emerging technology on lines businesses, on network businesses, and also for how we regulate those businesses as regulator. So, I guess this forum and the IM review

process is really a call to action now for everybody to start thinking about what this means, and I think what we want to avoid is a situation where we have to play regulatory catch-up. We think that's something to be avoided because there's a high risk that the consumers' interests or the consumers' benefit is not best promoted by playing regulatory catch-up, and to borrow a phrase from our Australian colleagues at the Australian Energy Market Commission, in a sense, we want to avoid being "ubered".

So, the part of the purpose of this session is to discover, challenge and moderate views. I guess the emerging nature of this topic means that views and ideas are likely to be quite heterogeneous and at different stages of formation. Certainly our own are in the very early stages of the process.

So, the idea is to test some of these perspectives ultimately to improve the quality of stakeholders' submissions to our problem definition paper. And, lastly we want to bridge the information asymmetry that exists between the regulator and the industry, and perhaps consumers as well.

It would be an odd world where the regulator knew more about people's businesses than the businesses themselves, so we really want to rely on the experts, if there is such a thing in this new emerging world, to try to understand whether and how the rules need to change, if at all.

So, just briefly to set the scene. The first two points there have been touched on already this morning. We're a creature of statute so we have to follow our statutory duties, that is Part 4 of the Commerce Act, and in this particular exercise sections 52R, which is to promote certainty around the rules and requirements of regulation. This is not certainty around outcomes,

and that's a key distinction, this is certainty around what the rules and requirements are. And so perhaps most interestingly for this context is the third point there, is that we want regulatory responsiveness to a changing environment, and you come up very quickly with a conflict. Because on the one hand we want certainty which implies some level of stability, of consistency of the rules over time, but at the same time we want these rules to be fit for purpose and remain effective in the face of change, and this may suggest changing the rules themselves.

So, the question that we ask ourselves is how to promote certainty through change, which may seem like an oxymoron but perhaps one way to address this is through regulatory predictability.

So, ultimately what we want is the rules to adjust and adapt in ways that stakeholders can predict. It should be possible for people to predict how the regulator will react to changing circumstances. And I would like to qualify that, this is conditional predictability. It is conditional on the availability of relevant information. So, one of the purposes of this exercise today is to share or build a shared common knowledge base on the circumstances that are happening outside these walls that may lead us, the regulator, to react and change the rule book, and to have that as shared understanding, and also helps with predictability to remind everyone that we're being guided by the statute, by the Commerce Act.

Okay, so now we get to the meaty part of the presentation. So, what I'm going to do is to share with you my understanding and try to synthesise what is going on, and then ultimately to translate this into what we think it means for the regulator and for the rules of the game. So, I call this searching for signal because

I was very confused at the beginning and there seemed to be quite a lot of noise so I tried to break the problem down. So, I'll take you on the journey with me, bear with me, it's not easy but this is how I see it.

We have three types of developments going on, we have the emerging technologies, everybody is familiar with the emerging technologies we're talking about, solar PV and battery storage, electric vehicles, Smart Grid broadly defined and my colleagues here will be able to educate us on that, and I guess two features that are relevant when thinking about the technologies themselves is that their costs are falling rapidly. For some of them, their performance is improving. This means that deployment is rapidly increasing in some cases.

The second type of development is changing business models, there on the top right. So, by the way, these are all interrelated and the arrows are meant to represent direction of influence or causality, if you like. So, changing business models, we've seen third party financing of solar PV installation, for example, we've also seen home automation of different types - this morning the Nest company was mentioned, owned by Google. Business models are changing.

The last area is consumer behaviour, which is changing as well, and there are two dimensions to think about, consumer behaviour. One is that consumers have existing needs and wants which technology and business models are better able to satisfy, but those needs and wants are also changing partly as a result of some of these developments.

So, all of this is going on within this circle and this is having implications for what we're interested in, which is the demand for lines services, and this is demand broadly defined, this is the demand for

electricity, that's volume, kilowatt hours, but is the demand also for capacity, for kilowatts, for the size of the network itself to meet peak demand. It's also demand for reliability, for the network to be there when you want it at the quality when you want it. What's happening is that this has been fairly certain, it's been more certain in the past than it is now. So, we're facing increasing uncertainty on how we can forecast demand compared to the past.

On top of this we are having substitutes to lines services that technology is enabling. So one example is solar PV coupled with batteries. At one extreme they could entirely substitute the need for a network for some consumers that could disconnect, perhaps an extreme view, it's an open question.

And, on the other hand we have new services, and again one can think of many different types of services that are emerging but this morning it was mentioned, I think by Simon, that consumers don't want to be dealing with different companies in silos to satisfy their needs, so there is a clear need to provide a more integrated energy solution service to consumers which are becoming more active. So, one could imagine things like home automation, as I already mentioned, but also the trading of electricity between neighbours, the charging of electric vehicles at different times, the list goes on, but I guess the point is these two things are impacting on what we care about, which is the demand for lines services, and that has uncertainty associated with it as well.

So, this brings us - well, all of this has very important regulatory implications and it's probably worth noting that this is outside the IM review - some of these issues that I mention here is what I hope or I guess we'll touch on and the Smart Grid Forum has been

thinking about, issues about network reliability, interoperability, governance arrangements, etc.

So, what we care about for the IM review is the definition of lines services, that is what the Act defines is a regulated service, and that is what the problem definition submissions are about, it's about the monopoly regulation of lines services. So, I guess at least one or two questions come to mind when thinking about that:

One is whether the current regulation is effective, is it giving the right incentives to companies to fulfil the purpose of Part 4? The second broad question is whether the boundaries of regulation are shifting, or is the current delineation appropriate? Put simply, this means whether the regulation should continue to be targeted at lines services as defined by the Act or it should be broadened to these new services or narrowed, perhaps because lines services could become more contestable themselves, whereas historically they have been a monopoly service.

So, I guess the takeaways from this slide is that it is a complex picture, it is multi-dimensional, and monopoly regulation is only part of it but that's the part that we're interested in for the IM review.

Also one implication that one quickly reaches is that the relationship between the Commission and other bodies like the Electricity Authority or policy and law makers will increasingly be important because some of the issues are cross-cutting and span across the electricity value chain. So, speaking of value chains I wanted to show this chart which helped me understand and organise these concepts, in my mind at least.

So, here at the bottom we have the electricity value chain as we know it today. We've got generation, transmission, distribution and retailer. On the

vertical axis we have a, I think of it as the regulatory value chain (regulators also create value). So, the purpose is to put the IM review in its regulatory context. So we've got Parliament which is the law maker, and as I found out when I moved here, in our context I found that the Commerce Act is quite prescriptive in some respects so it tells us what we have to create IMs for, it also tells us what types of regulation there are, and so in that sense, in my mind at least, it spans a little bit beyond the law maker into the rule maker world. For example, in Australia it will be a different situation where the rule maker perhaps has more scope to create rules.

Then we have the Electricity Authority which oversees the competitive segments of the industry, generation and retailing. For those of you who pay attention you'll see that I drew the responsibility as crossing over a little bit into the transmission and distribution segments of the industry, and the best example probably to think, one of the best examples that explains that is pricing. They have responsibility for pricing and this is one of the key issues that comes up and up when thinking about emerging technologies so it is important to bear in mind that they lead on pricing and we have to think on how the input methodologies impact on that role, and vice-versa.

And then we have the Commerce Commission which fills the remaining gap and there are two aspects of that. We are the regulator, so we implement the rules but we're also the rule maker and that's what this project is all about, it is about the review of the input methodologies.

So, when thinking about the issues that come up as part of the emerging technologies discussion, one very quickly sees that that the boundaries tend to exceed the

remit of the IM review, so I guess our challenge is to continue to focus on what's relevant for this exercise.

So, I'm going to finish by just showing some questions for discussion with either the panel here, the panel later, or questions from the audience to consider. We plan to put these questions up in the Q and A session after the afternoon tea, so perhaps I'll just touch on a couple of them.

The first one is we're asking people to tell us what is the most important question to consider.

So, on the first family of questions we have, what's the impact of these emerging developments on businesses themselves, and the second part of the question is what's the impact on regulation.

On the impact on businesses, some of the questions we ask ourselves, and we expect people are asking themselves are: what are the prospects of change? Is this an opportunity or is this a threat? We heard this morning about some people talking about leading this change and we will hear I'm sure after by some of the speakers. What is the link between the ownership of different EDBs and how they see these developments? What's the objective of the investors and shareholders in these businesses? Do they want to put capital at risk to start innovating and trying new things or do they want to just get a safe return?

So, here are some other questions for businesses to consider. These are the questions for regulators to consider and these are some of the issues that we elaborated on in the problem definition paper. The first one up there I'll touch on, expenditure incentives, are they appropriate under the current regime? And I guess it is useful to think of these in two dimensions, right, one is the existing asset base, what's been already sunk and is there, the network that

already exists versus what is to be built from now on. For the new investment what do we want to build? When to build it and by whom? And, where in the network, behind the meter, ahead of the meter, are relevant questions. Also, the treatment of the RAB. Some people touched on the point about asset stranding, and so the extent to which our treatment of the sunk RAB influences incentives to invest in new assets will be important.

Finally, to conclude, on the point around uncertainty, we suspect that uncertainty is going to be one of the key attributes of this work stream in the IM review, so we welcome people's views and insights on how best to deal with this uncertainty. And I just listed there some considerations. What is the option value versus the risk of waiting until we get some more certainty around these things? What's the trade-off between flexibility and certainty as I outlined at the beginning, and whether there are no-regret measures we can take as businesses or as the regulator at this stage?

So, with that I hope that's set the scene and look forward to discussion.

JOHN GROOT: Thanks very much, Diego. I'll ask now the Smart Grid Forum; Paul, John, Ryno, to kick off. Paul?

PAUL ATKINS: Thanks, John. I'm Paul Atkins, I Chair the Smart Grid Forum and I'm going to give you a quick overview of the forum and then hand over to John Hancock and Ryno to give a bit more detail about what we've been doing in the last year.

So, the forum is a little over a year old now, our first meeting was in April 2014 and it was set up with that purpose in mind. The context of course is a reliable well-functioning electricity system. The context is a slightly falling demand over supply, it's a context of 75% to 80% renewable generation in the

system. It's actually in an incredibly positive context this forum was set up in. And, in that context we were contrasted against other jurisdictions where there are huge threats on their systems, threats and demands to drive carbon primarily out of the system, and I can think of the Great Britain forum, for example, where the primary objective is to get carbon out of that electricity system. Very very different here.

So, the context really of this forum can be described as a context of opportunity, and just coming back to Diego's slide just now, is it opportunity or threat? Well, that can depend on your perspective but we initiated the forum with the perspective of there being extraordinary opportunity facing New Zealand through its grid, and hence that was our objective.

The terms of reference in the scope of the forum was to take a whole system view because it's actually in the whole system that the opportunity really exists, and so we have representation across Government industry, regulation, customers, and research, a very very customer-centric in many ways forum, again in contrast to many others in many other jurisdictions.

And we exist of course in a changing environment and that changing environment is the convergence of not only a whole bunch of new technologies but actually a continuing societal change. Society for many years now has become increasingly iconoclastic. If it's possible to have it now, we want it now, and even if it's not possible now we still want it, and we won't take no for an answer, particularly if we feel we have choice or should have choice, and it's in that context that the forum in the last six or eight months has been wrestling with the potential impact of new technologies, not just as technologies but as they converge with this societal change and societal behaviour.

And so on that point what I would like to do is hand over to, I think John is going to take the stage next who will give you some more detail on what we've been looking at in particular with respect to PV, EV and storage. So John, over to you.

JOHN HANCOCK: Thank you, Paul. Nick Russ rather unkindly said that this is the first time he's ever been to an event in the electricity industry where I've actually been actually doing something substantial rather than just facilitating which I took in a positive light, so thanks for that Nick.

There's a sort of definitional point about emerging technologies which is obvious when you stop to think about it but quite poorly understood.

One of the things that we did when we started work on the forum was to borrow someone else's definition of a smart grid rather than spending six months coming up with our own one. So, we borrowed a fairly orthodox European definition and that was that a smart grid is an electricity network that can intelligently integrate the actions of all users connected to it. So, those users might be generators, they might be consumers, or they might be people that do both, and one of the merits of this definition is it does point to two very different types of emerging technology and it's interesting that in this session emerging technology is sort of not defined in any way, but in the context of the IMs there is quite a profound difference between the impact of emerging technologies in the way in which networks deliver their services, which is the scope of regulation, and this is what you might call distribution automation, so these are new tools and technologies that allow regulated network companies to do their job better, faster, cheaper. It allows the deep instrumentation, measuring the condition and state of

the network in a way that was previously quite cost prohibitive.

And, one of the forum members when we started talking about this, who is a very well-known retailer generator, dismissively said, well, that's just asset management, we're not very interested in that, are we? And, after that comment I don't think we talked about it once since then.

But there's a second set of emerging technologies which are about technologies at the edge of the distribution system and the term that we've rather settled on, rather than calling them disruptive or emerging, are edge technologies. So, the point is there are now cost effective technologies for both supply, new use of and storage of electricity that only in the last two or three years have become cost effective even for quite small consumers and, of course, the implications of this when adopted at a very wide scale is that they totally change the way in which the electricity networks are expected to support those users at the end of the network.

As Paul says, we've done a great deal of work on this in the last six months and John told me that we had to limit our presentation to 15 minutes so I've already written a submission which tries to summarise most of the work that we've done in the last six months that's relevant to the questions that are raised in the invitation to contribute on the problem definition snappily titled paper, so I won't go through that material now but that's already on the Commission's website and it does try to summarise some of the work we've done in as much as it informs the questions that the Commission is asking. But there are some quite specific pieces of work which it does seem to me provide

quite an important context and the contrast in the way in which other jurisdictions have dealt with this.

The first one is that in terms of understanding how the regime may need to evolve in the face of emerging technologies the members were quite keen for us to try and draw on experiences that may indicate the way in which an unsubsidised smart grid may come about in New Zealand, and we've done a set of case studies, one of which is contrasting the way in which smart meters are being rolled out in New Zealand where there's been virtually no intervention by Government or the regulators, and contrasting that with the approach taken in Victoria where there was a very strong regulatory mandate and the experience is quite different.

And then the second case study is one around the way in which ripple control infrastructure which was originally centrally planned in New Zealand but is now not subject to any form of directive regulation has evolved here, and without going into detail it's all available on the Smart Grid Forum website, the conclusion of this is the forum has expressed an extremely strong preference for customer choice driving the deployment of these technologies rather than mandate.

And, I think to summarise it in a bullet point, it really points to the total asymmetry between the issues that you face in fast-changing technologies where capability can change within six months and where asset lives are measured in a matter of sort of two to three years, and traditional electricity network components where the capability of the components changes about once a decade and where asset lives are measured in the order of 30 to 50 years, and obviously the risks in regulating an environment like that over aggressively is that you fossilise early era

technologies and that's incredibly inefficient, dynamically inefficient, because you prevent the industry from being able to adopt whatever new technologies come forward. So, the forum wasn't making any particularly strong claim about how the regime needs to evolve but there was quite a strong caution against over-specificity in terms of the way in which these edge technologies might be integrated into the regime.

I'll also point to some of the work which I think the members have enjoyed enormously. They've enjoyed enormously looking at projections of the future, and of course the lovely thing about that is you can't be wrong because you're definitely wrong, but the contrast I suppose the members have got very interested in, is the difference between some of these technologies whose cost characteristics is they fall exponentially, and they are costs continue to fall exponentially not for years but for decades, and that's in complete contrast to the traditional elements of a distributions system, or mainframe generation where the costs fall really in line with TFP.

And, the conclusion about that is over time exponential technologies will always be cheaper than traditional technologies, that's what we've seen in mobile phones and that's what will lead inevitably to this industry disruption. Very exciting leads to a different future but very hard to predict.

This is an economist two weeks ago, so this is what's happened to solar prices, this is a peer review study looking at analyst consensus forecasts for the cost of batteries, and interestingly consensus forecasts around the cost of batteries halved after one event which is when Tesla announced the construction of a factory that would double the worldwide production of Lithium ion batteries, and that's just one event. The

third one of course is if an electric vehicle is basically a battery on wheels, then you may see something happening with the cost of electric vehicles which results in electric vehicles being cheaper than their equivalent petrol/diesel powered cars within ten years.

So, the implications of this, and the forum, Ryno will talk specifically how the forum's considered the impact on regulator distribution businesses, but the strategic implications around this for any participant in the energy sector I suppose is around dealing with uncertainty, which you raised Diego, and the point about this is in the face of uncertainty you will tend to try and maximise the options that you have to deal with the future, and if traditional management strategies don't provide you with very many options, then it may be appropriate to look at alternative strategies to the future which provide you with more options, even if some of those strategies are more expensive. Because, of course, if a different future emerges, it may turn out to be more prudent in the long run. But that's a generic point that applies just as much to consumers making investments in edge technologies as it might do to providers of regulated line function services.

But there are some specific considerations we've made around the impacts of these technologies on the regulation distribution businesses, so I'll invite Ryno just to run through those for you.

RYNO VERSTER: So, after all of that there were actually some engineers and distribution utilities on the forum and I'm one of them, there are three of us actually.

So, my perspective is very much on the distribution utility and what all these changes that are coming may hold for us. So, suffice to say I don't think we know. I mean, we all here are thinking we've

got ideas about the future and so on, but really there's very little that is certain. So, I tried to take a stab at this. I can probably say this much I know to be true but even that should be taken with a pinch of salt.

Firstly, customer centric, we've heard it a few times this morning, these changes are driven by the customer. What we do will be dictated to us by the customers. So, we really need to understand what the customers want, and all companies will be saying we've been doing that for ages but we really don't. It's a major change coming up, the degree we'll have to engage with our customers.

Their expectations are changing, heard it a few times this morning. Certainly along with that their ability to do something about it is changing. If we get it wrong, if the distribution industry do not listen to our customers and we think we can carry on the way we have been doing, they will just run ahead of us and leave us behind, and that will be the death spiral or the end of our industry. Not saying that's going to happen, but there's certainly a potential for that.

So, what is the future of distribution networks? And, to my mind there is a future, I mean there's certainly lots of value that we can still add and will continue to add into a future and it will revolve largely around facilitating our customers and third parties the access they need to our networks, to allow them to be innovative, to allow them to connect to what they want to connect and not be a blocker, to actually work with them and encourage them to do that, and if we can get that balance and we can do that right, then I think there is an absolute value in our networks.

Of course we still have to do our traditional roles, we have to maintain our assets, we have to make sure that we provide electricity for those times when

the sun isn't shining or when the batteries run out, and so on. So, that function remains as well.

We do after all have to look after the integrity of these assets, that is still a core function for our distribution businesses.

So, what are the key changes that I think are coming our way? I mean, this has been covered a few times already today. Future demand patterns are really uncertain. It seems to be a sort of commonly held belief that demand will drop. I have to say there are also credible scenarios to say demand may increase, it's not a one-way street. On balance you might say that storage technology etc will cause demand to drop but it's by no means a foregone conclusion, so we have to think about what happens if demand actually rises on our networks.

It will certainly become more intermittent, we've seen some of that already, as people start generating their own electricity. For example, they will still need our grids at times when the sun is not shining or when there's five days of rain and the batteries have discharged, but overall it's quite reasonable to expect that demand will be more intermittent, and then we have the technical complexities of two-way power flows.

So, what does it mean for the networks? Our architecture has to change completely, so we have to completely rethink what the networks of the future will be like. There's certainly an increased risk of stranding of our conventional assets. If we're going to be changing our architecture, that by definition means that some things won't be the way they were. So, that is a risk, there's no denying that and our networks will certainly be much more complex going forward.

By the way, the smart grid will help a lot with that, there are technologies of course which will help

us to extend the life of our assets and to get more from our existing assets as well.

Key change too this is relating to system stability. If we're going to be relying much more or variable generation in the future when we're bound to see more instability on our system and certainly in some jurisdictions where there have been rapid escalations of solar or wind, they have seen significant voltage issues, significant power quality issues, that is just the part of the physics of engineering or the reality of engineering.

So, there are going to be more frequency excursions, likely to be less certainty about how the networks will behave in the future, and will be much more important to balance the flows of power on these networks.

So, this means to us that we'll have to again think about our networks in different ways. We need new skills. Distribution utilities will have to start thinking a lot more like system operators because we will have to be balancing inflows from multiple generation sources, not like in the past where we've had a few entry points and everything was flowing to our customers. It also means we have to look at our system as a whole. We can no longer just look at distribution networks and worry about stability on these networks, what happens on the distribution edge will certainly have an impact on the transmission company, for example. So, Transpower, or at least a system operator has the responsibility to maintain the stability of the overall system in New Zealand. They will not be able to do so without the support of distribution utilities going forward.

So, that's got a whole range of issues associated with it, not least of which is sort of information

requirements, what it means for us and what we'll have to understand about our customers and the devices that are connecting to our networks, and how we then communicate that and work with the system operator to maintain the stability of our network.

The point here is, as I said before, I believe that the core function for distribution utilities will remain to provide safe reliable systems, we are still the providers of energy or electricity to our customers, but this will require a balance. So, we'll have to somehow balance between investing in conventional assets, which we've done for the last eighty years and emerging technology that we're seeing both on the network side and on the customer side. This by itself is difficult but it's going to be even more difficult given the sort of difference in customers we have and the difference in companies we have. It was mentioned before that we wouldn't have any of the smaller lines companies on the table before, but if we just think about rural companies versus urban companies it's a completely different environment. So, what will work in an urban network isn't necessarily by any means guaranteed to work in the rural network and these are things that we have to think about. I mean, we have one form of regulation after all, but there will be significant differences.

The other point that I wanted to raise on this slide is that many of our networks face significant renewal programmes. I mean, our networks are not necessarily old but a lot of them are getting to the stage where a lot of investment is required, in replacing poles and transformers etc. It's a difficult one to grapple with because we can't just go out and replace like with like without thinking what the future

demand on these networks is going to be like, what we're going to use them for.

So, when you are facing this massive investment need, you don't know what's happening in the future, you can see where the complexity comes in and how difficult some of these issues are that we will be facing in the near future.

The worst possible outcome is that we stop investing. I say "we" in the distribution sense. I was always told the most expensive form of electricity is no electricity. So, if we end up in a situation where because we don't know what's going to happen in 15 years or 20 years, we sort of become reticent to invest in our assets because we don't know whether we're going to be able to depreciate them over their full lives etc etc. That to me, to my mind, is really the worst possible economic outcome for New Zealand, the lack of capacity, the lack of reliability, and the reduced level of services that our customers will face.

And, closely following that is that if we sit back and say it's no longer our responsibility as distributors to provide this reliability, sort of expect our customers to be paying for this, they must put in their own generators or their own battery systems, and so on, when it's not the most economically efficient way to do doing it, that's another sure way of throwing money, good money after solutions which we can actually manage very well from a network perspective.

And the last point, this is Ralph's point, I mean I was sitting there thinking about your nightmare scenarios. It's actually exactly that. So, what happens if it's only the rich people that can afford these technologies? Why do we expect that if some customers can actually get the benefit of this technology, that other customers should end up paying

for that. Now, whether be a cross-subsidy from industrials to residentials, or from poorer areas to richer areas, or from people living in apartments to people living in big groups, I mean, we've gone through this but that is a real scenario and it's one that's playing itself out right across the world. Anybody that follows smart network literature in America will be aware of the number of court cases that they undergo between the providers of solar electricity and utilities, and basically some court cases, utilities are allowed to start charging additional costs because of the burden that solar is putting on the network. In other cases they're losing these cases, but it's a battle that's playing itself out and it's real. I mean, we have to think about the impact on our customers, and the real cost that these new distribution technologies will have on our networks. Undeniably there's value in batteries, for example, but what is it and how do we reflect that, how do we make sure that it actually goes back into the whole of the consumer base, not just in those people that can afford to put it on the installations?

And then another point that I'd bring up here is that, pricing has been mentioned a few times. I don't think we can go into a future smart network, smart technology environment, without looking at the way we price our system. Now, it has been mentioned again that, for example, the user charge cannot be removed. I think we'll have to face that at some stage, there is no way that we can live with some of these relics if we are going to be moving into the future, but I also appreciate that this will have a significant impact on customers. So, we need to be really really careful about how we do it and phase it in over time so we don't create undue price shocks.

So, I think the first point there is developing least regret outcomes under credible scenarios. We have to think, I mean this is probably the best thing we can do at the moment, is to look at it and model as many possible outcomes as we can to see how our networks will perform, what do we need to do with our networks to keep them stable in the next few years?

My personal view, and this is not Smart Grid view because we haven't discussed this, we don't face a problem today, we may face a problem five to ten years from now when we really start to see the impact of distribution edge technologies. So, we've got an ideal window for the next five to eight years, and probably this regulatory period, to actually sit back, model, think, learn, discover, pilot, do our work to be ready for what is coming our way, and we are quite lucky in the way that New Zealand is not at the forefront, we can actually look at what others are doing as well, because in many other jurisdictions they don't have this luxury that we have as distribution companies.

The last point is on collaboration. It's the core of the Smart Grid Forum that we work together. We want to understand the viewpoints of others. I think there's huge value of collaborating across the industry and I think it will be really sad if we all go into our little boxes and try to develop our own intellectual property and our own solutions to the future without talking to each other and without considering other sources that actually know at least as much about what's going on as we as distribution companies do.

So, how can the IMs help us? We have not as a Smart Grid Forum expressly considered this so it's largely my view and with discussions with a few of the others, but I do think that broadly we believe the regulatory environment can help if it recognises that we

are facing unique challenges in especially the distribution area, but there is a really valuable future for the businesses. So, if regulation can help us to facilitate our customers or a third party access to the networks, and sort of avoid us becoming blockers by price signals or by making it technically so difficult to our network, then that would be to me successful regulation and I think that is where the input methodologies certainly can help a lot.

So, we do need, as I said before, to use the period that we have to look out and do as much research and learning as we possibly can. That will cost some money, so potentially the IMs could help in at least recognising the sort of additional expenditure that utilities might have to incur for that, and then we are starting to look at the long-term life so certainly the aspects that we discussed before about shorter depreciating periods, or different ways of depreciating assets and so on, would also be something that I think would be worthwhile considering now.

Other than that, my view on this is that, and it's been said before, that the system isn't really broken. I mean it broadly works, so if we can refine some of these aspects, we're probably reasonably well off for the next regulatory period. Thank you.

JOHN GROOT: Thanks very much, gentlemen. We've just got time for a couple of quick questions if there are any questions for Diego or the Smart Grid Forum. You've been a bashful lot so far, so shush, if someone's brave enough?

JOHN HAMILL: Ryno, you talked about some of the new technologies being, having the potential to extend the life of distribution assets. I wonder if you could talk a bit more about that and whether that's consistent with the idea of shortening depreciation periods?

RYNO VERSTER: I think that the sort of category of extension would relate to us being able to understand the performance of assets a lot better than we ever have. So, we are now, for example, able to monitor a transformer at its various levels of operation and by virtue of that information we don't have to predict when the transformer will fail, we can run it right to the point that it's going to tell us that it will fail tomorrow, if I can use that colloquialism. So, certainly I think technology will offer some opportunity to make assets live longer and also allow us to push the assets harder than we would in the past have been able to do. So, that's what I refer to when I say that technology could assist to make some of our assets live longer.

JOHN GROOT: Any other questions? Will you please join with me in thanking Diego and other members of the Smart Grid Forum. (Applause).

I would just like to invite the other presenters that we've organised for today to step forward.

So we've got a number of presenters, I'll just briefly introduce them all now. We've got Glenn Coates. Glenn is the Strategic Planning Manager at Orion; we've got Andre Botha, who is the Chief Networks Officer at Vector; third along the table is David de Boer, who's a consulting economist from NZIER, David is here representing Major Energy Users Group; we've got Greg Houston who we've met earlier, from Houston Kemp representing the Electricity Networks Association; and finally we've got Ross Parry who is the Strategy and Regulatory Planning Manager at Transpower. I'd just like to kick off and invite Glenn to take us through this presentation.

GLENN COATES: Thank you very much, John, and good afternoon everyone. I'm going to offer you a very network

specific point of view, it's from a network engineer and perhaps at best a part-time economist. I hope that doesn't cause you any problems.

So, a little bit of context here I would like to set the scene on. We don't really feel there is a lot of uncertainty associated with some of the emerging technologies in terms of their potential impacts to the network, we think those things can be modelled and taken account of in advance and I guess we're not complete on that work but we are starting to form a view around those potential impacts.

What is uncertain about them is how they'll be implemented and by whom, and so whether they sit into regulatory environments, whether they sit into market environments, and perhaps more on the uncertainty front is around what are the other technologies that don't currently exist at the moment that really could be game changers. So, I want to point out that the views that we've got in here are perhaps just relevant to Orion and other distribution networks, as has been pointed out by the other presenters, do have different issues to face, and the urban versus rural challenge is a real one.

So, what I want to do to try and demonstrate potential impacts to the Orion network is just put up some really extreme scenarios. These scenarios aren't really realistic but what they do is test the potential outcomes that could flow from technologies.

So, just to get you in the mode of looking at graphs, here is some low profiles on this one and I'll just take you through it slowly.

So, what we've got there as the solid blue line is a daily profile on the Orion network on a really bad day in winter. You'll note it has a very very flat shape through a large part of the day and this is through our commitment to DSM over many decades. So, other parts of

the New Zealand distribution networks won't necessarily have a similar shape, it might see the more traditional two-humped approach.

Similarly on there you can see a summer day, the blue dotted line. So there we can see the effect of basically winter peak demand as opposed to summer peak that might be seen in irrigation dominant areas in New Zealand.

Overlaid on that we've got two PV scenarios, the red dotted line, very extreme scenarios, this is 6 kilowatts per ICP and 50% of potentially the energy in New Zealand being supplied by PV. So, you can see there that there's a huge amount over and above the winter demand and also at the summer demand.

Conversely, the red solid line is the PV on a dull winter's day. So, I think the point to notice there is the potential contribution of PV on a winter's day or a day compared to a solid blue line, even at a very very high uptake.

The other line on that graph there is the green line, is the potential impact of electric vehicles. There has been quite a bit of modelling done that that will have an 8% impact on energy increase in the New Zealand power system. I've made the assumption here for our network that 30 kilometres per day is sort of commuter distance, the New Zealand average is about 40, and one electric vehicle per ICP.

Now, that green line could take any shape depending on how people want to charge their electric vehicles but you can see it sits there relatively low in terms of impact.

Just looking at some scenarios, this is the summer, sunny day scenario, same colours used here. What would happen if no storage on the system is the PV would produce the orange dotted line there. So, what is the

solid blue line would be turned into the orange dotted line leading to export from the distribution network onto the transmission grid. Of course if everyone in New Zealand is doing exactly the same thing, where does all that go? So, therein lies the problem and the opportunity for battery storage. So, if we implemented battery storage as effectively as we possibly could, we could end up with the blue dotted line on there which is very close to zero. So we've got a summer demand that goes from 360 megawatts down to a 20 megawatt flat line.

Interestingly, at 45% of ICPs, we'd need one of the new Tesla battery units to achieve that outcome. So, that's very high up-take of battery storage.

Now, jumping to the winter day. What we've got here is the red down the bottom here, that P very low penetration level, this is essentially what we've got on these days is daylight and so therefore the output of the PV panel is about 10% of its capability, and of course reduced daylight hours to achieve that.

So, what we're looking at is with electric vehicles overlaid on top of that in the future, we could end up with the orange dotted line. So, we're now taking an Orion old historic flat curve, done all we can with DSM and now it's starting to get the more traditional two-humped approach again.

So, what we could do with that is we could turn it into that blue dotted line. So, this is taking what could be 670 megawatt peak on our network and taking it down to 540 megawatts. So, that's the opportunity, if you like, around battery storage. So, if we used it as effectively as we could without any energy efficiency measures on our network, that's the kind of quantum change we're looking at. So, we don't see that as material, we certainly don't see that as a stranding risk on the subtransmission network but, as I point out

there, there could be 10% to 20% perhaps future improvement around energy efficiency.

Some people talk about inter-day transfers with battery storage. We've had a look at some weather data kindly supplied by the epi centre and we can expect three to five days in a row of this kind of format, so if you're looking at battery storage over more than a day you're going to need to supply it over that sort of quantity. Interestingly, you only need 15% of the ICPs that have battery storage to achieve that outcome. So, a smooth profile in the summer, because of the peak nature you're looking at half, almost half of them needing battery storage, but actually to achieve this outcome it's only 15%.

In terms of the impact on our subtransmission investment, and note here that this is an urban context, the rural network does have different drivers, particularly in our case around irrigation. Our rural network has tripled in size in the last 15 years. So, there are completely different drivers there and you could say that some of the things that happen in the irrigation sector are actually emerging technologies so just if we can get the label at the time.

So, I think our subtransmission network is well-utilised at the moment, so the potential to down-size that is relatively limited, particularly in an environment of underlying growth. Now, of course that's not always true in all regions in New Zealand. New subtransmission capacity will be required still out into new urban sprawl areas, we're still seeing subdivisions going in, you know, thousands of households, sort of thing and we'll need to continue to supplying those.

We do note that we need to be cautious about our approach though, and we've always been cautious, so we don't necessarily see that as a change in our behaviour.

It's about getting the right balance between being an enabler in the long-term versus keeping the incremental costs down.

So, what about the low voltage network? That was all about the upper network. I'm referring back to some old EDB values there. I think we don't really look at this way now, but around 40% of our network value is attached to the LV network, perhaps more. So, this is the last cables in the street and the kiosk substations on the side of the road. It's actually a very similar curve to the subtransmission one. I won't go through the detail again here but it's there for your reference later to read, but there's a potential here to take what could be somewhere around 4 kilowatts per ICP in the residential area down to 2.9 kilowatts. So, that's the opportunity, if you like. If we use these technologies efficiently, we can actually roll out subdivisions in a smaller way and avoid investment in infill areas on the existing network. But this isn't stranding, this is still requiring the network to deliver a lot.

The risk, if you like, so not taking the opportunity to use these technologies well, the risk is that PV gets exported rather than managed at the household level and that we need to reinforce the LV network to deliver that. So, what we've got, a graph here, only the left is showing that our penetration levels up to 3 kilowatts per ICP, up to 20% of our LV network would need to be reinforced to deal with that export capability.

Similarly on the right, the EV uptake. We've got, take the very extreme end of that graph, one electric vehicle per household. Around about 13% of our network would need to be reinforced to deal with electric vehicle being charged at peak.

So, we don't want that to play out, we want to manage these technologies in an efficient way to get the other outcome.

So, some other points there around low voltage network investment. It is largely a set and forget regime. It's different to the subtransmission. It gets put in when the subdivision is done largely at the oversight of the developer. We supply design standards, they get a design done to comply with those and they roll it out. You get an almost once in a lifetime opportunity to get it right, and you do need to think about when you do that, about how much you future proof it.

So, historically we've been providing about 5 kVA per connection in residential areas, although the peak demand has been somewhere between three and three and a half. So, there's always been this inherent capacity margin that can be used for security of supply, but also if you get infill growth, then that can be used to meet that without costly revisiting costs.

So, whether new technologies achieve efficiency gains is largely dependent on how successful we are about managing the connection of DG to our network, to managing the dispatch of it, if it comes to that, and also managing demand side management, and I think there's a lot of clarity to be provided by the industry around how we can achieve that.

I just make the note there, the older areas are more vulnerable to poor management. If we don't do it well in the old areas of overhead lines and LV networks in large streets, there can be a lot of costs associated with upgrading those areas. It appears to me that low voltage network is a vital part of any micro grid if it should ever play out in the future.

So, just repeating myself here a wee bit. PV provides little benefit to the network in the winter. EV impact is, as you would guess, largely dependent on the time that they're charged. Battery storage would mitigate a lot of the effects of EV, it does introduce losses to the system, though. There's about an 8% loss on the cycle of a battery. So, when the penetration levels are very high you actually lose quite a bit. That's pretty comparable with the transmission losses.

Need to acknowledge that there are other energy efficiency things that could be achieved in the home, in particular I think around hot water. We're still using largely resistive elements in hot water cylinders to heat our hot water and that's 30%-40% of the electricity bill. So, there is quite a bit of potential there to reduce that.

Population growth in areas like Christchurch and Auckland I'm sure will off-set any moderation in size needed on the sub transmission network. We've got to work hard to make sure our LV network remains relevant, particularly around the flexibility of how it's used.

I think I could possibly skip this slide. How are we going for time?

JOHN GROOT: Fine.

GLENN COATES: So, I think there's a real opportunity here to help the transport sector in terms of CO2 emissions without the corresponding bad news in the electricity sector. We need to sort of embrace that, even if it leads to perhaps some extra costs in our industry, that's still actually a good outcome.

There is a risk that emerging technologies will lead to increased network investment. I think I've highlighted that. If we don't manage the PV export well, and we don't manage when electric vehicles charge well, and we don't manage when battery storage is

utilised to its best. So, conversely on the opportunity side of that there's a real opportunity to increase the utilisation of the existing networks and moderate the design of future ones if we do get it right.

None of these are game changers, are material shifts, in my view, at the moment with the technology that's available, they're all about incremental efficiency gains that we could potentially get.

There's perhaps an opportunity for customers to share in the role of capacity, security and reliability of supply and I think Ryno touched on this a wee bit. We need to define carefully what the role of network is. It appears to me we're still going to need to provide capacity. Maybe there's a shared role around reliability. All of our capacity at the moment is provided in N minus 1 level, maybe there's a different way of looking at that.

And a bit of humour there at the moment, I thought maybe in a struggling dairy industry if we got it wrong in the electricity industry we might be able to use the spare dairy cows.

So, not only the IMs but the broader regulation, remember I'm not the economist here, I'm the network guy, I think whether the risks are real or not around stranding, all the different ways we've talked here today about managing that, whether they're real or not we want to make sure that the outcomes don't lead to a shortage of investment in the network, leading to poor customer service outcomes for customers, and I think Ryno mentioned in his presentation that if investment in networks looks risky, the outcome will be poor service for customers.

Need to make sure we facilitate horses for courses and that's the difference in the distribution networks

across the country, they are all different and it needs to be taken account of.

The long-term interests of consumers is perhaps not as clear, the definition of that, what it means now compared to the old days. I think there is some opportunity value that we need to consider, and John Hancock mentioned that. There is value in perhaps something that seems a bit more expensive in the short term but increases options in the future, and we need to think about how we capture that, and if we do move into an environment of more market based regime as opposed to regulated in the distribution world, we need to make sure that because where distribution networks have come from that doesn't necessarily disadvantage us. So, we want to make sure that regulation enables enough flexibility for us to operate in those regimes as well.

So, at the moment there's an expectation of service from us. If we truly are in a competitive environment on some of these services then why should there be a level of expectation, and what pricing restrictions are there at the moment that would disadvantage us as well?

I think that brings me to an end.

JOHN GROOT: Thanks very much, Glenn. I personally quite like to see some numbers, so thank you for that. Our next speaker is Andre from Vector.

ANDRE BOTHA: Thank you for the opportunity to speak here today. I've got a bit of a cold and on top of my really weird accent some people may struggle with hearing me so just put up your hand if I have to repeat myself please.

My team and I have the privilege of looking after the three regulated businesses of Vector, however, the whole presentation focuses on electricity because we don't see the same issues for electricity or for gas and gas transmission that we see electricity. So, it's very much centred on electricity. In fact, we see gas as one

of those opportunities of new technology for electricity.

I always like to quote Jack Welch, I think he is credited with improving GE's profitability by 4,000% or their value at least by 4,000% while he was running the business, so I like to listen to him or read what he has got to say. My whole presentation focuses on validating what Simon said this morning when he started, and it's a consistent theme, the things that matter for us.

So, what I'm really doing here is showing and demonstrating why we believe this is an important conversation, why we need to have it now, why it's urgent, why this is a good forum to have it at, and also then what the implications for the IMs are. I'm going to conclude with that at the end of it.

I've got some bullet points on what it means from a network management perspective. Not going to go into that but happy to talk about it.

I often ask myself, because I've been in this business for a while and across a lot of jurisdictions, what has changed out there? We've always had conversations with our customers about price, quality and stranded assets but to me the intensity of customers' sentiment has changed in a bad way for the traditional operating model.

If you look at the third bullet point, you know, it's not often that I've come across commentators of customers saying, you're capital inefficient. They used to say you're inefficient when three trucks show up to fix a pole, and stuff like that, but there's a new movement where customers are now talking about or criticising the way we're deploying our capital, and if you look at the last bullet where they're saying, are they going to have to get a line or get out of the way, you sort of wonder what's changed and the only

conclusion that I can come to for the big change is that customers now see they have choice, from the residential right through to the commercial, and even some of the larger customers, they've got alternatives, and when you've got alternatives you can definitely start having these conversations and make these statements.

Now, initially when the term "prosumer" started floating around I really hated it, but the more I think about it and the more I see it being used, I sort of think that that's what we are facing. And, that's why Simon started this morning by saying, we believe this is customer driven as opposed to technology or network driven, or regulatory driven. You know, the whole new language is changing.

Last week we were talking about the internet of things and yesterday I read about internet of electricity and megawatts, which is the ability to generate your own power as opposed to distributed generation, and I think when customers start using a language of their own you sort of know that the change is more fundamental and it's here to stay and it's very real.

Now, some of the things that we are observing about this sort of new category of customer we call the "prosumer" is they're interested in total energy solutions to the point Simon made this morning, they don't care whether it's retail or line or transmission, or generation. They're also using the words in the language like big data, sensing, communications and analytics. The whole language has changed and it's moved somewhere off technology and somewhere off reliability and somewhere off quality of supply.

We're also seeing that this sort of new brand of customer has got huge expectations of service levels, because they're used to dealing with Amazon and Google,

and these people, they're really expecting us to start demonstrating the same response time and behaviour as these what we call competitors have been doing and are doing today. And, the very important point is that these prosumers are Agnostic from a technology perspective.

Simon made the point this morning that we tend to get stuck with solar and batteries, stuff like that, but in fact there's a lot of evidence to suggest that these new entrants are not hardware focused but still will change our operating model dramatically.

I mean, you all probably have heard of this list and there's more to add to it. The one that came as a surprise to me is the second bullet there, Ford, because I always thought that once you have all these electric vehicles I'll be able to give a customer a price signal and when to charge the vehicle or when I'll want them to inject back into a grid so that I can use it, but Ford launched this vision where they say they will work in their electric vehicle programme with people that build appliances and energy saving devices so that collectively they can reduce the energy consumption in a house by 60%. So, where I thought I'm going to have access to that battery, you know, if Ford gets their way and they probably will, the customer will use it for their own purposes. So, just an interesting mind-set where it's not just solar, not just batteries, it's very real and it's really got the potential to give us a lot of trouble going forward if we keep operating in the model and developing the network that we have been doing traditionally.

Now, if you look at battery costs - so, I'm just going to talk about a couple of technology options now. If you look at battery costs, I mean you can see what the trend is doing. Currently Tesla is talking about

$300 per kilowatt hour and their target within a decade is to get that down to $100 per kilowatt hour. That is a huge cost saving and especially if you consider the starting point seven years ago, that's a big change.

John already referred to this, that is a picture of Tesla's giga factory and then I was also interested in the comment of Musk that said it also even surprised them. So, that factory I think has got necessarily 12 months of capacity booked out now and they're now talking about building another one or may have started it already. I mean, if you look at that, it's very real, it's more real than it's ever been.

The one thing about the Tesla battery, which once again demonstrates that it is so consumer driven, is that it's really appealing and very flexible if you look at their design. The one on the right, Powerwall is a residential battery that weighs about 100 kilograms and if you need more you can just bolt more together. Very slim design, I guess sexy by battery standards, but it's really - you know, customers won't mind having that in their house especially if you can get it for $2,000-$3,000. But they also provide commercial solutions and grid solutions which the other two pictures reflect, and in our experience, compared with the grid side and tenders that were done two-three years ago, there's already been a big price improvement on the grid side batteries as well.

Solar is always an interesting debate and everyone will have their own view on where New Zealand will sit in this, but the way I look at it is the way that when batteries become a mass market affordable option, this graph will look totally different and batteries will make solar even more relevant than it is today for customers. So, that's my big caution around take-up rates and arguments on that.

The other important thing to notice is that it doesn't matter how you shift that graph, it will have an impact, and quite big, on the sort of current regulatory period for our assets, the current asset lives. I'm designing assets for 40 years, in 40 years' time if you get the scenarios as I've represented on this graph, that's going to have a huge impact on my ability to earn revenue off the assets I'm installing today.

Electric vehicles, this is really actually now happening, so the slide from John, and I just think if you believe in the scenario at the bottom, that by 2040 sales could be as high as 80% electric vehicles, that's going to be a total game changer, not only for our industry but for others as well.

The next couple of slides I just want to focus on Vector's experience to further support my argument that New Zealanders will adopt this as the rest of the world is doing. So, when Vector announced their relationship with Tesla we put this form on the website and within a couple of months we had 530 expressions of interest. Now, I'm not a marketing specialist but they tell me for an unprompted response that is really good, so customers are really keen to know more about this.

We've put a couple of charging points up around our building and the one at the back has had 118 hits over three months and they reckon that beats even the Sydney experience. I don't know if it's because we give a free coffee as well when you use it, but it's just showing you that Aucklanders are no different than other people in the world.

The way we communicate with customers and the way customers want to communicate with us is changing dramatically. Vector developed this App, an outage App. It's had 66,000 downloads and 8.3 million hits since it went live, and the most interesting thing about it is

that during a storm, now I'm seeing a decrease in my call centre, on the loading of it, because people are using the App rather than making a call, and that's another aspect that's interesting to take note of. More and more customers will want these sorts of tools to communicate with us.

One of the first slides showed the concept of big data and we've lately deployed a few tools that can help us analyse a really complex set of data with a lot of variables. But one of the interesting things we see now is that over the past decade, if you take the red line at the bottom for the low consumption users, the consumption has decreased at ICP level by 14%. That immediately raises a lot of questions. What is it going forward and what are the reasons for that? I don't have the answers because we're still doing the work but it's just interesting to note that the ability to analyse complex data, especially data that you don't even have in the business, is really valuable and insightful.

So, I'm coming to the end of my few slides talking about the implications or what does this mean.

Now, this picture, always when I looked at it on the Vector website it validated why, or validates why you're in this business. If you can provide that sort of calm environment for customers to get on with their lives it's really nice, but one of the implications of the change that we're seeing is that I'll have to compete for that customer going forward and that customer may not want to stick with me as a lines company. That is something that I'm still struggling to get my head around and if you read that quote at the bottom, that commentator there acknowledged that, you know, it's a threat or an opportunity, you have to decide.

Ten years ago, or even five years ago, talking at meetings like this you wouldn't put this slide up as the sort of things you worried about on a daily basis or what the future looks like. It would have been much more technical, much more network driven, much more internet focused. These pictures are just trying to say that things are changing very very rapidly and as that quote there says, it's not going to come in the order that you wanted it to come and it's probably going to come faster than you wanted it to come.

So, my last slide is some of the implications. On the left is technical network management stuff which I won't go into too much, and on the right is regulatory stuff.

The one I will touch on is capital efficiency and I just want to reinforce what Simon said this morning, that our - is pushing us to look at total energy solutions and the reason for doing that is that they believe for the long-term benefit of customers it's better that Vector starts looking at outside the boundaries of the traditional lines services to look at total energy solutions, to optimise the capital we will be deploying in the future.

Now, we believe that's a strong signal from the community, 75% community ownership and a 25% private ownership, together the tension it creates, how you balance community and commercial results. But they are certainly pushing us very very hard to look outside the realm of line services as it's defined currently. And for those that were here when the Deputy Prime Minister spoke last week, that supports my takeout from his opening speech as well, that if you don't do this you're effectively destroying value for your shareholder. If the lines companies don't start looking at the impact of

this new technology they are destroying value for shareholders.

So, on the right-hand side just a couple of regulatory points coming from a network manager. Uncertainty is here to stay and is only going to increase with the accelerated change. So, how do we come up effectively with a framework that works, I have to acknowledge that.

The second bullet there basically just says, trying to say that we can't afford to wait, you can't adopt a wait and see attitude and fix problems as they arise, we simply have to act very quickly. The next reset is critical, a lot of these things are going to happen over the next decade and we need to get ready for it.

The third bullet there is all around, not incentives for innovation, we already spoke about that this morning, but more incentives for investment where we're saying, the regulatory environment needs to provide that incentive for a lines company to look at a mixture of beyond the meter and on meter technologies to provide a solution, and also the trade-off that Nathan referred to between opex and capex, we need that flexibility in the investment test. So, the automatic answer in every option analysis that you're doing is not just to build another pole or line.

Really, the last point is just the observation that a lot of people have made already, that you've got a lot of diverging strategies around the table and you want to come up with a default regime, so that's a bit of a challenge.

But look, thank you very much for listening to my stuff, I appreciate it, and thank you for the opportunity to speak.

JOHN GROOT: Thank you, Andre, that was an excellent presentation from a different perspective. For me it

highlighted some of the blurring of the distinctions that we've traditionally seen between the regulated services and how what customers are demanding blur those lines. I think what we'll do now is break for afternoon tea and what we'll do when we come back is hear from David de Boer. If everyone can come back in 15 minutes, we're a little bit behind.

(Adjournment taken from 3.09 p.m. until 3.26 p.m.)

JOHN GROOT: Thanks everyone. Our next speaker is David de Boer from NZEIR on behalf of Major Electricity Users Group.

DAVID DE BOER: Okay, folks, welcome back. I'm David de Boer, I work for the New Zealand Institute of Economic Research. We have lots of clients in lots of different sectors and the Major Electricity Users Group are our client in energy, particularly electricity. So, we advise them and we're advising them on this particular subject.

I would make the point that I'm actually not speaking on behalf of MEUG, I'm speaking on behalf of NZ Inc. view so I'm not advocating, I make that clear.

Interesting having this conversation, actually, because I think like 5, 6, 7 years ago I was helping the Commission with changing the regulation of Telecom. It had been operationally separated and blah blah blah which was an interesting challenge because the legislation went through and the Commerce Commission were given, go make that happen, and John Hamill and Brent Alderton, and the troops, were busy developing IMs to get into place on a different floor. So, we shared ideas and conversations and things, and I think it's fascinating we're standing here five years later having a conversation about how to change those things again. So, it's great.

I'm no stranger to this. I came out of Telecom some years ago involved in sticking the internet into place - not engineering-wise, I'm not an engineer, - how the wholesale environment evolved. I actually set it up and ran it for a while and then there was one change too many, so I left.

This is not a presentation on technology either, by the way. I'm sitting back from all that because there's a lot of people in the room who know a hell of a lot more about this than I do. It's kind of a stream of consciousness and a set of questions that bring a lot of the stuff we've talked about this morning and this afternoon together so that we can advise our client. Hopefully they are helpful questions to some of the people in the room and the Commission. So, it's going to walk over some of the ground we've talked about but I won't get amongst that. It kind of parallels what Diego said too in terms of his thinking and the Commission's thinking in figuring out what the problems really are but it's different, it's framed as a set of questions about the regulatory impacts.

Now, the first question for us has been answered by the Commission. It's really, should regulation lead or respond to technical change? And, the Commission has made it clear that this conversation is leading it to determine whether it needs action or a response, so that's really a good thing.

So, what are we hearing? Some of this is obvious, we talked about it. We're hearing that network assets are going to get asked to perform different tasks, we're not yet sure what. There's a whole bunch of uncertainty that we talked about. Consumers are going to be looking to buy different things off networks and off not networks to fulfil their energy needs. We don't know about some of this either. Demand levels are going to

be uncertain - sorry, ahead of some of these changes, and following these changes they may recover, or they may not. We're also hearing that change will not be the same in different places with different consumer classes because of a whole bunch of economic and demographic factors.

So, this is not a one size fits all job. So, the question then we're posing to ourselves and deserves a great deal of thought is how the network is going to reconfigure assets, their business models and their pricing over time in this environment, and that I think everyone has agreed is a bit of a tough ask, and some of that came out this morning with respect to how risk allocation and risk profiles will change.

The other thought I think that emerged is that, well we've talked internally about it and talked with our client about it and it's emerged certainly in listening this morning and earlier on, we've got a whole bunch of lines businesses that are starting in different spots. Some of them are not even into this stuff, some of them are, but not only that, they allocate costs across different consumer groups in different ways. This is the charging approach, fixed charges, variable charges etc, they use different methods for recovering costs. They're exposed to different regulated businesses, some of them are involved in gas, some just electricity and some of them are involved in other businesses as well, wineries and things.

As I say, some participate in different aspects of technical change, and talking about technical change we think of it not just as electric vehicles and batteries and stuff on your roof that attracts the sun, there's all that efficient equipment that's put into a lot of commercial buildings, very efficiently set up

energy-wise these days. So, we're thinking of it in a broader sense in that regard.

The other thing is that some of the discussion today and some of our thinking and work back at the ranch is that the effect that a lack of a direct customer relationship has between the lines companies and consumers that will buy batteries and electric vehicles and stick stuff on their roof?

So, there are some questions for the EDBs that we've been thinking about, and given that they're in different places at the moment, at different starting points for this part of the journey, how well the building block approach of the IMs works for them at this point in time regardless of technical change, and listening to a few of the members that were up on stage today you can see very different perspectives coming through about that.

And internally to that, and this stuff came up at the WACC discussion over the last couple of years, is what does the IM model provide in terms of incentives for new technology and new services, which leads us to think, ask the question a little bit about, how do you out of that determine whether consumers are going to be better off? Because there's no direct link in there and what the EDBs do may hit the consumer in a different way.

So, we haven't got problem definitions, we're just thinking about how to figure them out. So, thinking about uncertainty two questions come to mind, how to think about network cost recovery amidst uncertainty and changing risk allocations, and some interesting stuff came up there.

The second one that deserves the focus is, will we need to adapt the existing cost recovery model which was built back when there was less uncertainty? It's got a

nice fixed structure to it, it's good, and as there was some discussion today, it works pretty well.

Things have changed, though, and the question is should we change that model or should we adapt it like adding incentive modules or performance comparison modules, you know, there's various views on benchmarking, or should we invent something new at some point in time? There is different - looking out there in the world there's different regimes in different places. People are trying new things, performance based regulation.

So, moving quickly through to putting uncertainty aside there are more questions and this is the monopoly status, this was brought up this morning again, monopoly status of the networks may change over time, starting quite soon. So, we've got generation moving closer to load, we've got flat demand, we've got load efficiencies improving and there's lots of examples of that, as I say, LEDs and air-conditioning and supermarkets, and things like that, all resulting in the networks getting pressured.

So, those changes taking place lead to another question about whether all or parts of network businesses should remain in or move out of, and this is a policy question, should you think about a strategy for over time moving parts of those operations out of network businesses?

There's another question that again was touched on in terms of overlaps and underlaps with respect to regulation, and this is are there constraints on the regulatory system already? And, those people working on transmission pricing issues and shortly to start work on distribution pricing issues, we're bumping up against this in a way that makes it immediate, it's right in the middle of the radar screen.

And there's questions about regulatory objectives, are they a little narrow, form of control, should be it prescribed in what way? And, pricing approaches are quite variable, quite widely variable all of which is causing pressure on the regulatory system.

So, following on from that there's, just dropping into the coordination across the regulatory system, Diego put a nice little model up on the screen before that depicts it but taking account of that in the real world, as I say, is quite difficult and the EA are looking at the allocation of Transpower's costs at the moment with looking at changes to the transmission pricing approach which is a major, and it intersects with this whole process, it's a major input to distribution businesses and it's handled in different ways by different businesses.

So, what's the point of putting that up there, David? It's asking the question, does the building block approach of the current IMs fit well with situations like that?

There's another one in terms of the Commission's decisions on Transpower's investments. And there's supposed to be a feedback loop into how, when those investments are proposed and decided upon, to engage grid users, mainly EDBs. Then the question is how well is that working and is transmission pricing the tool to fix that issue, and how does that sit inside the IM process?

I won't say anything about low fixed charges, that was talked about earlier as being an issue on the radar.

So, moving forward to think a little further about problem definition. There's the issue of long-term welfare of consumers and thinking about that in terms of this conversation and the IMs being only five years old we're talking about short terms here, not long-term

which is a real challenge I think for the Commission thinking about to do what with the IMs in light of uncertainty and changes in short terms.

One of the overhangs here, and these are short-term changes, retail prices of supplied energy are going up. So, network costs are increasing, RCP1 and 2 have both seen increased costs, and interestingly who was it, Andre talking just before about the declining costs of alternatives causing consumers to go, oh, I've got some choice here. The energy demand declines. There's some scenarios that MBIE have put out that had a nice solid growth extension of past demand that they have revised with a decay factor for technology interference. The revenue cap or the price cap CPI adjusted for distribution networks and the MAR, maximum guaranteed revenue for the transmission grid talked about before again, different approaches that affect how grid costs are allocated and how they pass through to consumers.

Interesting cost of alternatives, the Smart Grid Forum presentation, that cool graph with the little red bar at the bottom, that the real worlds just about touch, is informative but the other thing we need to remember is the decisions to get in amongst technical change are not always economic, people do it for a whole bunch of reasons and there's big lessons from overseas in that one. When the incentives in Queensland were, I think it was 30 cents a kilowatt per hour were removed, the growth path just kept going like this, hardly hesitated.

All of this tells us that the signals out of, this is one of the big problem areas that's going to come in our advice to MEUG in their submission is that we've got to align all the economic signals in the system. It's a key requisite in delivering the right outcomes.

So, last slide, we think of this as a system view which has emerged a lot, that's one of the delights of today is that people are thinking that this is not a compartmentalised transmission, distribution, retail, blah blah blah. That it's system driven, and to that extent we've actually started work on developing a modelling capability so we can look at this system and the effects of transmission pricing on input methodology changes, WACC if it's changed, what the trickle through, what the pass through is so that we can assess it on a system basis.

I think we're all agreed that a technical change will impact the IMs. There's not a lot of argument about that. It seems to me today it will also have an impact on pricing of network services for sure. So, as I say, these signals need to be aligned and that's for a whole bunch of consumer far end reasons, but it's also, as this technical change emerges it emerges efficiently of itself, and my rinky-dink diagram here is just a little picture on how this passes through the various stages in the supply.

So, a couple of take-outs out of here. One is the system needs to be actively managed, and letting each piece do its thing and rub up against the other piece is not going to deliver, is unlikely to deliver what we want; and at the end of the day, in terms of electricity delivery and distribution as we know it, the performance of that system has to be relative to the alternatives that consumers have.

The other takeout, I think we're all agreed that it's not a matter of if these changes are going to take place, the $64,000 question is when, and that I guess is one of the key components for the Commission in deciding this. So, that is my lot.

JOHN GROOT: Thank you, David. I think that was quite a nice little summary prepared in advance on a lot of the issues that have come up this morning. Greg Houston is our next speaker on behalf of the ENA.

GREG HOUSTON: Thank you, I should say on behalf of the ENA but they haven't even reviewed my slides so I'm hoping I'll still be spoken to at the end of this. Time is short so I'm going to give you five propositions or five key points to take away right at the beginning and then I'll try and back them up.

So, first one, I think some people in the room are too complacent. In my view they are real threats on the near term horizon to the sustainability of networks' current business models.

Number 2 is the principal cause of that sustainability problem is a long-standing focus of tariffs on energy throughput.

Tariff structures, the third one, is not part of this review, it is actually under the auspices of the EA which I must say it is hard to explain quirk of the New Zealand arrangements.

The fourth one, in terms of the IM review, there are some quite good things that can be done to help reduce the risks of technology, revenue caps instead of price caps, revisiting depreciation are two of them but I think it needs to be said that without serious tariff reform I don't think those regulatory IM context measures will help at all, they could even make things worse. I'm not saying you shouldn't do them but if you don't fix tariffs and completely change the way you're thinking about tariffs, the regulatory measures that are available focus on revenue, won't really cut the mustard.

So, there are apologies to people who have seen this before at the Competition Matters - not all my

slides are the same as last week but I just think it is worth running this for people who weren't here on Thursday I think last week.

This is a graph of the take-up of solar PV in the Australia electricity market, state by state, starting from 2010 to the beginning of this year. In terms of scale that's 4,000 megawatts of installed generation capacity on roofs in Australia, and no-one is predicting that that curve is going to turn down any time soon, and I think there are lots of reasons why it should just keep running.

So, 4,000 megawatts, how big is that? It's more or less one and a half times Meridian to put it in perspective, obviously it doesn't go all day but it is a lot.

Now, the poster child for network challenges is South Australia which has, and I'm going to show you the load curve of the South Australia SA Power Network's distribution network over the period since, from the beginning to the end of this graph, and you'll see what I mean, and they, like probably the rest of you, have a very high throughput focus in their tariffs.

So, here is the load curve in South Australia, it's a 24 hour picture when 26 megawatts of solar PV was installed back in 2010. I'll just go through this quickly. Here it is in 2012 and the number corresponds in installed megawatts. Here it is at 2014 and here it is at the beginning of this year.

So, what that says, in the middle of the day you've had an enormous drop in load in South Australia, also the evening peak is dropping, even in sunny South Australia there's not that much PV generation in the evening so there are other things happening in terms of the evening peak, but if you've got a throughput based

revenue model, that's a serious challenge to your business, at least the financial side of your business.

Now, interestingly we're moving to revenue caps in SA Power Networks which has had, as Megan explained, had different kinds of combinations of weighted average tariff basket and revenue caps over the years, it too will soon be on a revenue cap and so it will also be able to keep putting up its tariffs in response to this loss of throughput, but of course what happens to the people who are thinking of installing who haven't already installed solar PV? It just means the incentives through avoided network usage are rising as the revenue cap causes you to respond unless you change your tariff structure.

SA Power Networks has been thinking about that. In June, so only last month, they submitted - and there's some implied criticism here so I'll be judicious in how I describe it, but they submitted a proposal to the AER for a surcharge on the network tariff for people who had installed PV, $100 per year that they thought, obviously a good way of filling the revenue gap and the AER within a month rejected that proposal, they said they didn't think it fitted their criteria for efficient tariffs. Now, there's some argy bargy still left, I'm not quite sure, I think they have appeal rights whether they will appeal, not sure how that's going to resolve itself, remains to be seen but I think you get the message it wasn't obvious to the economists in the AER that singling out people who put in solar PV and just charging them extra because they had solar PV was the right way to go, and to be honest I don't think it's the right way to go either.

It also needs to be said that good and sensible people have analysed closely and said notwithstanding these friends there's very few people are going to

disconnect, and if you look carefully at the economics of disconnection from the network you need an enormous amount of space, you probably need to go well beyond the roof of even the largest house to simply get enough PV cells to capture enough sun to meet your total energy needs and that's then before you add in the number of Tesla, or whatever batteries might need to actually smooth all that out and deal with the days when the sun doesn't shine, which could be one or two weeks in the extreme.

Even if the costs of batteries came down a lot, which is likely, it seems unlikely that anyone will physically be able to disconnect. So, it seems to me we are talking about very different business models for networks and the question is what are they.

But before I go there I'm going to just take you through the economics of the Houston household tariff structure in Sydney and I've brought our power bill and I've put the - we have a time of use meter at our house, we did some renovations a few years ago and that was the reward for that and here's the tariffs we pay at the moment. So, in the peak period, 2 p.m. to 8 p.m. we're on 48 cents per kilowatt, shoulder 18, and off peak which is nine hours over the night which is 12 cents. I've got three teenage children who are completely disrespectful of any kind of demand-side conservation, they leave everything on all the time so we have about 2,700 kilowatt hours a year of peak usage. It's a lot, I know, I'm embarrassed to stand up here and say that but we do.

Now, if by some, the magic of the Tesla battery I could take - we don't have solar by the way PV, but if I could manage to get the Tesla battery I could shift most of that from 48 cents to 12 cents that would generate me by arbitrage $1,000 a year. That's quite a big saving.

If the Tesla battery is going to cost $3,000-$3,500 that's got a pretty attractive pay-back period.

So, my guess is and my particular retail supplier, this is retail tariffs, not network tariffs, isn't going to last very long with this kind of tariff structure when batteries start to be sold in Sydney. Forget about batteries being sold, go straight to PV, they are a straight arbitrage vehicle in the land of the future.

So, what I take from that is, if you think about the Queen Mary of tariff reform that's been slowly coming into the direction of we've got to get everyone on to time-of-use pricing because the evening peak is the most critical thing to manage, that's been the mantra in electricity networks for decades, and slowly but surely, including to my house, it's coming to be but I put it to you that that's yesterday's problem and that moving everyone to that kind of tariff structure is going to be self-defeating because batteries will defeat tariff structures like that quickly.

So, what I think is needed is first of all to sort of step away from whatever box you're in and completely rethink what your concept is of a network and what service it is providing, and I mean I'm only throwing out ideas here but I think that has to be based on capacity, and when I say, because at the end of the day whatever of these gadgets you may have and whatever way you may want to use your network, the fundamental thing is do you still want to stay connected or not, and if you do want to stay connected what's the maximum rate you're going to need with that connection? And, if that's the way that I think people are going to be, need to be thinking about their network service, then that's the way the industry needs to think about structuring its charges for them.

It already happens to a greater extent at the commercial and industrial level at energy networks and we have to bring that thinking to the household level, and I don't see, I'm fully aware that you've got these low user, low fixed user tariff regulation that says everyone's got to get a fixed tariff but I don't see at all capacity tariffs as being fixed, they are variable because they depend on how much capacity you want, and the challenge for the industry is to find a way of dividing up customers into small, medium, large, extra-large, whatever it may be, and to charge them a graduated amount for the level of capacity.

And it just happens that that's exactly how we all pay for these things, which is, as I've said last week, and, so here I have from a website of a telco provider in Australia, it's about a year old so I'm pretty sure these prices are lower now but why wouldn't we think about our electricity network just like this?

At the small user, you know, you've got only 500 megabytes of data per month, you've got limited number of calls per month and it's a cheap tariff, and some people go over that, and if you do go over that you're not going to be cut off but you're going to get penalised so that you realise, actually if you systematically, or even occasionally, or often need to breach that, you're going to have to go for the medium tariff, or if you're really big, perhaps like my household, you're going to have to suffer the XL network service.

I don't see why we couldn't think about electricity services in the same way. I don't see there's any problem with a tariff structure like that that would not fit with the low user regulations and I think that's got to happen otherwise you have an industry that's in trouble. Thank you.

JOHN GROOT: Thanks very much, Greg. The last speaker we've got is Ross. I'm conscious we're a wee bit over time so we might curtail some of the question and answer session.

ROSS PARRY: Right, so time is really short and you poor people have heard a lot of presentations by now so I'm just going to try and rattle through this really quickly. The whole presentation will be on the Commerce Commission's website as I understand, including a little notes section under each of these slides, so I'll leave that to do most of the work and just rattle through these.

Planning to talk, this has felt a little bit like the EDB IM Issues Forum, and that's kind of okay with us but I'm going to talk a little bit about Transpower. I'll talk about our history and about how we see our incentives, those are kind of context pieces that are important. I'll talk, because I have to here, the topic about how we see the future, and then make a modest attempt to talk about what that means in terms of IM issues.

Here's the history lesson. This is a picture of Transpower's assets since corporatisation, so the red line is a view of our asset valuation over time and the blue bars are our capital expenditure over time. This is all stated in real terms. The purple is a forecast of our capital expenditure into the future.

A couple of points I want to make on this. One is the nature of our business is if you extended this back, if it were possible to extend it back through time you would see pulses like the big pulse you have there happen periodically, that's how it works. We have regional and backbone pinch-point expansion investments to make from time to time, big economies of scale we get pulses of investment.

The other point to notice is there's a period not long after corporatisation when we had a very low level of capex and our asset value was declining. There was a couple of valuation shifts in there as well but the rate of depreciation was out-stripping capex in that period.

There were a couple of things happening at that time. One was a difficulty believing we could get a return on our investment at all, that anyone would pay us for our investment, so a regulatory confidence problem, and the other was the perennial kind of idea that there's emerging technology coming along that will make our assets redundant anyhow.

Those two things went together for a period where we under-invested, if you like, and the consequences of that for us in terms of the condition of our assets over time, so it has an impact on our assets, it has an impact on the quality of service that we're providing to consumers over time. It reached the point where that really wasn't tenable to carry on like that and we had the other set of consequences, that you need to follow a period like that with a period of catch-up. So, you see a period of catch-up, capex, there's a bit of a hump, that's one of those periodic expansions, but also sitting in there is a period of renewal catch-up.

That's not a great story and not something that we're keen to see other people go down in the future and I think it's a cautionary tale when we're talking about emerging technology. The other consequences in that catch-up is not just that it's not a good smooth way to manage your spend over time, but that it has institutional consequences in terms of running down your asset management capability and having to get good at doing that again, and having to get good at running what is a sustainable capital programme for us of about $300 million a year, getting that pipeline operating

efficiently again takes a bit of time particularly when you're trying to do an expansion capex pulse at the same time.

The other thing you have is the reputational challenge of dealing with the quality of service implications of that period at the same time as your asset base is increasing and hence your charges are increasing. So, that's a history lesson.

The takeout of that is I think a couple of things. Uncertainty is not new, stop/start capex is not good. Another point there I think I would like to make is that the regulatory task is easier when you're trying to stop an over-eager investor from putting capital into their business. The regulatory task where somebody doesn't want to is much harder when you're trying to force a reluctant supplier to keep investing in the future in the face of uncertainty.

Just a regulatory version of that history lesson. You'll see when we started investing again that was under the Part F regime which was an early regulatory intervention to give us some certainty we could get our investment back. That started about ten years ago and the RCP1 period proper started about three years ago, the RCP2 period started about four weeks ago. The average investment that we make lives for more than 30 years so when we're putting a dollar in the business it takes more than 30 years to get it back, so that's not a picture of stability and certainty when we look back and thinking about a 30 year investment at the moment.

Just to summarise some of the features of our regulatory arrangements. We have a lot of things that the EDBs are talking about wanting to have. So, we have, as described already, a revenue cap, we don't have a throughput tariff, we don't have RAB indexation, we do have reasonable flexibility around moving opex/capex mix

over time, we have a pretty good balanced set of incentives around service levels, opex and capex now thought they're all new and we're still figuring out how they work really.

I'll just mention in passing as well that our opex incentives are currently broken. They worked for the first couple of years of RCP2 and then they stopped working but we think we can fix that up with a bit of more discussion, that's not really an IM review topic.

I'll just talk about how we think about incentives in Transpower in a rounded sense. One of the main incentives for us, we're on an IPP, every five years we're back in front of the Commission again talking about what our service levels are for the next control period and what level of expenditure we need.

That's got a whole lot of incentives for us, particularly it encourages us to take a long-term view and to balance our expenditure profile over time. It makes it hard to follow a glide path catch-up kind of thing again, and it also means we have to be pretty good at planning, in effect, seven years ahead. We have to have a good view of that seven year expenditure and it makes a lot of sense for us in a regime like that to be pretty transparent about what we're planning to do and what we're going to spend it on.

We have some service incentives and the service incentive I think is really about each control period we want to come back with a better understanding of what is the service we're delivering for consumers and how much of it do they want? And, again quite new, but a sensible incentive.

Expenditure, we have since four weeks ago a very balanced total costs set of expenditure incentives, again some of that's broken but we think that can be fixed.

The other incentive that I think is really important is we're acutely aware that we have a big balance sheet and when there's uncertainty, as there always is, we're not keen to make that balance sheet bigger unnecessarily.

So, incentives are not about balance sheet growth, our incentives are trying to do things that avoid unnecessarily building that balance sheet because that over the long run is our biggest risk.

In light of all of that, this is just hot of the press, our latest planning report, a standard view of what we think demand is doing right now. You'll notice it points upwards. It points upwards less slowly than GDP and about the same rate as household growth, so in terms of what's the central view from within Transpower, it's still one of net demand growth, really founded on economic growth and household population growth.

But we have been thinking about, well, how might that change in the longer run? This is from some work we've been doing on a new version of what we call transmission tomorrow. In the interests of time I'm not going to try and explain it all but I'll just say there are four different scenarios down the rows there, but the first one is a scenario, which is entirely plausible, where there is growth both in terms of amount of energy that we're conveying, and in terms of the peak at demand. So, there's a scenario there where we're needing to invest in expansion.

There's another scenario where there's an increase in headline growth but not much in terms of throughput, and then there are scenarios where both throughput and peak demand are easing or falling quite a bit.

Now, that's kind of interesting. It says, yes, there is uncertainty, things could go both ways. A couple of things to note about that from our point of

view in our context is, one, that reinforces that making big investments is always a bit scary and still is; but 2, throughput is not our service, so we have a value proposition that holds across all of those scenarios around providing people access to really low marginal cost energy, and access to a market, and all you want access, so, as much as you need and when you need it, and a reliable supply as a back-up to your other forms of energy.

The other point is that peak gigawatts is not really what drives our investment. We can have investment needs because of changing patterns of demand and generation without peak grid growth, peak demand growth.

So, issues. Rattling through it really quickly. So, for us a history lesson, really the IMs have not been around very long, just getting used to them now.

Stability is really important. We don't see that we're stopping needing to invest. In fact, we think we need to carry on maintaining our asset because it's still going to be of value into the future.

The best thing the Commission could do in that sense is anything it can do around confirming its intentions around the future treatment of the RAB and how that rolls forward over time, that would be helpful.

We actually think there's quite a bit of useful stuff to be done, just some very unglamorous housekeeping things. IMs are new, they're a bit clunky. We're learning how they work. There's quite a lot of just tidying and trimming and housekeeping. That's probably not an issue, a review thing to do, that's a business as usual.

And, technically one of the things that restricts our flexibility over time perhaps if we needed to move really quickly is just the compliance arrangements

around the quality path, but I don't think that's really a big deal. Ultimately we've got quite a lot of flexibility within our arrangements to shift between opex and capex and make trade-offs between service and expenditure within a control period. So, what do the IMs need to do? Not a lot really, we can do quite a lot. The IMs aren't stopping us from making sensible decisions.

For the electricity distribution businesses maybe there's more things of interest. I certainly agree with everyone who said that tariff structure reform is the most pressing issue. I had a quick look on the internet and saw that I could get a $300 per megawatt hour price signal for installing solar. That's a retail tariff. That's what I get paid. That's the signal, rather. That's really way too strong. The value of energy in New Zealand in the daytime is more like $50, so that doesn't seem very sensible.

Tariff reform structure is really hard, though. We know, we've just changed our tariffs a little bit recently and that was hard, and our regulator has been trying to change them more significantly for a long time without much success. So, anything that the IMs can do around assisting EDBs to restructure tariff reform is a question worth asking. Making sure that well, I guess not losing sight of the fact that in all likelihood the network is still of value well into the future and the worst thing that could happen, I agree with people who've said this, is that EDBs would stop investing right now. So, they need to keep maintaining the networks and to adapt their service.

Another thing that hasn't been mentioned too much so far is I think that change is likely to stress some of the smaller EDBs and there's a kind of capacity thing around how the smaller EDBs will deal thinking about

these things and adapting to them. So, the extent the IMs have any relevance to this, if they can make it attractive for people to look for efficiencies across firm boundaries, then that would be helpful.

And, the other thing is the CPP. So, the CPP seems like a natural way of dealing with some of this because these are regional stories, every region is going to face something different. Moving from a DPP to a CPP, including moving from a many firm DPP to a single firm CPP, those kind of options, may be scope to do something there.

Services boundary, I'm not quite sure but that's a tricky one but a question for the IM review. Thank you.

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JOHN GROOT: Well, a big thank you to all our speakers. I would like to open it up for questions. I've got a few observations of my own I was going to make but if there are questions that people want to ask of our presenters, now is your chance.

We're all suffering from information overload, stunned silence. One of the things I think that is an observation generally in terms of the emerging technology I felt we spent much of the day touching on issues to do with it, I think we've explored a lot of the themes, a lot of the issues in terms of how they affect consumers and how they affect businesses across the boundaries, and one of the things that we're really going to look for in submissions is, I'm going back to the problem definition paper, what are the problems that submitters see in terms of the IMs. And, I think a lot of the things we've talked about with tariffs and new business models and opportunities to provide additional services, are outside of the IMs to a large extent. So, I think really would encourage people to continue to think about how some of these issues relate to the IMs

because I think that's the kind of issues we're dealing with at the moment, so that's just more of a theme. Obviously submissions are due in only three weeks.

I think there's been some other issues too; I suppose some differing views in the urgency of how quickly we need to start addressing these issues. I'm not quite sure where I personally sit on it but I think in terms of clear message to the Commission in terms of how urgent these things are, and do we need to deal with them in terms of this IM review, is there an option to wait? I think the extent to which people can sharpen up on that question I think would be really useful.

I think one of the other themes, and Ross just mentioned it again as being, we've heard from some of the bigger players and I think the story about the context being different in different regions for different companies, and I think some of the smaller businesses we haven't really picked up on that and that's something we're going to have to explore a bit more, and the idea that the IMs apply to everybody may be a tricky feature.

I did actually have one question in particular I would like to pose to the panel and one of the things we thought that the forum would help us with, and submissions that come in, in a few weeks I'm sure will help us further with this, just thinking about what our process is from here on in? Partly the sharpness of the problem definition but also in terms of how is it that we should engage with stakeholders to best think about these issues and best progress these issues? And, I don't know if any of the panelists have got some thoughts about what it is that is going to be most useful in terms of progressing these issues through the IM review?

DAVID DE BOER: I had a little think about this at lunchtime because I expected the forum to be perhaps a little less presentational and a little more conversational, so I think those conversations need to take place and if they take place out of here, that's fine but there does need to be a conversational engagement process. That's my view.

ROSS PARRY: Yes, I agree with that. I think this has been a very presentational kind of forum. It's been a good step to take and there's some material I think from here, you could probably identify some workstreams and maybe have some more focused sessions to try and narrow things a little bit, and the point is I think to try and go from business impact in the emerging technologies to what does that actually mean for the IMs, if anything.

ANDRE BOTHA: I'm happy to add my bit as well. I think there's a high urgency for the Commission and lines companies, and other interested parties, to start talking on this very urgently. You know, just from a very self-centered perspective, if you look at our AMP, you know, we'll be spending more than $2 billion worth of customer's money over the next ten years in the Auckland network and the shareholder would be expecting a return on that over the next 40 years, roughly. So, these are big issues and we're running out of time a bit so we're very happy to get together and work on, if you look at, I was talking to Lynne and Mark about this as well, if you look at Diego's presentation, pick up the things on that that's really important that you have to prioritise and leave the rest for later, that's slightly outside the IM review, but I do think there is an urgency to start the dialogue.

JOHN GROOT: One of the other questions I had was the extent to which, and again interested in the panel's view and views in the room, the extent to which the current IMs

are deterring people from investing in some of these new technologies, or thinking about some of these new technologies, or alternatively they're discouraging people from investing in the traditional lines services. I think I can see some of the points that have been raised but just in terms of some of the facts on that.

I think one of the issues that was squarely put to us in terms of the problem with the IMs was to do with asset lives and in terms of depreciation, and I think Nathan made this point quite clearly in his presentation earlier today and there's an interesting question in there about intergenerational equity and the extent to which is that something that the Commission ought to be taking account? Should we be increasing the charges on current consumers because of the possibility or the risk that future consumers are going to see less value in the network and be less inclined to pay for it, and I think it is an interesting discussion point.

ROSS PARRY: I was just going to say, that makes sense if your counterfactual was not, do consumers pay now or pay later but if your counterfactual is, do consumers pay now or face a deficit in the future? That's more the question than comparing the two time profiles.

GREG HOUSTON: Yes, I think I wouldn't actually encourage a discussion about intergenerational equity as such, because there's no good answer to that. I think I would put it in terms of long-term efficiency because that's actually where it's at, it's the ability to recover costs. Obviously the more smooth that can be over time, then the greater will be your ability, so, that's efficient. But obviously the question is making judgements about that, which is very difficult.

I think just to go back to your prior question in terms of investment and are there impediments. I do think the technology question gives rise to quite

serious issues about who, when thinking about investment it's just networks and what is within our traditional view about the boundaries of a network, but a lot of these technologies are outside the boundaries of networks and they'll be made by other people whether we like it or not. And some of them, those same technologies - take, for example, the humble battery. Every household or every second household may put one in but it may also be that networks want to install them as part of their networks, so there's a piece of investment that could be outside the network made by someone else or inside the network made by a network service provider, and as soon as you confront that situation, and I think we're very close about confronting that, you've got questions, if someone outside the network can make that and I'm inside, it might not make that much difference whether it's on one side of the meter or the other. Certainly when you aggregate them all up, what does the regulatory framework have to say about the ability just to add that into your asset value? Because you risk a situation where the monopoly, if you like to invest in assets and add them to your value, could displace decisions which people which are outside to that alternatively could make.

So, I'm not saying they are pure batteries on one side of the meter or batteries on the other side of the meter are pure substitutes, they're not, they may even be compliments but they quite probably are a bit of both and I think that will present long-term challenges for the boundaries of regulation, and there are a lot of other examples of technology where that may be, beyond batteries. So, we may not have to confront that now but I think that's an important thing to be mindful of. People talk about whether the network will still be a monopoly, I think we can say at least for the

foreseeable future, a high percent of the population will have a need for it and there will be scale efficiencies for having a network, so it will have monopoly power but, as with any sort of regulated monopoly, there's always going to be questions at the boundary and I think those boundaries issues will become more complex pretty quickly. So, I would urge some attention to that question.

JOHN GROOT: Unless there are any other questions or any questions at all from the floor I'd like you to join me in thanking the presenters, I think they've done an excellent job. (Applause).

KESTON RUXTON: Thank you, John. We actually still have two more short sessions for the rest of the day. The next topic on our agenda is complexity and compliance costs, we've obviously, Grant, cut a little bit into your time on that. I think we will run over a few minutes at the end. We can run over ten minutes at the end if we need to but I'm going to hand over to Grant Weston who is a Chief Advisor at the Commerce Commission to lead the session on complexity and compliance costs.

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GRANT WESTON: Welcome to this session. As Keston said, I'm Grant Weston, I'm a member of the IM review team. My working background at the Commerce Commission is that I've been a member of the team that's been dealing with the regulation of Transpower. I was a member of the team that was involved with the CPP for Orion and I've got various other functions not related to energy at the Commerce Commission. So, I've seen some of the entities and I've had pretty good exposure to the IMs since 2010 when I first joined the Commission.

This session is to give an opportunity to discuss any necessary IM changes or other actions that could significantly reduce unwarranted complexity and

compliance costs, and we'll come on to this issue about warranted and unwarranted a little bit later.

In the session I'll just make some introductory comments, then I'll pass over to Lynne Taylor from PWC who's here on behalf of the ENA, and then she'll be followed by Jeremy Cain from Transpower who will give I think more of a transmission perspective.

We're expecting that the same issues that we talk about in this session will also apply to the gas industry so we're not trying to cover that as well. We're happy to hear any alternative comments or submissions in that respect but we're not looking to separately cover those issues, we're primarily focusing on electricity in this session. There are also issues for airports and airports is a subject for discussion tomorrow, so the guys that are running the session tomorrow will cover these topics for airports. So, hopefully I've just managed to narrow this down quite successfully.

So, the purpose of the topic is really to look at the problem definition paper, and one of the three factors that we proposed in the problem definition paper in considering IM changes is whether it's possible to significantly reduce complexity or compliance costs of the IMs without detrimentally affecting the Part 4 purpose. We think a key question that we would like to ask submitters to consider is when is complexity and the related compliance costs warranted and when is it not warranted?

We first need to consider some context, though, for this issue. There is some overlap in this issue between the IMs and ID and the thing to remember, though, is that in this review process we're really primarily focusing on the IMs.

Submissions in response to the open letter in response to our open letter earlier in the year asked for the IMs to be reviewed for unwarranted complexity and compliance costs, but really didn't give us much direction at all in terms of what that really meant. It was really just pitched up as a concept rather than specific details, but we did manage to identify in there a number of points and we grouped them into four significant categories that we thought should be possibly considered in terms of the IM review, and these were the related party transactions, regulatory taxation, cost allocation and cost definitions, and I guess you'll appreciate from that previous session that what Greg was really talking about when he talked about boundary issues I believe is really around the cost allocation and related party transactions. So, I think they could be relatively hot topics in terms of the IM review depending on what sort of ideas come forward, especially in respect of emerging technologies.

Our aim is for submitters to refine their thoughts on matters that should be considered when they assess unwarranted complexity and compliance costs. For example consider, are the issues that we've identified in those four areas adequately described? Are there any other matters that should be considered when assessing that issue? What alternative approaches might be taken or considered? And, how can they meet the purpose of the IMs?

So, we don't necessarily have a fixed mind around this that it's necessarily an amendment to the IMs that we're talking about. We do have a slightly broader perspective on this and we're prepared to at least look at other ways of dealing with complexity and compliance costs.

We want to understand whether there are other specific areas of the IMs where there might be a problem with the same issue, so we're not restricted solely to those four areas that we identified in the problem definition paper, and we want to understand whether those four issues do have the backing of interested persons, suppliers, in order for us to go forward and consider them in a bit more detail.

One thing I think you have to acknowledge is that some complexity and compliance costs will be unavoidable, and that was considered at the time that the IMs were put in place, and at the time that the IMs were first put in place it was also considered that the IMs would prove themselves through their track record, through practical application, and that in the course of that practical application things will come up that we need to consider as part of this review. In working out whether the regime is being effective we need to look at the purpose of the specific requirements in their current form and consider whether an alternative form would be more effective in meeting that purpose.

One of the things we need to do from a practical point of view, and I think Ross talked about this in the previous session, we need to consider whether the complexity and the costs of actually changing any of these requirements would outweigh the benefits of making such a change. So, it's not just the existing complexity, we need to consider the complexity of any possible amendments or changes along the way. We recognise that regulated suppliers have invested in systems and processes to collect information and we have done that as well over the course of the period since the IMs first came into play. So, we do need to be careful that we don't undermine that investment and

create further complexity and change the existing balance of compliance costs.

One of the things that we're considering at the moment is the impact on time series of information and our information disclosure. Any fundamental changes in the IMs to try and address these issues could upset the pattern of information that we have and therefore impacts the analysis that we can do with that information.

One thing I would like to do if we do have time at the end of the session in terms of pitching out some questions to you, is to really ask you to consider, are there other factors that we need to take into account when weighing up this issue.

So, that's by way of introduction. I would like to turn over to Lynne Taylor now to give her perspective on the issues.

LYNNE TAYLOR: Hello everyone, a little bit of a tough topic isn't it for the last topic of the day. Anyway, we'll try and be reasonably brief.

So, I think just by way of context, so what we're talking about here is a 230 plus page rule book and this is my copy which is two-up double-sided which some people might say quite sadly does sit on my desk and I do refer to it reasonably frequently, but I think it's important to remember that there will inherently be complexity in the rules because all of the topics we've been discussing today are hard and in order to accommodate the ultimate policy decision and the unenviable task of the Commission is to reflect those in a set of written rules that can be understood, interpreted and applied by stakeholders and through into related determinations.

So, I think we just need to remember that that is the challenge before us and it is very timely I think to

look back at this after five or so years with the current IMs and just take stock, cost and complexity.

So, I am here on behalf of the Energy Networks Association which does represent the 29 electricity distribution businesses, some of whom also have gas interests. And, I think it's worth noting that the ENA has been very active in thinking about the rule book and putting forward suggestions to the Commission in the range of submissions and through various forums over the past few years about potential issues in the rule book and how they might be improved, so I just wanted to highlight to you the submissions that have been made over the past year or so which do go straight to the heart of the cost and complexity of the IMs and the related determinations. So, a lot of what I'm going to go through quite briefly here is already on the record from an ENA perspective.

So, I think it's fair, as I've suggested, to accept that some complexity is unavoidable in the IMs. However, it is, I think, in everybody's interests to minimise the cost of compliance and in doing that reducing complexity is obviously a desirable outcome.

Obviously the IM mechanisms are intended to implement a policy intent but I think there are opportunities to potentially improve them in order to make the intent clearer, less ambiguous and effectively easier to comply with.

It's also important to recognise that the understanding of input methodologies improves over time and some of the other related determinations that have come since the IMs were first put in place have helped with this. I'm thinking about DPP determinations and also information disclosure determinations.

On that case, though, I think it is important to caution against unnecessary change because businesses

develop understandings of IMs in the way that they're applied, and change can potentially add cost and complexity, in addition to removing it one would hope.

And, the additional guidance that the Commission has made available since the original IMs were published has certainly assisted businesses apply them and these have included workshops, worked examples and the determination, for example the information determination disclosure schedules themselves.

So, in terms of the IM complexity topic I think that the focus should be really trying to remove any residual ambiguity that exists in the existing IMs, and to avoid ambiguity in any of the changes that are made to the IMs as a result of the review process. Think about whether or not there are unintended consequences that have come out of the IMs and address those, and also think about whether or not the complexity in the methodology actually impedes achievement of the policy intent. And, one example of that might be efficiency incentives, opex and capex efficiency incentives. If businesses don't understand the mechanism very well, then that might hinder the achievement of the objective in the first place in terms of encouraging incentives.

Grant referred to some topics that were raised in the problem definition paper, there were four different areas which had been highlighted by the Commission for potential consideration, and I thought it might be useful just to run you briefly through those four topics today because the ENA has thought about these and obviously its members have had to comply with the existing rules, and so there's a little bit of experience that ENA members have with these particular four topics which I think is relevant to this review.

The first one is cost allocation. The current method I think has a nice balance between prescription

and flexibility and that was really important, and that was fleshed out originally when the IMs were put in place. So, the method has very clear principles but has sufficient flexibility in the actual mechanics of the method to accommodate different business models and different cost reporting systems. So, I think that's a very positive outcome from the current methodology.

Some mechanisms that exist in that methodology have not been widely used to date, the optional variation to the accounting based allocation method, it's a long acronym I know, is one of those but I think the policy intent is still valid today. This mechanism was intended not to disincentivise investment in new start-up unregulated services through a sort of standard accounting based cost allocation model, and I think that's a mechanism that might become more valid and more useful as we go through and deal with some of these other issues that we've been talking about today.

Treatment of taxation. You'll understand, those of you who are close to the electricity distribution methodologies, that there's a reasonably complex regulatory taxation methodology which has a deferred tax element to it which I will not explain to you today. I think the thing is it is reasonably impenetrable when you try and read it in words, however, it has now been applied and businesses now better understand it. So, I don't think that there's a strong driver to change the underlying mechanism, although there is I think some ambiguity that has emerged over the past few years around certain treatment under different circumstances and one of them that comes to mind is how you treat transactions with businesses which have either no regulatory tax methodology or a different regulatory tax methodology, and that's not clear in the way they're presently drafted.

Cost definitions was another issue that was raised in the problem definition paper and I think that was framed mainly around opex and capex and recoverable costs, but the underlying theme in this was whether or not it's appropriate to have alignment with GAAP rules in the way in which some of the IMs are framed, and I think it's fair to say that the more alignment with GAAP where possible will help manage compliance costs and reduce complexity, particularly in terms of the systems that businesses need to maintain and the way that information is collated and reported.

So, I think fundamentally unless there's a significant policy difference to how GAAP records certain things, then I think divergences from GAAP should be avoided, and I think there are elements that exist within the IMs where that could perhaps be reconsidered, particularly in areas that are not very material, in addition to the cost components we've also identified components in the asset valuation IM where that cross-check could be rerun I think.

Related party transactions was the fourth topic that was highlighted in the problem definition paper. So, related party transactions can be capex, opex or revenue transactions. The capex rules sit in the input methodologies as part of the asset valuation methodology. The opex and revenue rules sit in information disclosure, not in the IMs, although those rules do feed through into the CPP IM which covers both opex and capex. So, there's immediately some complexity in terms of where it all sits, and some of the challenges therefore are to ensure that there's consistent approaches across those different parts of the regime.

So, I think that there are opportunities to improve these rules and remove some inconsistencies between the

various parts. The way in which the criteria operate or the related party transaction rules operate, there's a set of criteria that are available to determine how transactions between related parties and regulated services are valued, either opex, capex, etc. The way in which we now have more experience of applying various criteria under various different models, and it's emerged that some models are not treated the same as others under certain criteria, and particularly there appears to be an emerging issue around shared service models where components of cost are not able to be recovered under certain models, and I think that's not consistent with the Part 4 purpose, it's not consistent with ways in which businesses might innovate and achieve efficiencies if there are barriers to shared service models.

So, I think it is appropriate that these rules are reconsidered, and one of the components of those rules that's sort of driven this outcome is a linkage between the related party rules and the cost allocation IM where one component of costs has been brought into the related party rules but the other component of cost, the not directly attributable cost, has been left aside, so I think it's appropriate just to go back and reconsider that.

There are other sort of things that can also be looked at and I've just listed a few there regarding the way the third party test, which is an equivalence test, the way that works in practice; the way director certification applies in terms of when directors are able to certify arms-length transaction rules; and finally, I know we're dealing more with CPP tomorrow but it's actually not possible to forecast related party transactions using these rules so we need to think of a

better way of dealing with related party transactions on a forecast basis.

So, finally, just to wrap up, throughout this review process in terms of cost and complexity I think it's appropriate to consider issues raised more broadly across ID and through various determinations in the IMs, they are relevant, they all come together in a package. I think there's an opportunity to consider how the IMs themselves, the 250 page book, is presented and different ways of presenting. Maybe there's more use of formula than there currently is, maybe there's hyperlinks through definitions, maybe there's more worked examples, maybe there's some aspects that could be pushed maybe into appendices and that sort of thing. I think it is appropriate to consider that at this time.

Workshops and working groups I think are a really important and good way of getting into this level of detail, robust Q and A at the draft determination stage, I think we're increasingly getting more time and more effort put into the actual drafting but that's really critical in terms of ensuring that the final outcome is as high quality as possible. And, as I said, all the linkages back into the other determinations are pretty critical as well. Thank you.

GRANT WESTON: Thanks, Lynne. I just want to say, Lynne obviously appreciates she has to carry around the 250 pages but there are actually five versions of the 250 pages and we deal with each of the five versions. So, I'll now ask Jeremy Cain from Transpower to talk about his version of the 250 pages.

JEREMY CAIN: Thanks, Grant. I know for everyone now it must feel like you're coming crashing down to earth after a pretty open blue skies discussion for most of the day, but I think a lot of this stuff is actually really important in terms of keeping the wheels turning on the

rules as they are now and making sure these things work as efficiently as possible is worth the investment.

I think as well as a transmission perspective I come to this as someone who came into Transpower in the electricity sector in 2012, picked up freshly minted capex IM, sat down and read it, and then went onto the IPP and the rest of the IM. That was certainly a challenging experience and gave me an appreciation for both the complexity of the regime that we're trying to implement here but also that there are opportunities for improvement even at that stage.

So, just in terms of a bit of context, this is going back to when the IMs were produced. Not only did they sort of replicate a lot of the instruments that existed in the previous framework but they introduced a raft of new incentive mechanisms, and some other mechanisms which were not necessarily at cutting edge, thinking globally, but were quite new to New Zealand.

I think it's really important to recognise that and that it is very difficult to get this stuff right first off. The Commission developed this stuff in a very short space of time, they were put under a lot of pressure and they often are, and that in the meantime both the Commission and ourselves as suppliers, and perhaps consumers as well, have learned a lot and things have moved on.

So, I guess what that says is as we approach the first major review of the IMs, things have been reviewed a number of times in isolation, there really are some reasonable opportunities to improve. I don't think I'm suggesting a wholesale re-write but there are certainly opportunities to simplify and the effort should be made to do that where it can improve effectiveness or reduce cost, and sort of relatedly, to identify and remove

unnecessary compliance activity. Those things sometimes overlap but not always.

And, I think the point has been made by a few people already that what you've got here is a series of interrelated regulatory instruments that all fit together. You've got the IMs, information disclosure, the IPP, or the DPP or CPP depending on where you sit in the system, all fitting together and to actually understand how the regulations work you need to understand how all of those different things, how they fit together, and often find yourself looking across them. So, just to demonstrate the complexity point.

So, there's an opportunity for change and I think what today's made really clear to me, if it wasn't already pretty clear already, is that there's also a really big imperative to change, and that applies both to the businesses in terms of the way we plan, we think, how we're looking into the future, how we're managing risk, all those sorts of things, but also to the Commission and to other regulators in the sector, that we need to try quite hard to improve and do things better, and sometimes that might mean taking out a piece of regulation, sometimes it might mean trimming it back or whatever, but just what we've always done isn't necessarily the right answer going forward.

This is not tongue in cheek at all, I think the Commission has done absolutely the right thing, to ask suppliers to make the case around complexity and compliance costs and where things should change, but I think when we look at it as a supplier, and actually I'm a former regulator myself so I've got a foot in each camp, often it's the regulator, the Commission in this case or the Electricity Authority on the other side, or whoever it may be, who is actually determining the scope of a lot of regulation. They're actually saying, what

do we want to know in the case of information disclosure specifying a whole bunch of stuff that when you look at it if our side, sometimes we say really, is that really that useful, and we can't answer the question about whether that's actually unnecessary compliance activity, that's a question for the regulator. And, I think one of the messages I give back to the Commission team is to, as you're going through this process, ask yourselves some searching questions about whether all this stuff is really necessary or whether if there are areas, even if it's at the margin, where you can simplify or cut back the odd bit of regulation? And, I think that's not to give you a hard time but when we look at the Electricity Code, talk to the Electricity Authority, there's quite a bit of stuff in there that's still a legacy from when the Electricity Authority improved Transpower's major investments and you think perhaps they're pretty easy to get rid of but it's actually pretty tricky, it's quite hard to actually get the impetus for change. So, seize the opportunity.

And this is, as one of the presenters last week said, an insight into the soul of a presenter, the power point style, and perhaps that's true here but I do think this is a simple but effective illustration of a concept, and I'm not the first person to say this, and when I was doing the research for this you didn't have to look too far back to find some quite choice quotes from the likes of Steve Jobs who has very strong views about this, or had very strong views about this; going back a bit further, Albert Einstein had very strong views about doing things as simply as possible, simpler; and, Leonardo DaVinci going back even further. So, you know, nothing too controversial there.

But when asked to present on this, and thinking about what should you be aspiring to, it seemed pretty

clear that doing regulation as simply as possible, no, simpler going to Grant's point, and a point made by a number of other people, that it's an inherently complex system, is a good one, but also recognising that this stuff is hard and anyone who has written draft regulations or who's written long documents, or documents, will know that it's much easier to do long than short and elegant, or in this case cumbersome and complex, than elegant and effective. That's not to say that the IMs are all cumbersome and complex but just to illustrate the point, and also recognising that for all the will in the world regulation does get more complex over time.

People have bright ideas, this is not just the regulators, this is suppliers, in fact a lot of the complexity in our regulatory regime which is reasonably bespoke has come out of Transpower, so we need to exercise discipline here as well, we need to think quite carefully about this stuff before we're asking the Commission to do things.

The other point is that although the sort of housekeeping stuff that we're talking about here, and investing the time when you're drafting the rules to make sure that they are as clear and straightforward as possible and you've thought through all the linkages with the related provisions in other instruments is really critical, is hard and it's often not the top priority when you're the Commission, you've got six determinations to make in November before price control reset year, it's not an easy task and I think one of the messages I would like people to take away from this is you do need to invest as much - not as much in resource terms, you do need to invest more in this side of the equation than in the policy debate than we currently do. And, again, that's not a Commission specific point,

that's a regulator specific point, and certainly I've been in that space myself.

So, what all that means is it's really important to have a view as to the end game when you're contemplating new regulation, and that's not to say you try to, you know where this is all going to end up in 50 years' time, but saying what are we really trying to achieve here, and how does this help us get there? And, the Commission is talking about the section 52A objectives, and so on, and that's really great, I think every decision you make should be linking back to that, and saying how does this help us get there and is it really helping us get there over the longer term, or is just something which might be useful for the shorter term but is actually just adding cost and complexity? And, a lot of this stuff is bread and butter stuff so I won't go through that but it still is important nevertheless.

I sort of stumbled across this when I was googling as well, not sure who owns the rights to this picture but I thought it was a sort of metaphor for compliance costs, you don't want to overdo this, and we recognise that Transpower are natural monopolies, as are a lot of the organisations represented, and for the foreseeable future until some of these scenarios play out anyway, we are going to remain that way, we are going to incur compliance costs and we are going to live in a complex world. I think the concern for me is where those compliance costs aren't justified they can impose quite significant costs on consumers ultimately. They're on us as suppliers but at the end of the day the way these regimes work, those costs get passed through to consumers. And, I think the point here is often what you may see is the tip of the iceberg in terms of there's a regulatory analyst perform their compliance function, whatever it may be, but often these things

actually pervade businesses and actually change the way the decisions are made and practices operate, and that has a, there's a short run in efficiency there in terms of administrative hassle, but in the long run it actually can be changing the direction of the business not necessarily in a positive way. So, you can have really significant indirect compliance costs.

So, in terms of issues for Transpower I won't dwell too much on this. I think for the four issues identified in the problem definition paper these aren't particularly big issues for us, which I think you'll be pleased to hear, and that's probably to do with the nature of who we are as a business and what our lines of business are.

Key things for us are departures from normal business practices and accounting standards and the like, impose lots of costs. We've had some experience with it over RCP1. The Commission has made some good progress in terms of changing that but there are still some issues.

The other point is there's a trend away from mechanistic mechanisms and incentives, and the like, towards ex post administrative judgements, and from our perspective that makes our life really difficult, it makes it difficult for us to give advice to our business in terms of what they should do, how they should make capex/opex trade-offs, and the like, and it also just creates a lot of angst that's hard to quantify but which can be quite debilitating, I guess, in a sense, and I think, just as Alison mentioned this morning, the Commission has proposed to introduce a decision framework which is something that we encourage the Commission to do. I think it's a really good idea and we'd engage with that and we'd be happy to share our thoughts through the consultation.

These are some specific issues we've talked about that we've identified. These aren't necessarily all pure complexity and compliance costs, some of these are actually policy design issues and instrument sort of effectiveness issues. None of these will be a surprise to the Commission, we've often got me or people at Transpower giving them a hard time about this stuff but they are things we would like to see addressed through the IM review. Change is hard, it kind of reflects, having been a regulator for probably half my career. You know, the irony of not being able to get much traction talking to the Commission and the EA now is quite rich for me because I've been on the other side and probably not all that sympathetic to some of these things, so I understand that.

Takeaways. So, the first thing is, to take a line from Bob Dylan, the times are changing, supplies need to change, we need to change the way we operate and manage our businesses - time's up so I'll finish up - but equally the regulatory models need to evolve as well and the first part of that is actually taking out things that aren't really justified or simplifying wherever possible. This will all be available so, I'll wrap up there. I don't know if we've got time for questions? Thank you.

GRANT WESTON: Keston has just told me we've got five minutes. What I would like to do is just make a comment in response to Jeremy's comment working both sides of the fence, I've done that as well. I spent most of my working life before I joined the Commission working at PWC on the other side of regulation, other side of tax regulation in that case, so I do have a good appreciation of the practicalities of working with complex regimes.

If you've worked with a thousand clauses in the Income Tax Act you can deal with anything, right?

So really what I want to do is encourage submissions. I'm really looking for good quality submissions on this topic. I want in response to the problem definition paper, and as was said in the last session, the form of discussion that goes beyond that stage will obviously be decided after we look at the submissions and the content of that as well, whether the four issues that have been raised all remain priority issues.

But I do want to pitch out a bunch of questions for you to consider and I won't pose them to the audience because what I'll do is just run through these questions and leave you to consider them if you're considering putting in a submission on this issue, and then what I'll do for a couple of minutes is just open the floor up for any general observations on the issue if anyone wants to make any comments.

But what we need to understand is whether the issue is actually a significant one for you or whether underneath the issue there's a whole series of lesser points that you want to pitch forward? And, let me assure you, if you do want to pitch forward those lesser points we're prepared to receive them and consider them as part of the overall IM review, and we've got things we're considering in terms of how we'll deal with those, in other words the things outside of the major issues identified in the problem definition paper.

Are we correct in identifying those four issues? How do people feel about the four issues? Are there other things that we've missed in identifying those four issues as being causes of complexity and compliance costs?

The question I raised earlier, for the gas sector, are these the same issues or are there other issues that the gas sector wants to raise in respect of the IMs, in respect of complexity and compliance costs?

How do you think we should consider these issues when we're assessing the issue of whether we have unwarranted complexity and compliance costs? Because, as the other two speakers have agreed, there is inevitably some level of complexity and compliance costs in the regime.

And lastly, as I said at the beginning, is there an approach to easier or more workable alternatives than making changes to the IMs to solve the issues, and Jeremy mentioned a couple of those at the end of his presentation and I'm more than happy to receive any sort of suggestions on that, and the sorts of things that we discussed in the preliminary discussion with Jeremy and Ross before this session was things like better sign-posting in the IMs or better guidance notes around the IMs, or just other things that don't go necessarily to the technical wording of the IMs and change the current balance of the IMs.

So, I'll leave it at that and just open it up to the floor, and just if anyone has got anything they want to say on the issue at this stage? Right, looks like everyone is happy to move on, Keston.

I'd just like to thank Lynne and Jeremy for their contribution this afternoon.

KRISTINA COOPER: Kristina Cooper from the Board of Airline Representatives. So, I'm on the third opposite side of using the outcomes as a user to try and understand them, and I've just noticed over the last few years that I think there are a number of areas where there could actually be costless improvements to improve the usability for users. So, I just ask you to keep that in

your mind as you go through this process, that it's not just complexity and compliance but also usability.

And one example from the airport sector is valuation reports, you know, they're a hundred pages long and they're disclosed but there's no summary. So, in terms of putting the information out there for sort of people who are less informed, there's no one place where you can send them for a one-stop shop of information, yet the cost of, say, having a page in the disclosures would be zilch. So, I just put that out there.

GRANT WESTON: Yes, I mean the only comment I can make to that really is that the Commission is looking at the way the Commission puts out its own summaries of key analyses and that sort of thing, so that is something that's sort of front of mind for us anyway and it's something we could consider in terms of how we frame up the regulation, the requirements under the regulations. Yes, thank you.

Thank you Lynne and Jeremy again for their contributions and just ask you to show your appreciation for their contribution. (Applause).

KESTON RUXTON: Can I just thank Grant for running that session, it's very tricky always to run the graveyard session.

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KESTON RUXTON: The final thing we had scheduled for today was to ask those people we had up at the beginning of the day who are still around and still would like to come up, and just to take a few minutes out just to get from them their perspectives on the day and some of the conversations that have been had. So, I'm looking at Ralph, I'm looking also Richard Hale, I think there is someone from Transpower who is going to come up, can you come back and to give your perspectives.

So, as I've listened to the sessions today I think a number of themes have come out and I think I can pre-empt everyone by talking about some of the things that I've observed. I think as we've run through the programme we've discovered it's been great to have so many presenters presenting, and I have observed the amount of effort and time people have put into their presentations. I think this has led to it being quite a presentation heavy day but from my perspective hopefully people have felt that they've all learned something. I think it was a great takeout from the emerging technology session, from the panel members who suggested that we do need to think about having more of an interactive session or follow-up sessions on that topic.

In terms for me, the take-outs for me is that it's clear it is still uncertain in terms of what's going to happen in the environment, and I think we have diverging views to some extent but I think the agreement really came from the start of the day and right through the day, that the situation is uncertain, but I think what I'm hearing is that people are asking and saying that certainty in terms of regulation, even in an uncertain environment, is even more important, and that is the challenge to the Commission.

I think we've had a lot of talk touching on the issue of tariffs. I would say about that, you know, we're all clear this is not within the remit of the Commerce Commission but my takeout is that we need to look at our changes to the input methodologies and think about how they could impact tariffs. We have had a lot of comments and I think particularly from Ralph about, ultimately about the question about tariffs will need to be answered and at that point we'll need to look at the socio-economic impacts of these things, and I guess for us those are a bigger question than the IMs but I think

the point made about form of control and other topics was that we still need to look at the impact of the input methodologies on tariffs.

We very much heard from EDBs that incentives to invest in an uncertain environment where perhaps the choices we make around investments will differ from what we've done in the past still become important. To quote, I think it was Ryno who said, the most expensive electricity is no electricity, and I love that quote, so great. Before I talk any more I would like to hand over, we'll do the same thing we did this morning. Can we say three minutes each on any perspectives you have had on the conversation today and we start with Richard.

RICHARD FLETCHER: Okay, thanks. I won't take three minutes, don't worry. Look, I think the key point for me, I think just reflecting back the three key priority areas we talked about, I talked about earlier, from Powerco's perspective, certainty, the WACC alignment which is tomorrow, and the form of control still remain valid in my mind. But I think it picks up on Ralph's point.

We've been talking about an uncertain future and there's different views on that, as you say Keston, but whatever scenario you look at, the future is predicated on consumers taking the lead on it, and I'm not just playing to the gallery, I think we're referencing everything we're doing against long-term interests of consumers but we've got very little consumer representation in this group, and I guess the challenge for us as we go through the next 12 months is how we engage with representative consumer bodies, and I think ENA, the Electricity Network Association have got a role to play in that in trying to get some kind of consumer input into the process. So, that's the first point and that wasn't one of my main points earlier but it probably will be now.

Secondly, I quite like the Smart Grid Forum summary and I think it is, and I guess personally I'm leading more towards to, we've still quite a bit more modelling to do to understand what the triggers are. Whether we need to do things in the next 12 months for this IM review, I've still got an open mind. I would probably say we do need to get together immediately and start to work on this and through this, collaborative mechanisms that we've talked through earlier.

I've been an advocate in the past for having certainty and having seven year reviews and not having interim reviews. I think for this particular issue, if we believe that we couldn't get the rules changed for the 2016 deadline, there may be merit in considering some transitional IM review half-way through the process in 2021, or something like that, once we've done that modelling and that planning.

The only final thing I would say, I was quite taken by Megan's presentation. I'm probably leaning more towards revenue path but I kind of swing both ways, but you did present quite a compelling set of benefits and I think we probably just need to look at the counterfactual to that in the same amount of detail, but I think there's a lot to work on there.

And, finally Greg's point of view, I think tariffs is kind of key to underpin all this and we're fortunate the EA is going to be looking at this, this year as well, so that's good.

KESTON RUXTON: Thank you, Richard.

GREG SKELTON: Yes, a fascinating day and I think the takeaways for me are really that it's quite surprising that the regulator and the regulated businesses find themselves in the same position that we both are running businesses that are very much rules based and it's going to be very hard to get the benefit from that when we've

got uncertainty facing us. So, one way to keep the rules up-to-date is to keep re-writing that so the ink never dries - that's not positive, that will never happen. The other way to do it is actually to have a set of rules that maybe shift a wee bit to provide an element of flexibility, and that's going to be challenging, and I think it's the flexibility part that we need to work through as well as the fixed rule component, so that's interesting.

I took some solace that we may get there with some incremental changes. I know that both Andre and Glenn, two lines companies, large operators, have different views about the future, and I think that's fascinating but I did take some solace that we do face one constant and that is change but we can be guaranteed that this will be coming with a bit of uncertainty, so I thought that was a good thing to reflect on.

The ideas that Greg Houston brought I thought was interesting. Richard has talked about tariffs, that's important. We must get that right otherwise we're trying to probably build our future business foundations on sand. So, I think that's something we need to be careful of. Greg, I'll buy that battery for you if you take on two more teenagers.

Transpower also gave a good summary I think of the history, and I think they're sort of lessons that while you keep looking towards the future and the uncertainty, it's all going to change, I think we still have to look backwards at some time and say hang on, if we do these decisions based on what's happened, then Transpower provides a very good example of the problems of actually taking one approach when it may not be the right one going forward. And, clearly there's a lot of work to do around the complexity elements, and I think the risk

allocation stuff went well, and I certainly agree that Megan did a very good paper.

NATHAN STRONG: Thank you, I agree with the comments that have just been made by the two previous speakers and so I just really restrict my comments to just a few observations. Firstly, in terms of, Keston, you mentioned before there's been a theme throughout the day about talking about the importance of tariffs and getting the price signals right, but the actual setting of tariffs sits outside the Commission's remit which I agree with but I think it is really important to recognise one of the points that I've made earlier in the day, which is there is a current barrier in terms of the form of control or no incentive mechanisms that will promote or de-risk a transition for businesses moving from one set of tariff structures to a different set and not being able to manage that sort of behaviour or response. So, I think that's just important to reiterate.

I thought one of the things that strikes me too throughout the day is actually at a high level I think there's a really strong level of agreement amongst all the speakers about what the key issues are around emerging technologies, yes tariffs, yes uncertainty, and then we need to look at this issue of is there some sort of tilting that needs to go on in terms of cash flow recoveries.

So, I think at a high level there's good understanding of what the issues are and the challenge is how do we kind of get to that next level of modelling to really unpick the issues and work out, as Greg said, how do we maximise efficiency over time? That's sort of the central question.

KESTON RUXTON: I would agree. I think there was divergence of views in that session but my interpretation of Andre,

what he said and what Glenn was saying is that they're not mutually exclusive, they're just different facets of the same problem, which I think it's coming up clearly that most people are observing. Jeremy?

JEREMY CAIN: First of all I really agree with that, people think about problems in different ways, but I don't think they were necessarily opposing views but you could have taken that impression from the first pass. I think that one thing I took away from today is we all agreed the sector is likely to look very different in ten years' time so I don't think that's contested, but we all probably agree we don't know what it's going to look like and what the best business model is going to be for the parties in question.

And, another takeaway for me is it is likely there are going to be some tweaks to the IMs that can help position the firms in question better for the future, in particular to deal with uncertainty. At the end of the day there's only so much these regulations can do.

Similarly, there are some things that can be done in the IMs that will help reduce cost and complexity and that's basically an efficiency driver that makes us more efficient, lower costs makes us more efficient as a sector.

However, I think the other big takeaway, and perhaps my view is a bit skewed on this because it's aligned with my own prior thinking, is that the real issue here, the bigger regulatory issue here is not so much the IMs, it's pricing, tariff design, not so much retail tariffs, I think there's a big issue for distribution. I think if you get distribution pricing right, that will flow through the process of competition into retail prices and fast forward ten years, get those tariffs right, we'll have a really exciting competitive energy sector where we're seeing really efficient

choices being made by consumers in the sector where we're getting the most out of the resources and the technologies available, rather than a less rosy scenario where we've got building networks for peaks, bigger peaks but less utility through the networks, and higher costs, lots of loss for the country.

The final point I would say is that I found this forum really useful. I think it's a really good initiative from the Commission. I think that's good thing and it should be repeated. Sitting next to a colleague from Australia who said, in the history of all the work they've done there over the last few years they haven't had an exercise like this, so great.

The other point is we've spent three years debating transmission pricing, probably longer if you go back before my time, and we're about to get into a pretty substantial discussion around distribution pricing. I would encourage the EA, I know some of my friends from the EA are here, to follow the Commission's lead and have a discussion like this before it dives into particular solutions.

DAVID FREEMAN-GREENE: I thought this was a really good start to the conversation and hopefully the dialogue around this and an interactive dialogue will continue to develop. As I mentioned this morning, we're really keen for this IM review process to be thorough and we would encourage further workshops and consultation to get that dialogue flowing because that would be really useful to flush out views and enable us to form our views on the back of that around the consequences and we can pare down whether a revenue cap and what sort of revenue cap is a really good idea, and help us submit and make our submissions richer in that.

When we're talking about different views of the future around emerging technology, I've just put it

between Glenn and Andre, I found it quite an interesting perspective because I think everybody agrees they don't know what the future is, so, and I think what I'm starting to see is different strategies evolve over the top of that uncertainty. So, Vector has taken one stance which is really interesting and informative, and others may like to take another stance and become more of a network enabler as was discussed earlier in some of the presentations so you stick closer to your core. So, there are some interesting strategic overviews on what approach you take in the face of the uncertainty that comes down the pipe.

And, just a note on Glenn's presentation as well. It's not so much you're choosing that strategic objective to be closer to the core because you don't want to get close to the customer or you don't understand the scenarios around emerging technologies. Quite the contrary, you have to do that. There are "no regret" actions you've taken in that regard as well and that's what we're doing to get closer to the customer and also understand what those scenarios are so we can position ourselves well for the future. That's all from me, really.

RALPH MATTHES: I just want to go over the three points that I raised this morning. First of all, cost of capital is too high, the discussion today wasn't on that topic, topic number 5 in the Commission's paper, but it remains a top issue for us.

I won't go into any detail about Fischer Black's discounting rule as an alternative to cross-check capem SBLM, but if anybody wants to email me I'll send you the details.

Let's get onto the interesting stuff. Emerging technologies. This was a fantastic session, really enjoyed it, and I think Greg Houston, you were the one

who said, well, what about cost allocation and service definition IMs? I think you were the one that led us down that way and I think there's something in that in terms of dealing with the emerging technologies in the short term.

Similarly, when I raised the question about a whole of system approach and good discussion today about tariffs and pricing. Look, we're absolutely realistic of where we're at. We have to deal with the IMs, another regulator deals with pricing. But I'm an optimist, I think there is time to align the transmission pricing methodology at EDB pricing reviews by the Authority over the next 18 months with what the Commission are doing.

KESTON REXTON: Thank you, Ralph. And, our final speaker, Richard.

RICHARD HALE: I took heart from the comments that the process should be thorough and I found that useful. I enjoyed Megan's presentation because I think that gave me a framework for understanding some of the risks, albeit that we have a revenue cap but I think the process has kind of lacked that kind of discussion, so I think it's very useful to have that framework.

The only other thing I would say is I think it is important that having had that, that we understand the full nature of what that revenue cap means for suppliers in the gas sector so that we can either take comfort or understand fully the risks that both sides of the transaction carries, because at this stage we're not particularly happy about the way those risks are allocated.

KESTON RUXTON: Thank you. Can I thank again our presenters. We've put them on the spot twice today and they've all stood up to it, so thank you very much. (Applause).

I think we've had wide ranging conversations today and a point made by Ralph earlier in the day about the process of defining problems being not such a linear one and involving potentially identifying alternatives and looking at solutions whilst you are defining the problems.

I guess for those people who will not be attending tomorrow, the next task, really, is to cast your mind towards your submissions, and from our perspective we talked about a lot of issues and a lot of things today. For us, any thoughts that you can put into that question which we originally raised this morning which was, what problems are raised by these issues which could be dealt with in terms of a change or a review of the IMs? I guess for us that would be something that we really look to submissions to get more of your feedback from.

For those people attending tomorrow we will be focusing on DPP to CPP and the inter-relationship of those price-quality paths. We'll have more sessions on CPP and then the second half of the day will be dedicated to airport topics. So, we'll say 9 o'clock for 9.10 and in the interim you're all invited next door for some drinks. So, thank you very much and good evening.

(Adjournment taken at 5.24 p.m.)

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30 JULY 2015

[9.10 a.m.]

KESTON RUXTON: Good morning, and welcome to day two of the Input Methodologies Review Forum. I would like to welcome back all the people that attended yesterday's sessions and also welcome anyone who's here this morning who didn't attend yesterday. For that reason I've been asked to also go back through the housekeeping details here at Te Papa. I just want to remind everyone that in case of a fire evacuation, you should get out of the building, and that Te Papa hosts will ask us to leave by the main stairwell and that there are a number of fire exits coming off these rooms.

Second of all, in the case of an earthquake please drop to the floor and cover your head with your hands, or if you're near a table get under or beside that table, and please listen to the instructions of the Te Papa staff.

There's a reminder that smoking is not allowed in this building, so if you're a smoker please do that outside.

Toilets are back towards the main stairwell block outside these rooms and down the corridor.

Food and beverage, we've been asked to not take any food and beverages outside these rooms or into the museum if possible.

If you have a car parked downstairs and you don't already know, please bring us to the main table at the front your car parking ticket because you are able to get a discount, a reduction of the daily charge for your car parking of $10 if we're able to endorse it up here. This is valid from 6 a.m. to 6 p.m. and, as I found out last night is even if your ticket is endorsed, if you're here after 6 you may find you'll be charged more.

There is WiFi in these rooms and some details of that WiFi should be on the back of your programme. You should just know that it is free and you don't need to have a password.

So, in terms of today's programme we had a huge amount of material presented yesterday. Today we will move on to the topic of interactions between DPPs and CPPs in the first session, we'll then have some time talking about other CPP topics, and then for the afternoon the sessions will be dedicated to the airport sector.

I want to thank everyone yesterday who put so much time into the presentations that were done. I think we had some very worthwhile sessions yesterday. The purpose of the forum for us had been to help stakeholders test their views of the problem definition for the purpose of the IM review and to do that by trying to foster some information sharing and some discussion.

What we found out yesterday was that a lot of people had put a lot of time into their presentations which was great. I just want to say, in terms of the discussion, we are transcribing the session and we have our transcriber sitting over here, but I just wanted to reassure people that the goal of today is really to foster that discussion and from the perspective of the Commerce Commission it is about making people feel that they can make the comments that they need to. If you find yourself on the stage, you clearly are on the spot and we won't be taking your comments as necessarily as the final formalised comments of your organisation. I think everyone listening to the discussion should realise that the submissions are really the formal round of comment and this is really about testing views in the interim.

On that note as well, I think as we get into the airport session today we'll have a smaller group and it may be easier to hold those discussions, but I just wanted to reassure people that in terms of when we ask for questions, if you also want to make a comment on things that have been said, please feel open to do that and please feel again that the submissions will be the formal round of comment, and that if it's helpful to you to have a discussion in the interim, please feel that you are able to do so.

The sessions today will be again in a variety of formats and each of our facilitators will be explaining those formats upfront. After today we will look to publish the transcription, and obviously after that as well we will put up the presentations, and then from the Commission's perspective we will eagerly await your submissions which are due on the 21st of August.

Without further ado I would like to invite John Groot, a principal advisor at the Commerce Commission who will be facilitating the first session on interactions between DPPs and CPPs. Thank you very much.

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JOHN GROOT: Thanks, Keston. Perhaps I can invite the members of the panel to come up too, please.

Good morning everyone. A strong feeling of déjà vu actually as I come in this morning but same weather, same people in a lot of cases, same place, but I think one really important difference is a very different topic this morning, customised price-quality paths. I think yesterday quite conceptual issues, some of them are quite hard, the long-term future of electricity networks. These issues for me feel a lot more grounded, a bit easier to get your arms around and your head around.

I'm also mindful of the old adage that a problem shared is a problem halved, and to halve my problem I'm hoping that we can help to come up, define some problems that relate to customised price-quality paths.

I'd just like to introduce members of the panel. Starting from your left to right we've got Richard Fletcher from Powerco, Richard is the General Manager Regulation and Government Relations; we've got Jelle Sjoerdsma from Maui Developments, he's the Manager of Regulatory Affairs; we've got Greg Skelton, CEO of Wellington Electricity Lines; and, Ralph Matthes from Major Energy Users Group; and, we've got Richard Hale who's from Hale & Twomey and does assist a number of the major gas users.

We will hear some brief presentations from Richard and Greg and there will be an opportunity for comment from our panel members.

Just briefly in terms of the purpose of today's session, obviously we're trying to define the problem as it relates to customised price-quality paths for the IM review. Very briefly we're really keen to understand the obstacles that suppliers face when thinking about applying for a CPP, keen to seek views on topics and problems that need to be addressed. We will give a brief update on our decision last week to fast track consideration of certain amendments.

I guess the conventional view of customers to price-quality paths is they're a necessary alternative to the DPP to meet the particular circumstances of an individual supplier, but I'm mindful that there's also a view that something that's a bit too much, a bit too hard, the requirements are too onerous and that's deterring people from submitting such applications.

The Commission's view is that they are a vital and very valuable alternative to the DPP but we accept that

they may need some refining and some fine-tuning to make sure they work well in practice as they're intended to, and I think it's always been clear from the outset of the regime that some fine-tuning would be required. I think in the original IM reasons paper 2010 we noted it was a challenge to set the requirements before the first practical application and that there would need to be, refinement as experience with the regime grows. I think this first IM review is the ideal opportunity to look at those requirements again.

Just very briefly I think you probably all know that the New Zealand regime is reasonably unique. We've got a number of small firms subject to price-quality regulation. The DPP is meant to be that one size fits all approach that really works for the smaller firms as well as the larger ones, but it can never do justice to the particular circumstances of an individual supplier, which is why the CPP exists.

I guess in terms of where we are, the state of play as regards CPPs, we've only had one application to date and that was brought about by the earthquakes in Canterbury earlier this decade. Since that time there's been a reopener added to the DPP for catastrophic events. So, it's an interesting question I think to reflect on whether or not Orion, faced with having the option of using that reopener rather than applying for a CPP, would still have chosen to apply for a CPP or not.

I just want to pause there for a moment and just reflect on some of the themes and some of the problems that we heard identified yesterday, and just think about those in the context of the CPP option.

I guess one of the strongest messages I took from yesterday was the submission from Megan around the form of control as it relates to electricity distribution businesses and the argument that we should move to a

revenue cap. I'm mindful that, and obviously we would need to amend IMs to do that, the CPP option already allows firms to apply for a revenue cap if that's their preference. So, without amending the IMs there is a way to move yourself on to a revenue cap.

Another issue raised yesterday was in the context of emerging technologies and the risks that they pose, potential risks of asset stranding and just the value that customers see in the network, and one of the options may be to accelerate depreciation on the RAB. Again under a CPP it is possible to seek alternate rates of depreciation, so you can look to depreciate assets faster under the CPP option.

Another message that came through very clearly yesterday was around the different contexts for different companies, and I think we saw that in terms of some of the strategies that were outlined in some of the presentations, particularly in emerging technologies, and I think it highlighted differences between rural and urban, between areas facing growth and areas not facing growth, and again the CPP is designed, it is as its name suggests, customised for the particular circumstances of a supplier. So, I think in all three of those areas, all three of those themes, the CPP is ready and in existence, an option which already exists in the regime that can be used to address some of those differences, some of those issues.

I guess the other final point I would make on this is one of the other messages we were hearing I think in terms of the emerging technologies is the different choices that it's providing to consumers, and I guess one of the challenges for what were or what still are monopoly businesses is how they engage with consumers.

The DPP really assumes not much engagement, the CPP I think strongly advocates CPP applications will reflect

really strong and good engagement with consumers. I guess that point again sort of supports the CPP as being perhaps the more appropriate or a more consistent option in terms of the environment which we appear to be heading into.

I guess both of those two points, the point about the DPP reopener and some of those themes that I picked up yesterday, go to this question about why don't we see more CPP applications than we have?

There's a variety of reasons for that, perhaps we can return to that at the end if time permits, and I've tried to outline, I think there's some reasonably obvious reasons, and to answer my own question, I mean obviously there's been a fair amount of uncertainty in the very early stages of this regime. You know, there's been uncertainty about the IMs which apply and whether or not there are any materially better options.

The initial DPP was just to roll over prices and the reset happened a couple of years later. There were issues around whether or not we ought to be setting rules for how we set starting prices. So, until all of those things bedded down, the environment wasn't very conducive for thinking about CPPs. So, maybe as we move forward with a more stable and settled regime there's more opportunity for firms, or a more conducive environment for firms to consider CPPs.

The second point I mention up there is maybe the differences in practice between the CPPs and DPPs are smaller than we thought, and I guess related to the point I made earlier about some of the comments yesterday, it may well be that the amendments which are being suggested, or potentially being suggested, may further reduce the differences between the DPP and the CPP, and I guess it does raise the question, how much

territory is left, how much landscape is left for the CPP to operate within?

The other factors there I think are reasonably straightforward and we'll discuss them further. You know, is it too hard, too complex to complete a CPP? And, we'll hear more about that shortly. Another thought is, is the DPP too generous? There may well be other factors. We may get time to discuss these or solicit views later in the session. If we don't, obviously there are formal submissions as Keston mentioned.

Just very briefly, I think there are some learnings from the Orion experience, we're certainly not ignoring those and in the next session after this we are going to talk about those in a great more detail in a presentation with a number of people who were involved in that process. I guess the key point I'd make on this slide is really the third and fourth ones, that we are keen to promote the CPP option. We accept there's been some issues in terms of the first application and I guess that was always likely to be the case.

I guess the fourth bullet point there is probably the key one, when it promotes the long-term benefit of consumers we would like to see firms seeking a CPP. What does that mean? One, it means we have to get the rules right upfront so the costs are cost effective, and also we need to market the CPP option as an attractive alternative, and today's session is really looking at those potential obstacles to the CPP.

So very briefly in terms of the one hour that my part of this session will cover, we'll briefly outline the fast track consideration process we mentioned last week, we are going to have some discussion and some presentation on a couple of the substantive issues with making a CPP application which

have been identified to date, whether we should align the WACC for DPP and CPPs and also whether we should have I guess something, I think it was described as a sort of intermediate step between a DPP and a CPP but a more limited scope CPP.

There will be an opportunity for questions and comments from the floor. I know it's not an easy forum to speak at, I'm feeling that myself actually but we do welcome the input, so there is the opportunity.

In the next session, which will be led by Simon Copland, we are going to look at this in more detail, at the requirements that exist in terms of information and process requirements for making CPP applications.

So, very briefly in terms of the fast track decision announced last week, why are we doing this? There's a supplier we'll hear from shortly who's looking at making an application in 2016. In terms of the timeframes for the IM review, that really comes a bit late to fit neatly into that firm's processes. I guess we are showing or indicating that we would rather try and address issues as we see them and we would rather not have their potential application, or the timing of the application held up by things which we think we can address quickly in an accelerated process.

So, the fast track decision, or fast track process that we announced last week has got two limbs to it. The first one relates to some of the CPP information requirements, proposed changes to those, the first limb of that process, and that's really for the next session which Simon is going to lead after this one.

The second issue is the alignment of the CPP/DPP WACC issue, which is the second limb, and we're going to cover that in this session.

So, the key point is that last week we made the decision we will shortly issue a notice of intention, an update paper on the fast track process, and it does cover EDBs and GPBs. There's different processes for limb 1 and 2. Limb 1 will be done first, limb 2 will start early but take a little bit longer. We're targeting a draft decision, early November, with submissions and cross-submissions this side of Christmas, and a final decision around end of February 2016. We're doing these processes because we think the timeframes are feasible. We value the submissions we got on this question but we think the timeframes are feasible.

I just want to talk a little bit more about that second limb, just a brief overview of that from the Commission's perspective, and then I'll hand over to Richard Fletcher who is going to talk you through a bit more on that from his perspective.

I think fundamentally the methodology, the cost of capital methodology for the DPP and the CPP are similar but in both cases our methodology, cost of capital methodology picks up the prevailing rate of interest in the market. Now, those rates of interest are always changing and therefore depending on when we're making our estimate of the cost of capital, those WACCs are going to vary and that's in a sense the nub of the problem. It's not a question about altering the fundamental aspects of that WACC methodology, the question is which of our estimates produced by our single methodology we should use when it comes to setting a CPP.

For a DPP we set the WACC once every five years, so that's the blue line which is on the top of the graph. So, you can see it was set in 2010 and again in, well, set shortly before 2015 for the period from 2015.

The CPP WACC by contrast is set every year and it applies in respect to any applications received in the 12 months following when it's set. So, you can see it's fluctuating over time as interest rates in the market fluctuate.

Just because of the trends in the market, the CPP WACC is lower than the DPP WACC and that's just a reflection of what's happening in the market. It could just as easily be the case in future that the CPP WACC is higher. But I guess the gap between them can be significant and that may affect supplier incentives to seek a CPP, in particular when the CPP WACC is lower you're giving up, or a supplier is giving up that higher level, higher cost of capital for the duration of the CPP and you're going to that lower number and in that situation it would seem to discourage someone from making an application. Conversely, if interest rates are rising, the CPP WACC is above the level of the DPP and it may encourage more CPPs than we can handle, I'm being slightly optimistic perhaps.

Sorry, I should say that the CPP WACC shown there is the five-year estimate. We do also estimate a three and four-year estimate.

So, this issue with the differential between these two estimates of the cost of capital has been identified as a key barrier. I think in the original policy we recognised that this could occur. I think at that time we felt that that was just one of the factors that suppliers would factor into their decision, whether or not to seek a CPP. I guess with the benefit of hindsight, with the benefit of experience and also in response to some of the points which have been made in submissions, we are questioning whether or not that is the right way to think about these issues, and that perhaps the better answer is to have these WACCs aligned

so that the firm is almost indifferent between the movements in these interest rates in respect of the CPP period. So, the fast track process is really designed to enable us to amend these requirements if that's what we ultimately choose to do.

So, this slide just very briefly sets out some of the issues which have been raised in submissions and we thank Powerco and MEUG in particular for the submissions we've received to date on this fast track process. I don't think I need to expand on those, that's something that no doubt we will consider further and parties are able to submit on during this process.

Okay, without further ado I would like to hand over to Richard Fletcher and he'll talk further about this issue, and then we'll open it up for a short panel discussion and questions from the floor.

RICHARD FLETCHER: Thanks, John, good morning everyone. John's done a very good job at summarising 90% of my slides so that's good but I'll just summarise again.

There are nine or ten slides which try and talk through the context, what the issue is and how it's arisen for Powerco, what the possible solutions are and then what the questions for this forum might be. I want to hone in on what are some of the key issues rather than go through laboriously the slides because I'm quite keen to get a discussion going if possible, not wanting to overstep your role, John, because I think I'm really keen to gauge what people's views on this are. As you'll see, Powerco is looking at a CPP application.

First of all a bit of context around Powerco. Powerco started thinking about signalling the need for a step change in investment particularly focused on renewals.

In our 2013/14 asset management plan, at that time we were going through the DPP reset process. Towards

the end of that process it became clear that the DPP, I guess the one size fits all process for the DPP, wouldn't accommodate the sort of future investment that Powerco envisaged and midway through last year we put in place a programme to prepare for a CPP, and originally we also had targeted a May 2015 submission date with a CPP applying from the 1st of April 2017.

But it's only when you get into the detail, you set up a team, you start looking at the rules, the requirements and the IMs, you start to see the things that could possibly be improved, and I don't want to steal the thunder of Ollie and Dennis and Lynne later, because there's quite a few areas of improvements which have been acknowledged around information refinements around a CPP, but I guess over the last six months the biggest issue we've been debating internally is the issue of where the interest rate is, the current risk free rate, and how that then will flow through to an alternative rate of return which would apply to a CPP.

So, in other words, we're under a DPP at the moment, there's a rate of return which was set last year. If we apply for a CPP next year then we assume a different rate of return, and given where interest rates are at the moment, as John showed quite clearly on that graph, the rate under a CPP would be significantly lower than it will be under a DPP albeit that rate would be applied for the same period.

So, it seemed to us that was the issue we raised with the Commission, and I think what I want to do now is just recap on the problem a little bit and then the proposed solution.

So, a CPP IM, as John says, requires a new WACC to be specified, and it's based on an observation of the risk free rate, and since the DPP risk free rate was observed in August 2014, last year to this year, there's

a roughly 100 basis points difference which has big flow-on effect to the rate of return under a DPP, so effectively companies are exposed. If you're applying for a CPP you're exposed to the volatility of interest rates, and effectively if interest rates have fallen relative to where they were when the DPP was set, then a lower WACC will produce, and the incentive there is that a company would necessarily look at deferring a CPP to the extent possible.

Conversely though, and it works both ways, that if an interest rate has risen since the DPP, then a higher WACC would be available under a CPP and that would then incentivise a company to accelerate.

And, I guess from Powerco's perspective, and it might seem strange, well, obviously you're not going to say that now because interest rates have fallen, but it seems to me a company and suppliers and customers should be neutral as to where interest rates are when putting forward a CPP.

A CPP in my mind was always envisaged to be focused on opex and capex requirements which may be different than what was allowed for under a DPP, and whether or not the quality outcomes implied under a DPP were appropriate given consultation that customers had done with their consumers, and it wasn't around trying to arbitrage around interest rates.

So, the problem does create a real perverse incentive and I can say that from Powerco's perspective but for anybody putting in a CPP at this time it would be exactly the same.

I guess what the question is, without getting to a solution, and then we'll get into the issues around what that solution might be, what we want to do is remove the distinction between a CPP and DPP WACC and have a single regulatory cost of capital set for a five year period

which is carried over to a CPP when a company defaults from a DPP to a CPP.

Effectively that would mean if we applied for a CPP next year, we would take exactly the same rate of return we're on currently and then we would reset that to when the DPP is set at the next regulatory period. And, I guess that seems to us to be quite a simple, conceptually simple solution. It kind of takes out of that perverse incentive around interest rate movements and the pluses and minuses around that. It works both ways for consumers and suppliers.

The big question for us is how implementable is it within the fast track process? In order for us to put a CPP in for next May we've made a case, and the Commission, as John has said, has included it for discussion under the fast track process. If we going to have a process where we agree with the principle, can we do it within the six-seven-eight months of the fast track process, and what are the issues associated with that?

We've engaged an Australian specialist, Jeff Balchin, who has done a lot of work with the Commission over the last few years around input methodologies, and for suppliers. We asked him to look at the input methodologies and see whether this issue of aligning the WACC could be separated from the broader IM review? His view was, yes, it is, it is more of question of principle rather than substance of how the WACC is set.

So, the full IM review could continue and still review the cost of capital and how it's set. All we would be saying is we would adopt that, if we had a CPP in place we would adopt that updated cost of capital when it was set in 2020.

So, the other question for us, I'll just move on to some of the other questions which I'm quite keen to - that's an interesting graph there, the WACC alignment issues graph. That's the interest rate, volatility rate over the last period, you can see it's a low period, I think it was actually over here when the DPP was set.

So, these are the questions that I'm quite keen to get a discussion on because from Powerco's perspective we've got about ten months now before our submission period in May. We're at a period of time when we're just about to press a button on some quite big commitments around consultation, around getting the verifier in, finalising our plans etc. The viability of a submission next year is pretty much predicated on this alignment issue given the materiality of the misalignment of the WACCs, and we really want to get a bit of discussion going as to whether or not is there general consensus on the principle, does it make sense to have a single regulatory WACC to take out that incentive? Does the solution of carrying over the DPP WACC to a CPP WACC address that issue? In our view we've put a case up, we think it does, but the question remaining is, is this issue totally severable, can it be separated from the broader IM review? Can we look at this issue in principle separate from the other aspects of the IMs? And, our view is that it can be done, and we've set out a case in our submission which is on the website to support that.

Are there any other solutions which address this issue? And, for our reasons set out in our submission we think it's the most principled and it's conceptually the right approach.

And is it implementable? This is the area where I think we probably need to do more work under the fast

track process. Jeff Balchin's view is it is implementable. When I say "implementable", is there a mechanism whereby the Commission can set a five year customised price-path and then update the WACC half way through if the DPP WACC changes. So, you set it on the current WACC and then maybe for the last two or three years of the CPP it reverts to an alternative, an updated cost of capital.

Our view is that it is and it can be separated. I think there is a little bit more discussion to be had on that and that's one of the things I want to maybe chat about now, and basically does seven months allow us sufficient time. So, we need to take a view really in the next month or so from a Powerco company perspective as to whether this issue is likely to flow through to a positive decision in February under the fast track process, and if not then we I guess we need to take stock on what that means for a CPP application. And, that's fine if that is the outcome but that's the reality of the issue in terms of its materiality.

So, I'll just leave it there, if that's okay, and maybe leave these on and these are the questions.

JOHN GROOT: Are there questions from the floor? I mean, Powerco is obviously keen to get some feedback on this. Any thoughts, or from the panel?

JELLE SJOERDSMA: One question I have, in your proposal which you also anticipate eliminating the three or four-year CPPs?

RICHARD FLETCHER: To be honest I haven't given that a thought, we've always predicated we'd base our CPP on a five-year CPP. I don't see why you couldn't do it. Let's say, for example, you were submitting a three-year CPP next year, we would just automatically, we would remain on the rate of return for the next three years which the Commission has already determined is the

appropriate rate of return. If we get a four-year CPP then we take the current rate of the DPP for three years and then we'd take whatever is the new rate of return, even if it is a different methodology for the final year which flowed into the next regulatory period.

So, I think it really is actually taking out any of that kind of perverse incentive and I think it works both ways. So, from Powerco's perspective and just to put it in a nutshell, that's a good way of looking at it. If we put in a CPP application in May next year, we've got three years in this regulatory period on a CPP where we would continue to carry over the current DPP rate of return. Meanwhile, the Commission may review the cost of capital input methodology next year, make a decision in December, an alternative methodology might result from that, hopefully it won't, but if it did we would assume that for the last two years of our CPP in '20, '21 and '22, and that's a risk for Powerco but, again, I come back to that point, it's exactly the same as we would have had for that period under the DPP, so seems quite principled to me.

Can I just say that Jeff Balchin makes his apologies. I did invite him. He's in Europe at the moment but I've got Andy Nicholls from Chapman Tripp here who's a proxy for Jeff Balchin if there's any curly questions around implementation, that gets me off the hook.

SPEAKER: ...from Frontier Economics. It seems to me that the question that's being posed, whether there should be this mechanistic alignment between the CPP and DPP WACC, is not the right question, and it doesn't address the fundamental problem that I think you're pointing to, Richard, which also John alluded to. It seems to me that the fundamental problem is that there is something about the Commission's methodology for estimating WACC

that introduces volatility in those estimates, so, in terms of the cost of equity and the cost of debt. The mechanistic alignment of the CPP and DPP WACC doesn't address that problem because whenever the Commission resets its WACC, you can still get these large increases or reductions in the WACC and this is not good for customers and it's not good for the businesses who are planning long-term investments. So, I think to address this problem properly the Commission really needs to look at what's driving the volatility in its WACC estimates and fix that problem.

RICHARD FLETCHER: I don't disagree with that and I think we mentioned that yesterday, and I think the two things can work in parallel. I think as part of the broader IM review looking at the costs of debt and looking at whether or not moving to a trailing average or moving to a cost of debt, to take that volatility away is something we would support as well. The question is whether or not there should be two, you should be updating, there should be a CPP WACC and a DPP WACC. So, you could do the two. You could align the two and then look at improving the methodology for determining the cost of debt.

JOHN GROOT: The underlying issue we've got is that interest rates in the market are displaying that volatility. The question is I guess, as Richard just said, do you retain the sort of on-the-day approach that we've got or do you look at what others have done, Ofgem - well, Ofgem has always been there but AER in terms of moving to that longer term average. So, I think that is an issue which was raised in our invitation to comment paper and problem definition. So, that could be something we look at, but if that was to change it would happen only by December 2016 and I think, as Richard's indicated, Powerco wouldn't be advantaged or disadvantaged because

it would still affect them in terms of that WACC which was set from 2020 onwards.

DENNIS JONES: Dennis Jones for Orion. Richard, this is probably more for Andy actually but while I agree with everything you say in there about -

RICHARD FLETCHER: You can stop there, Dennis.

DENNIS JONES: The alignment between the CPP and the DPP WACC, I'm a bit concerned about the timing. If we fast track this process, and I think you were talking about allowing the full IM review to go through and then whatever came out at the end of that you would adopt that in your CPP, my recollection is that the Act prohibits changes to the IM, or any IMs applied to the CPP after it's taken effect.

RICHARD FLETCHER: I'm looking at Andy.

ANDY NICHOLLS: So, the practical implementation issue to get our heads around for the proposed solution here is that you would set a CPP for five years and then three years into it you would reset the WACC. And so what does that mean? So, in practical terms for this example you would make a CPP or the Commission would make a CPP decision next year and that it would use the same WACC that all the EDBs are currently on, and then in 2020 when the WACC changes, that would flow through to the CPP and what does that mean? And so we go and talk to Jeff about that and he said, surprisingly he said it's actually, you know, quite conceptually simple and similar to some of the things that they're talking about in Australia, so, you know, in his mind not even breaking new ground.

And, the basic idea is that you would amend the CPP IM now as part of this fast track review to build a reset in, you know, when the DPP or the regulatory WACC changes, and three years in you would rerun the model to calculate the MAR for the remaining years only changing

two things, the WACC that has changed for everybody say in 2020, and the new inflation forecast because those things get paired up in the Commission's model, nothing else changes. So, the same forecast of expenses and capex and everything that were part of the initial CPP decision.

So, conceptually in his mind you're just updating two parameters for the remaining years. As a modelling exercise he tells me that's simple and as far as the sort of regulatory changes that we're talking about, this is one of the things we need to sort through as we go through the process but on our current look at it you're talking about changing the CPP IM now. A lot of the detailed lifting can be done in the CPP determination and that would be it.

You would draft those changes so that if, as part of the general IM review to address some of the more fundamental issues around WACC, say the Commission made some generic changes to the way that it sets the WACC and those changes were baked into the IMs in December at the end of next year, just again the CPP reset mechanism would just pick up the new WACC and the new inflation forecast, and so on. That's the idea.

I don't know if that answered your question, Dennis, but that's the sort of high level of Jeff's intuition, that this actually is reasonably doable and quite severable from the general review.

BOB THOMPSON: Bob Thompson, Director of Vector. Look, there's an elephant in the room and the elephant in the room is new technology, IT, solar and batteries. How you can advance quickly anything in the present environment when there's two distinct views in the industry of what's going to happen is beyond me.

And, the key question is, you're setting a WACC which takes account of risk. My question to you is,

you're going to put a big capital programme in if the technology goes the way I think and the Vector Board thinks you are going to have huge write-offs after five years, who's going to take those write-offs? Don't expect the customers to take them. How do you answer that? I think your theory, I think you're doing your capital to satisfy your owner who is an investment company, you're not doing it to satisfy your customers and -

RICHARD FLETCHER: I think that's a little bit unfair, Bob, because just for the Commission, the way the process works is that a company puts forward the CPP application, sets out the rationale for any step change or uplift in investment, or forecast in investment, demonstrates that the company has consulted with its stakeholders and has taken their views into account, and the Commission then tests that submission against the purpose statement objectives and determines whether it's in the long-term interests of consumers. So, whatever we put in, Powerco would say well, we were prepared to defend it but it's up to the Commission and their consultants to determine whether or not it's in the best interests of consumers.

In terms of the rate of the uncertainty, we're already locked in into that rate of return under a DPP from 2017 to 2020 and all we're saying is that's the rate of return which the Commission through its methodology determined six months ago was appropriate for that period. We think that rate of return is still appropriate for that period if we're on a CPP.

So, I understand the uncertainty argument but I'm not sure it directly flows through to this.

BOB THOMPSON: You haven't answered my basic question, who's going to take the write-offs after five years. When the batteries come in, you don't need about a third of your

assets especially...and Transpower has already got $1 million to $2 million of write-offs in the network, and that's only the start. And you've got to take that into account when you look at things and you haven't. You've just been going as if life's the same and it isn't.

I've just spent seven weeks in Europe, right, this country is so far behind and there's going to be major catch-up and you're not taking that into account and you're leaving people those extra costs they don't have to have in the future and the prime aim of the Commerce Commission in my view is the long-term benefit of the customers.

RICHARD FLETCHER: We agree on that, Bob.

SANDEEP KUMAR: I've just got a small comment about the three year and the four year CPP, and so obviously the life between the CPP and DPP is different but the WACC for the three year and four years are also different because there'll be a sort of three year and four year - there's an inconsistency with the way the MRP is calculated as well because the way the MRP is calculated is - a five year - risk free rate out of the expected return on market. For the three and four year it should be the three and four year tenor, not the five year tenor.

JOHN GROOT: Which should be a good question for the cost of capital input methodology review.

GREG SMITH: Greg Smith, Wellington Electricity. A couple of points, we first of all would agree that the issue of aligning the WACC between a DPP and CPP can clearly be severable from the underlying review of the WACC methodology. I think in response to Bob's comments we talked yesterday about emerging technology and asset stranding. If one were to believe those observations in five years' time, that we're all facing massive

write-downs, or even 10 or 15 years' time, would you stop investing now? And, for the long-term benefit of consumers I think we've seen from previous presentations as well the major flaw in that approach. We do have to be prudent in what we do and that's part of us working with the Commission, and working with consumers but to be honest, if we're putting the sums of capital up that we are, we need to know that there is a reasonable recovery around them. The WACC does not compensate us for that risk otherwise.

ROB BERNAU: Richard, I just wanted to make a comment following on from what Andy was saying in terms of the framework. Instinctive view on it is that the framework shouldn't be an issue for the kind of conversation that we're wanting to have and the kind of issue we're trying to talk about, but I guess that's the very point of this forum, is if we define the problem very clearly that we're trying to address quickly on the fast track, which the Commission has tried to do and we're very clear about what's not on the fast track and what's going on later, then the framework can adapt to that and whether that's by looking at reopeners into the CPP or looking at a different method of updating a WACC within the CPP, that's all quite doable. It's very much for the Commission, the issue around making sure that the fast track problem that we're addressing is well defined and well understood by everyone so they know what they're submitting on, they know what's going quick and they know what's coming later, and if the coming later - if the quick question is fundamentally do they align the DPP and CPP WACCs, and that's it, and the long question is, is there a better methodology around WACCs be that trailing averages or something like that, as long as that's clear and distinct to everyone, then it seems to me the process now can cope with it and the price paths

ought to be able to cope with it as they get to that 2020 reset point.

RICHARD FLETCHER: I agree with that, it's do we do it, how do we do it and when do we do it, are the three questions.

JOHN GROOT: Thanks, Richard. A lot of my colleagues aren't all that interested in cost of capital and I find it somewhat ironical that, delicious irony in it actually, that the topic which has got the most engagement from the floor has been cost of capital.

We'd just like to move on now and there's another issue, another obstacle to submitting CPPs that we would like to talk through and Greg is keen to talk.

GREG SKELTON: Good morning everyone and welcome back to our capital city, great day yesterday, 8 degrees, better day today at 6 so I'm a happy camper.

I think one of the takeaways from yesterday was, and Bob sort of hit the point, there's a fair amount of uncertainty heading forward for all of the businesses, and what form that takes we could spend the next hour on, but John won't let me do that.

So, one of the issues though is the uncertainty for the suppliers, is pretty much the same as the uncertainty for the rule makers and the regulators. So, we think that we've come through 40-50 years of developing assets in a very structured, very engineered approach and that's fantastic, it's serving us very well around price and quality.

The Commission likewise have come through with their sets of rules and again they're very structured, set from a legal process, and like our designs for our network, quite mechanistic.

One of the things we need to do, though, if we need to face changing business models for some of these opportunities dressed as threats, we also need to have

the Commerce Commission work alongside us and I suppose we agree from the forum, we're all now in the same boat and I suppose all we're really asking is not who sits in seat 1 to 8 but making sure everyone is actually sitting in the right direction facing the right way, so when everyone rows off together, everyone is working in tandem.

So, that's one of the benefits of this forum, is the sharing of information that we can do, is able to help and educate that there are a number of opportunities ahead for us.

One of the opportunities or the benefit of businesses or suppliers having to be a bit more flexible in their approach, I suppose, is the counter, is the expectation that we can take along the journey with us the regulator, the people setting the rules, to make sure there is some flex in what we can do to meet a changing world ahead of us, because at the end of the day we won't be able to achieve some of the goals we need to achieve for the benefit of our consumers unless we have the regulators alongside us, and the way rules work is they need to be a bit more leading than at the moment saying well, this is what we're used to. So, some great tension across the table from both sides and a great way of engaging to try and bring at that forward.

One of those tensions that we're looking at and I'm pushing the button and nothing is happening - oh, look at that. I was allowed two slides so Megan did a wonderful job yesterday, but an even better job today of making an eight point slide for me so I can get some decent points on there.

Networks in New Zealand are small scale and look quite different to the rest of the world and we're running a very low cost regulatory approach and that

fits us, it's fit for purpose, and that's fine, but in some cases one size doesn't fit all, and as John alluded to me a wee while ago, the Highlanders did beat the Hurricanes in the final of the Super 12 and that was something that I thought wasn't going to happen, so he reckoned that regulation had nothing to do with that, so that's fine.

However, the full CPP option is also a bit of a barrier for businesses and particularly businesses of almost any size. It's quite costly, it's very resource intensive and we can't really see that working that well for the smaller networks.

It makes sense where major investment requirements are ahead of you that a CPP approach takes you out of that one size fits all, and that's expected, but it doesn't make sense when there's only a small number of matters to address to bring you back in line with what is a low cost regulatory regime, and that's where we get to with the paper or the views putting forward now, is can we get some flex in the DPP where we can just look at an issue in isolation and deal with that, package it up and put it back in the DPP. And, although I disagree with John on the Highlanders winning the Super 12 final I also do disagree with John about his revenue cap. Yes, it can apply to a CPP, my view is it should also apply to a DPP.

As an example, the DPP methodology, the forecast constant price revenue graph has been one of the problems we've butted up against and it doesn't work for our business. Wellington, despite bringing all you people into our fair city, is seeing declining volumes, and with the benefit and the patience of the Commission we've had some good engagement on this in trying to work out ways of resolving it and this is something we've floated so it's not a new concept.

The revenue impact for falling volumes under the constant price revenue growth modelling means that we're about a 6% decline in reaching our maximum allowable revenue. Now, 6% seems a small number but when in each year you're allowed to spend in the vicinity of $100-110 million, it soon adds up to be $30-40 million in the regulatory period that you're not funded to spend.

That has a big impact on how you make your decisions, and we saw yesterday Ross Parry give the example of when there is uncertainty in the Transpower grid 20 years ago about should they invest, should they not, is it going to be a stranded asset, is it not, you saw the pull back from saying, we need to be careful, we need to be careful, and then we saw in the last three to four years a very large expansion of investment in the national grid and that's now flowing through to customers. So, although there's a problem with maybe over-investment if you like and making it difficult for customers taking these extra costs, there's also a difficulty of under-investment and this is where it's a short-term game or long-term game, the long-term benefit is trying to spend at a sustainable level. If we pull back and withdraw investment, then there's going to be a big pile under the carpet later on and that extra cost is going to be shared with those consumers in the future.

The full CPP option is large and the solution itself is going to take two or three years to get a business of our size up to the speed of actually being able to make a lodgement. So, with a minus 6% on our MAR and potentially you're losing around that $6-8 million a year in the revenue we should be expecting, that's quite costly for a two or three year delay.

Costly to implement, we're thinking that we have to gear up, bring more people into our business, experts, consultants and modellers, and effectively that's going to be over the other side of $3 million to do that, and adding a lot more additional resources than running what would be a business as usual business.

And, there's uncertainty in the outcome, and that's one of those areas - and I talked to Susannah and Scott yesterday after their presentation, it was sort of an interesting paradox between customer engagement where the long-term benefits to consumers under an IM review is resolved by the judgement of the Commission, the long-term benefits for consumers under a CPP application is through consultation with customer groups.

I think those two can be brought together and I think if there's customer consultation, then I think the party running the CPP and the Commission should both go together and have the process bedded down. I think that would be a useful approach.

And, these forums will be useful too. I did speak to the manager of the Commission this morning saying having these sorts of forums open door to public or taking a road show around explaining a bit more about some of the areas where benefits to consumers, efficient investment is much easier to understand, much easier to pre educate people before you have the conversation on that price quality trade-off.

My final slide. The mini CPP or DPP reopener. What we're proposing is an opportunity to apply for a new price path based on a DPP, and it's only the consideration of maybe a single matter. In our case it would be the forecasting of constant price revenue growth, the idea of what our volumes are going to do in the future, what our current price is, are we going to over or under recover the MAR, how do we do that? We

can rely on forecasts, as we heard yesterday, some of those forecasts are very difficult to land, or we could look at another way of correcting that.

And, we got very very close in the last submission process with the Commission at looking at some of those alternatives, and it may be able to, use specific supplier approaches to actually corral or look at this for specific supplier circumstances.

We saw David de Boer yesterday from NZIER talking about how each of the companies are in a slightly different phase of their cycle. So, having some way of opening up your DPP for a specific issue that's going to guarantee long-term benefit for consumers for that region is going to be quite an important process, rather than having to open everything up and go through a two or three-year preparation to lodge a successful CPP.

Focus on the issue and concerns is paramount. Very expensive to go through a full CPP process when there's only one item to fix and the materiality threshold is really a comfort that the Commission, as regulator, and consumers, as the ultimate party who are paying for this, if we can make that more efficient, less complex, then those costs are going to be held to the minimum and that's going to mitigate any perverse incentives if we go through a materiality threshold approach and engage on that.

So, long-term benefits to consumers, this is the important part, the reason we're doing this, it provides a lower cost solution. The mini DPP is a small step rather than a full CPP approach to look after one or two issues that might arise that are sitting you outside that business as usual current DPP legislation.

It becomes a faster solution. It's around efficiency, and implements change that can take effect a

lot earlier than the two to three years' preparation we require for a full-blown CPP.

Therefore, it's a more effective approach, promotes the purposes of Part 4; it does benefit consumers to have something cleared up very very quickly; it does continue to provide the incentives to invest; and, it also incentivises to provide services at the quality that reflects the consumer demands. The idea behind not being funded to the right level of MAR means it puts a huge amount of pressure on a quality path.

Our business has been on a bit of a roller coaster. I think we've had a minus 11% price reset, we've had a plus 10 and we've had a minus 13.7. All through those price swings the quality target has largely remained the same, so it's kind of a bit of an anomaly that we've got a price quality balance we're trying to ascribe to but we've got the price doing this, and that makes it very hard to run a sustainable business and deliver consistent services to consumers in the longer term.

That's my, well that's our two slides, thank you Megan, and happy to take any questions.

JOHN GROOT: Thanks, Greg. I think there's probably a couple of comments perhaps from panelists, I mean Jelle or Ralph, did you want to comment on this?

RALPH MATTHES: Commenting on Richard's presentation, just three points in terms of principle. Absolutely agree that both suppliers and consumers should be neutral with respect to the WACC that applies to, when a CPP application is made. That's obvious, but the other two points I think is where we, well definitely we do have a difference of opinion.

First of all, Powerco says that the decision about the WACC to apply for a CPP application is severable from the broader review of the input methodology for

cost of capital. We disagree and I'll come back to that.

Then the next point he says is that it's easy, don't worry, we've got a fix here, and I think we have some problems with that too.

Just in terms of the cost of capital input methodology, that was topic number 5 in the Commission's invitation to submit on the problem definition, it hasn't been the subject of this forum. It will be a huge focus for us and we've indicated that to the Commission.

Trying to split out the cost of capital for CPP isn't a trivial exercise. For example, apart from perhaps the Transpower people in this room I don't think anybody understands why Transpower has exactly the same beta as an EDB. Perhaps in comments someone can tell me that, but I think intuitively we have a view the WACC for the CPP probably lies between the WACC for a DPP and an IPP.

Again, these are issues that are going to be raised in the substantial review of the cost of capital input methodology. And, I know Richard said, don't worry, we'll just, let's get on with this fast track but the risk to us is that there will be precedents set in terms of a fast track WACC for the CPP that will pollute our discussion on the substantial review.

In terms of it's easy, we can make a deal, I think just the questions from the audience here really raised some concerns, reinforced my concerns about whether we can actually get there.

So those are the three points but as a general observation, look, we want Powerco and the other companies to do the right thing in terms of investment. No doubt about it, it's in our long-term interest as well. Take Bob's point that there are some companies

here who are investing and he thinks that perhaps they're going to be taking a risk, but these are long-term decisions that people are going to be making. Powerco has some long-term investment decisions and I think Richard at the beginning said that it really was driven from their interest in renewables in particular.

Our suggestion is that perhaps Powerco, yeah, Powerco do have to make some big decisions in the future but why not just defer for one year until we actually have the substantial review of the input methodology for cost of capital? Why does it have to be May 2016? Why don't you wait to see the landscape in May 2017?

JELLE SJOERDSMA: The topic of interest to us, MDL, was the transition between CPP and DPP so I won't discuss the merits of either regime by itself.

We've been considering a CPP for a long time. That, however, was driven by a single project so I'm very much on board with what Greg was mentioning. We would love to have the opportunity of a CPP light that essentially assesses one issue only without having to go through the full rigmarole.

But the observation that I would like to make is, and this is my assumption, this is not MDL, I always had the assumption that if we ever went to all the trouble under the current regime to apply for a CPP, that we would probably never want to transition back to a DPP again.

There are two reasons for that assumption that I had. One reason is that in a CPP, other than issues about WACC, you can also make variations to input methodologies, and for us as MDL that's a very important feature because we don't consider the current input methodologies fit our business very well. So, in that sense we're very grateful for the current IM review.

That may actually negate that reason I'm mentioning and eliminate one transition issue.

The other issue that is perhaps even more important, currently under a CPP you can have unforeseen projects and contingent projects built in, and I won't spend the time here to give an example of contingent projects, but I had a good one. This, however, is in a CPP only and contingent projects are very important for us, so that's the other reason why I would originally have expected to be on a CPP forever.

However, I would love the opportunity of getting a DPP plus, or like you mentioned, a DPP reopener that you could actually do that in the context of a DPP without needing to go through the full rigmarole for CPP. So, that's the transition I would say is key for us and we're interested and as part of the IM review, to see how we can address those transition issues.

RICHARD FLETCHER: I just take a little bit of issue that I actually said easy, we can make a deal. What I was trying to make a distinction between was the principle and the implementation. I question whether our risk profile necessarily changes under a CPP as opposed to a DPP, so I think an appropriate rate of return and an appropriate time in a regulatory period should be the same for DPP/CPP. I think what we're proposing doesn't preclude any other review of how the WACC is set and all the things that you might want to build into your IM review, and that's something a company like Powerco under a CPP would adopt automatically even if we had already agreed to a five-year CPP.

And, in terms of deferring, and I kind of question whether or not that's the right question, Ralph. I think the point is we do have a framework, we have a DPP/CPP framework. We're agreed the light-handed versus the more intrusive approach is appropriate. At the

moment that mechanism is being constrained, it is a barrier to a company doing that and the point is a company who believes it has an appropriate case for making a CPP, if we believe that we've appropriately engaged with our consumers and they support that, and we wouldn't put it in if we didn't believe we had that support, then what we're saying at the moment is the framework doesn't work as it was designed.

And, should we defer that? I think we should try and address it if we can do, and I'm not saying make a deal, I'm saying let's work over the next seven months constructively to try and get that outcome if we agree to the principle. If we don't agree to the principle, then let's take a longer time to do it and I agree with that too. So, I'm just trying to, we just, from a company point of view we just need a little bit more certainty whether or not if it goes into the fast track process it will result in a positive decision, so we're not kicking off a whole lot of work unnecessarily on a CPP in the next seven months.

RALPH MATTHES: Can I just make a comment on Jelle's comment. I think that was actually quite interesting about wanting to, you know, if you're going to go to the CPP you wanted to be there forever. I think that sort of makes sense actually.

I mean, you want a CPP because you want to make long-term investments and you want to know what that long-term investment environment is going to be. Jumping back to a DPP, I mean this goes back to the whole I think what we call uniqueness of the CPP, DPP, IPP framework, it's tough trying to make it work but one thing I think you didn't mention in terms of going to a CPP and staying on it, is whether or not your risk profile changes, because if it does we have to have a

discussion around cost of capital and that goes to my point, it's a substantial issue.

RICHARD HALE: Can I just say one thing, I don't want to get into the debate about the CPP versus DPP but from a gas user's perspective our concern, and I'm pleased that Jelle has raised the issue of probably a discrete project which we are concerned about as gas users.

So, we are supportive of structures that would basically not impede or change the suppliers' view of the risk profile that they're prepared to take because of these sorts of issues. So, I just wanted to throw security as a relevant factor that might be an influence on some flexibility around the way the Commission views the price paths.

JOHN GROOT: Thank you, I think we are due for morning tea but there may be a question from the back of the room? Either you can have your morning tea or you can ask a question. Look, thank you very much, it's been a really interesting conversation. Can we please just show our appreciation for our presenters. (Applause).

KESTON RUXTON: Thank you to all those people. Could I just ask that people stay in their seats. We've got just another additional item that we were going to do before we break for morning tea.

We've very much heard a lot from industry participants as part of the two days. However, we just wanted to take five minutes to allow Molly Melhuish to say a number of comments on the perspective of the consumer before we break for morning tea and that will mean we'll give you a few minutes extra on your morning tea, and we'll try and make the time up at lunchtime.

Can I invite Molly to the stage, thank you.

MOLLY MELHUISH: I did want to talk about the three problems that I think are most clearly concerning on the input methodologies. The first one is mentioned in 113. The

regulatory framework assumes its suppliers fully recover the cost of assets whether or not they are used and useful. That means in fact that consumers are paying more than the market will bear. I've done a quick analysis. The prices, final consumer residential prices have risen continuously and are still rising, this is causing you know what, people are either investing in efficiency if they can afford it or getting sick and dying or fighting over whether to turn the heaters off. The Electricity Authority says sunk costs are your problem, not ours, and that raises the problem of the disconnect between the two regulatory systems.

Second issue is that the Commerce Act requires you to consider energy efficiency and innovation. Don't know whether that includes consumer as well as supplier investment, that's something that I would like to talk about with your legal team. Electricity storage is mentioned in your section 212.2. The question is, can lines companies be given the incentive to cooperate with consumers who want to invest in electricity storage or are they in competition because that reduces their asset values?

A more important innovation is in fact wood burning which directly addresses winter peak loads, and it could be that advanced gas burners which are essentially absolutely smokeless and can burn unseasoned wood cleanly, whether these are a relevant part of the technology disruption. All the discussion of disruption is about solar. A little bit about batteries, and nothing about efficient wood burning much less home insulation, which is probably the main thing that has reduced demand. Economic regulation 217.1 is not promoting the most efficient innovations.

Now, the third problem, and final, is representation. You mentioned consultation on asset

management plans. I've been to one of those at the lines companies and they just don't understand, consumers just don't understand.

Number 2, you have no true residential consumers on your consultation processes, and unfortunately the Smart Grid Forum has no true residential consumers. MEUG is wonderful but they cannot represent us.

So, I would like to discuss a wonderful paper on modern approaches to regulation, and I would like to meet with some of the Commission staff on that, by a guy named Jim Lazar, and please I want somebody to help me craft a useful submission on this input methodologies because I've got a lot to say but I do not have the legal or analytic support to say it correctly. Thank you.

KESTON RUXTON: Thank you, Molly. Thank you very much for your comments, Molly. We will now break for morning tea and we will come back ten minutes after we said, I think that's 10.45, so we'll see you back here for a start, thank you very much.

(Adjournment taken from 10.28 a.m. until 10.46 a.m.)

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SIMON COPLAND: My name is Simon Copland. I'm a Chief Advisor in the Regulation branch of the Commission. I have the pleasure of introducing this session on the cost effectiveness of the rules and processes for CPP proposals which is a topic that affects both regulated electricity and gas suppliers.

The purpose of today's session is to seek input from stakeholders on our problem definition phase of our overall review of input methodologies before we further develop the process for the remainder of the review.

We will be focusing on the CPP requirements that suppliers are required to meet when preparing their

applications, and the IMs the Commission is required to use to assess whether an application is complete and undertake an evaluation of the CPP proposal.

We have been told by suppliers that the CPP application process and the requirements could be simplified to reduce the time and costs involved for suppliers and to avoid creating barriers or obstacles for potential CPP applicants. We'll therefore hear today from parties that were involved in the Orion CPP in 2012/13 about their experience with the requirements and also perspectives on the process and requirements from an intending applicant, which is Powerco, and an industry consultant.

We are interested in what stakeholders perceive to be the topics and the problems that should be addressed in relation to preparing, assessing and evaluating CPP proposals.

Lastly, as John Groot commented in the previous session, we have already announced our decision to fast track our consideration of proposed changes to certain CPP requirements in order to improve certainty and reduce compliance costs, and this will be done in a timeframe to allow regulated suppliers who are planning to submit a proposal in 2016 to apply those changes.

I will be able to update you on that decision and give you an overview of what is in scope for that fast track process, and an idea of the likely timeframes.

So, we have received a substantial amount of feedback from interested parties after we completed the Orion CPP and this feedback is published on our website. I think it's fair to say that there is broad agreement among all submitters that scope does exist for the CPP requirements to be incrementally improved.

A number of issues were identified and the feedback we received, for example, talked about the large volume

of information that was required to be provided to the Commission in a CPP application; about needing to focus the requirements to have the application audited on areas where an audit can add most value; and, clarifying the expectations around how a verifier will be used in the Commission's evaluation of the CPP.

A common theme arising in much of this feedback was the costs and complexity of a CPP application might pose an obstacle to applicants.

In terms of framing our work on the review, our thinking so far is that the existing IMs should be the starting point for our consideration.

As already indicated in previous sessions, I think yesterday, we will consider changing the existing IMs where this appears likely to promote the Part 4 purpose in section 52A more effectively, which directs us to consider the long-term benefit of consumers; or where the section 52R certainty purpose would be promoted more effectively, or where it would significantly reduce compliance costs, other regulatory costs, or complexity, without detrimentally affecting the promotion of the section 52A purpose.

In our problem definition paper in June we noted that CPP regulation is a complement to DPP regulation and offers a more tailored approach to a particular supplier situation. Our view was that the cost effectiveness of the CPP as an option depends on striking an appropriate balance between the benefits of setting a CPP, and the costs of a supplier preparing information and the costs of us undertaking our evaluation.

We also noted, however, the Commission needs sufficient information available to determine a CPP, and beyond a certain point it may not be possible to

trade-off the costs of the CPP process against outcomes desirable to achieve the long-term benefit of consumers.

Lastly, in the problem definition paper we reminded parties that in setting CPP IMs in 2010 we had been conscious of the compliance costs that might be incurred by suppliers and set the requirements accordingly. For instance, we decided to build on information that was expected to be required under ID regulation and to only require regulation on proposed expenditure to provide the level of detail that would be expected to already be held in a well-run and well-governed business.

After taking account of the feedback we received, the key areas identified in our problem definition paper in which additional costs in excess of setting the DPP would likely arise, included: the costs of the applicant meeting the CPP information requirements; the engagement of the external parties such as verifiers and auditors; and, the costs of us evaluating the CPP proposal, including our use of experts.

We're interested to explore with you whether this is an adequate framing of the problem, and whether you agree with the areas we have identified for possible improvement.

We have open mind on what issues related to CPP rules and processes should be addressed and how, although from the fast track, as I'll explain in just a second, we've already made a decision about its scope.

As a consequence the objectives today are to identify what issues are present with the current CPP IM requirements when preparing an application; to better understand how these issues might be a barrier to a supplier preparing and submitting a CPP application; and we'd like to identify priority areas or possible solutions to progress as part of the IM review.

We expect that the discussion today will help interested persons develop their written submissions which are due on 21st of August and cross-submissions on the 4th of September.

So, turning to the outline of today's session. In just a moment I'll update you on the decision the Commission has already taken to fast track consideration of certain CPP requirements. The remainder of the session will centre around a discussion of the obstacles parties feel they may face in making a CPP application focusing on the costs and complexities.

We'll first have a set of four presentations for approximately 45 minutes reflecting direct experience with the past CPP application which was Orion's in 2012 and 2013, and I'll invite the three speakers to draw on their experience, to share from insights into the process and recap on the key issues for them.

The speakers are Dennis Jones from Orion; Geoff Brown, who was engaged under a tripartite agreement between Orion and the Commission to act as the verifier for the CPP proposal; and, Bill Heaps, who was engaged as one of the Commission's expert advisors in relation to the evaluation of the proposal.

We have invited Geoff and Bill not as parties who represent the position of any particular entity but because they're able to reflect on their experience with working with the current IMs and stimulate thinking about problem definition.

I'll then summarise the public feedback we received for the benefit of the wider audience, and then lastly we have a set of two speakers for approximately 20-25 minutes who have a forward-looking focus on upcoming CPP applications. We've got Lynne Taylor from PricewaterhouseCoopers who appears on behalf of the ENA and who is a pretty familiar face, I think, to many in

the industry as a consultant and advisor; and lastly Ollie Vincent from Powerco who, as you heard in the session before, has signalled that a CPP application is being actively considered.

We have reserved some time at the end, approximately 10 minutes, for questions, including any comments that might come from a consumer perspective, and the idea is it opens speaker questions up from the audience to further develop the discussion, so if you could please hold any questions until the end and I'll ask the speakers to all remain on stage.

We can now turn to the CPP fast track. The Commission has made a decision it will fast track certain CPP requirements and we wanted to take this opportunity to provide further detail on the scope and timeframes for the decision.

The fast track will be two limbed, and as John Groot explained already one of those limbs will be aimed at considering the issue whether the CPP cost of capital should be aligned with the DPP cost of capital. The second of the limbs, however, will focus on mechanisms and approaches that could simplify the CPP requirements for applicants making a CPP proposal, and we call this the 'proposed changes to the CPP application requirements' limb. We discussed this as an idea in our problem definition paper where we proposed we would consider a number of relatively simple changes that would give greater flexibility to applicants around process and content requirements.

Our thinking is that a process could be put in place for the Commission to approve on a case-by-case basis, and possibly as part of a pre-approval process, first, modifications or exemptions for existing process or information requirements. An example there would be providing a dispensation to businesses for providing

detailed information if the information could be provided in a different form instead and be equally helpful for a CPP evaluation.

Secondly, allowing the use of Alternative Methodologies With an Equivalent Effect, known by the snappy abbreviation, ‘AMWEEs’. An example would be giving approval for capital contributions to be netted off against the total of assets for a project or programme, giving the same outcome as netting contributions off against individual assets which the IMs currently require.

Thirdly, we could consider an amendment such that a materially complete proposal could be accepted by the Commission. This would ensure that extra costs are not incurred by the applicant or by us in remedying a proposal where information gaps would not materially detract from our evaluation process or from consumers' understanding.

Each of these measures could serve to better align the information that is required to be provided in a CPP application with the business' existing information and accounting practices, and this would be expected to reduce the time and cost and make for a more cost effective CPP process overall.

Any wider consideration of simplifying information requirements will occur as part of the overall IM process. In particular we do not have time to undertake a line-by-line review of individual requirements in the fast track but the changes above could potentially alleviate issues with the current requirements for particular applicants.

We also think that once the modifications, exemption and AMWEEs are in place, they would be an enduring improvement: even if a line-by-line review was

conducted there would still be a need to cater for unforeseen cases in the future.

I should note here also that the decision to fast track is for both the electricity and the gas sectors. As the CPP requirements for these sectors are fairly closely aligned at present, it would be efficient to undertake the changes for both sectors at once, and including both sectors in the fast track would provide advantages in terms of timing which we'll see in the next slide.

But lastly, and as a footnote to the slide there, we are considering as part of the CPP information requirements fast track whether clarification is needed about which IMs apply to a CPP application which has actually been prepared and submitted during the IM review process itself, and if so whether an IM amendment is the most effective way of doing that.

So, just to be clear that this indicative timetable is for the CPP information requirements proposed changes and not the alignment of the DPP/CPP WACC which John talked about in the prior session. The timeframes for that fast track differ and the changes to CPP information requirements are to be completed more quickly.

We're keen to ensure that these relatively simple but effective changes applying to the CPP information requirements are made in time to be applied by any supplier who is contemplating submitting a CPP application in 2016 or later. The timeframes we envisage working to are set out up there.

An amended notice of intention NOI and process update paper to go out 6 August 2015, next week; submissions from interested persons due on 25 September 2015; cross-submissions due on 2nd of October; then a

final decision on any IM amendments expected around about 9 November.

The timeframes for anticipated completion are aimed at ensuring that they will be completed and reintegrated back into the overall IM review process before we release our draft decision on the overall IM review in mid Q2 2016.

As indicated there, further details of the scope and timing applying to the CPP fast track will be provided in an amended NOI and an accompanying process paper due out next week. I would now like to invite the first speaker for those who have had direct experience of the Orion CPP, Dennis Jones for Orion

DENNIS JONES: Hopefully I'll manage to get through this without having to disappear into a coughing fit somewhere but we'll see how we go.

This was the first CPP application and it was the first for us of course and the Commission, and unfortunately it was the result of a catastrophic event and as such it was never really going to be a simple exercise. However, having said that, it probably stress tested the rules and the processes as much as they're ever likely to be stressed, and us.

So, I'm just going to touch on a few issues today. It's verification, customer consultation, information required, and the CPP after, following a catastrophic event.

Now, I'm not going to go through all this lot but basically that's a CPP application timeline. We actually had two years from the event to apply for the CPP. The first year was actually taken up dealing with the immediate network issues and trying to actually get the system back up and running.

Right from the start, however, we considered that CPP wasn't appropriate following a catastrophic event

and we actually spent a considerable amount of time trying to organise an order in Council with the CERA legislation and this was in agreement with the Commerce Commission and we were working through MBIE. Unfortunately that wasn't to be in the end, the Minister decided that there was sufficient provisions under the CPP for us to apply in that way.

So, one of the problems you've got is the expected effect on revenues can't actually be determined until you get the WACC number, and that's published 30th of September. So, before you can actually go out and do consumer consultation and finish your modelling etc, you're really in October, and as you'll see from this you end up, once you've got your consultation material, Board reviews, you've got to liaise with the verifier and the verifier had an extremely short timeframe to actually commence the review.

And, the other slight problem you've got is consultation has to be finished 40 working days before you actually put the application in. Now, that's not as simple as it sounds either because from the 24th of December to I think the 15th of January is actually classed as working days under the Act. So, that takes quite a considerable chunk out and you actually find you've got somewhere around 37 working days to finalise your price path and carry out your consultation, and we think that's just far too tight.

Consultation could have started earlier if we weren't constrained by the requirement to quantify the actual CPP price path. That is, we didn't need the WACC at that time, and we also think verification shouldn't need to wait until the final proposal is ready, and we've got ideas on how you can get round that.

The verifier. The engagement process was quite onerous. Preparing an RFP, interviewing, selecting,

developing and agreeing the tripartite deed for the verifier took quite a considerable amount of time, and we actually think there's a relatively simple solution there, that we develop a standard deed that could be included as an IM.

There's a limited pool of verifiers out there and at the time we were looking, the verifiers' familiarity with the CPP IMs was relatively limited, and I think unless we get a lot more CPPs it's going to carry on being that way.

However, a more significant issue was the limited verifier involvement after the application was submitted. The information that the verifiers gathered and the explanations that are given basically risk being lost, required an awful lot of duplication and repetition from our engineers. So, we had quite considerable interaction with the verifier and going through various processes and explaining that which after the event we then replicated with the Commission.

The IMs require the verifier to have the full proposal before it can start to verify. That immediately compresses an already very short timeframe, introduces unnecessary time delays and we're not sure the verifier does need to have the entire proposal. There's a large amount of information for the verifier to review. It could be simplified if the verifier focused on the topics directly relevant to capital expenditure objective. We're not sure whether the verifier does need to opine on alternative depreciation or consider the price path or consider insurance issues.

The verifier however does have value we think. It ensures that proposals are robust and meets the IMs, and if a proposal is non-compliant then you've got possible time delays or rejection of the proposal, and we're talking potentially considerable time delays. Once you

put the application, there's a 40 working day window for the Commission to consider whether the proposal is compliant. If it's not then, or they can ask for a 30 day extension, if it's not compliant then you've got another 40 working days to make it compliant, that can be extended by another 30 days. Quite soon you can be a long long way down the track.

Verifier is actually well positioned to advise the Commission post the application. They've done an awful lot of work in reading the proposal and understanding it, and we think that would avoid unnecessary duplication of explanation. We also think that the verifier's and the independent engineer's roles could be combined.

Consumer consultation. There's been quite a bit said about consumer consultation. IM 5.5.1 actually is a requirement to notify. 5.5.1 is focused on the consultation process rather than the content. The expected effect on revenue cannot be determined until after the WACC is published, and as we've said previously, this seriously constrains the time available and therefore you don't actually have an ability to test options as has been suggested.

Consultation could start earlier if it wasn't constrained by the requirement to quantify the CPP price path.

The Commission's draft decision noted that we could have explained to our customers that we could have chosen a lower opex and capex by deferring expenditure till later years, that we didn't explain to consumers what impact on the service level that would have and the price that they might have to pay, and they considered that that sort of information would have enabled consumers to better, give better feedback and demonstrate their support of the proposal.

However, the Commission also noted the input methodologies did not require customised price path applicants to undertake consultation in that way and we think this is a considerable problem. If the Commission's got one idea of what consultation means and we've got quite a different idea of what consultation means, we've got to get a lot more clarity on this.

It certainly suggests that the IM needs modifying we think to provide more clarity and the Commission needs to have due regard to the consultation that is carried out and the circumstances under which they're carried out in.

Key information. Key information is lost, basically it was lost in the bulk of the proposal. The IMs required Orion to provide far more information than we considered necessary for the application. There was lots of duplication of material and a lot of the material required was actually, we considered quite trivial. There is information in other sources such as the AMP that had to be basically repeated in the proposal, so we took a long time actually copying stuff straight out of the AMP and putting it into the proposal which really wasn't that conducive to getting the process completed quickly.

The schedule E templates, they're very prescriptive and we have a problem that recasting our information to those templates and also into the proposal, the actual content of the proposal was actually quite onerous and difficult.

The other one slight issue we had, the IMs asked for information in nominal dollars but immediately the verifier and the Commission wanted everything in real terms so we had to go round and start working both out.

If we'd had that requirement that was in both from the start, that would have speeded things up.

The actual models that we produced, they provide significant information such as inputs, calculations, outputs, and that information we think that's contained in the model shouldn't have to be replicated in the proposal document, it's already there, there's no need to duplicate it. Schedule D we felt is poorly drafted, it's representative and it doesn't target the key information, and that we think implies significant compliance cost.

When the Commission requires ten additional projects, not sure if anybody knows but the verifier has to look at basically ten projects, top five capex projects and top five opex projects by cost and two other projects. It will then choose basically another ten projects that they want to look at from a list that's provided to them. Unfortunately you don't know which ten they're going to choose so you actually have to produce, comprehensively document all these projects against the IMs and those 77 projects, actually they were a combination of an awful lot more of our small projects, we actually combined them to try and make a manageable number of projects because much of the work we do isn't actually classified in this way by a project and we just had to make this up for the purpose of the CPP.

Our view of the core information which is relevant to the proposal, where the application is being made; an AMP, and that should include sufficient project and programming information; the price path models, they should be consistent with the IMs, and plus the project and programme spreadsheet schedules; there needs to be a quality proposal and that probably will need to include models as well; customer consultation, I'm quite happy with customer consultation but we do need the scope, we would like the scope to be clear and we think it's

probably worthwhile if it's been previously set out and agreed between the applicant and the Commission just what's required.

CPP following a catastrophic event. We still don't believe the CPP was appropriate to our situation. The pressure it placed on the staff who at the time were critical to the earthquake response and recovery, which is still ongoing, it just tied up an awful lot of their time and they were already stressed as it was.

There's tremendous uncertainty in that situation about the actual medium and long-term demand expenditure and the service requirements and the resourcing network performance - the two year window is probably too short under those circumstances, however you still do need to do something within those two years, it's just maybe not the CPP, and we also thought there was too much focus on elements that were not impacted by the event.

Someone mentioned I think earlier this morning the IMs have been changed and now provide a DPP can be reopened following a catastrophic event. We actually think this can be useful and may well have been one of the ways, or we would have seriously looked at that. However, we do feel a DPP reopener would need to acknowledge the impacts on performance against DPP quality standards and basically avoid the unknown consequences of a DPP quality breach. It would need to provide price path relief for immediate consequences especially around anticipated opex and capex, and it would need to use a far simpler and more cost effective process than the CPP.

It should allow suppliers to reach the next DPP reset and then consider their position once the price forecasts for the next regulatory period are known, it may well be actually two regulatory periods that you

have to go before you actually get to the stage where you consider that you would actually go for a CPP.

That's basically as much as I want to say at the moment, thank you.

SIMON COPLAND: Thanks, Dennis. You did well to get through all that. I would now like to invite Geoff Brown from Geoff Brown & Associates Ltd and I think getting an insight from the verifier would be invaluable in terms of someone who was actually hands on in that role. So, Geoff.

GEOFF BROWN: Thank you, Simon. Good morning everybody, a lot of what I was going to say has already been said by Dennis, thank you Dennis, so I'll try and not repeat what's already been said too much.

The first problem that we encountered was that there was nothing in the IM that specified what the main purpose of the verification was, and this was a problem for us because our perception, and it may not have been the reality but was that Orion and the Commission both had different takes on this.

Orion was looking for confirmation that all key issues had adequately been addressed in its application. It saw our draft report as being critical, it wanted the issues that we raised in the draft report to be the issues that were going to concern the Commission in its review, and that gave it a chance to modify its CPP proposal to take account of this and to submit a final proposal that better met the requirements of the Commission. But at the same time it didn't want us to prematurely disclose the contents of that proposal to the Commission. It regarded this information as confidential until the submission was given to the Commission and made available to the public.

The Commission on the other hand wanted to test or as we saw it, it wanted to test the integrity of the

proposal and it wanted us to identify any attempt to "game" the regulator.

In this context it had two main concerns. It emphasised that we had to provide a report - that it didn't want us to provide a report I'm sorry, that rubber-stamped - it was clear to us, didn't tell us this, it was clear to us it didn't want us to provide a report that rubber-stamped Orion's application and because of this it was wary of the manner in which we communicated with Orion during the process of the review. It didn't want us to start talking informally to Orion in a way that they couldn't monitor so that we ended up with Orion actually persuading us that it had to go, there was nothing wrong with this application and that we gave the Commission a report that basically rubber-stamped what they wanted to say. I think the Commission saw this as a major risk with the verification process.

The Commission was also concerned about not following due process because they thought that there was a possibility that this could have derailed the whole review in the event of an appeal.

The Commission also would have liked to have had some advanced notice of what was going to be in the proposal so that they could have planned their review around the likely contents of what was going to come in. But of course given the fact that this information was confidential, we couldn't tell them that.

So, one of the big constraints we had from all of this was we couldn't talk freely to either Orion or the Commission during the process. We had to be very careful about what we said to whom and that was a major issue. It was very difficult for us to go down and talk to Orion, sit down and talk to Orion in a workshop sort of a setting to try and better understand what they were

doing because the Commission had concerns, well it appeared to us the Commission would have had concerns if we had done that.

Dennis has already mentioned that the verification timeframe was a problem. It was a real issue for us and it wasn't helped by the fact that one of the members of the verification team had a heart attack three days into the project and was taken out from there. Fortunately he's still alive.

We received the CPP application on the 16th of November and submitted our draft verification report on the 31st of December, effectively it was completed by Christmas and we were given some time just to tidy it up and make sure that it was presentable.

In order to mitigate the time pressure we agreed with the Commission that Orion could submit some information, primarily policies and procedures, at the beginning of November before it actually submitted its application, but we found this difficult to review in a meaningful way without the complete application, and I know Dennis feels that we don't need the application. It's very difficult to sort of review everything out of context, that was a problem for us. So, that pre submission in the event wasn't as helpful as we thought it would be.

Time was of the essence. Dennis has mentioned that they had a two year timeframe by which the submission had to be, their proposal had to be submitted. We weren't able to go back to Orion and say, hey, we need more time, can we have more time because we can't do it in the time that was available.

The draft report that we finally submitted was basically a shell of what we had, would have liked to submit. There were a lot of gaps. What we effectively did was identified what we thought were the key issues

and focused on them. In one instance I think there was a significant issue that we raised in the final report which wasn't identified in the draft report and this was a bit of an embarrassment for us, but we did use the draft report as a vehicle for getting more information from Orion. We embedded questions into that draft report as comments, and that enabled Orion to interpret those questions in the context of what we were trying to do and given us more meaningful answers.

The Commission had a requirement that all our conclusions in the verification report were supported by a verifiable paper trail. So, following our initial visit to sort of get a preliminary overview of the application from Orion, all substantive communications from then on were in writing and in the event all project files, including our draft report and I believe the draft proposal, were submitted to the Commission as part of the verification record.

This was because the requirements of the IM for us to include in the verification document any information that was not in the proposal but that we had relied on and that had been provided to us by Orion, that had to be included in the report, and also other information that wasn't provided by Orion but we relied on in reaching our conclusions also had to be identified in the report, and from our perspective this was not very practical.

The information requirements in the IM. Dennis has already talked about the forecast templates so I won't talk about that any more. The requirement to talk about, or for them to identify service measures and service levels in relation to service categories that had been identified in the IM, added another level of complexity to the information disclosure information for which Orion had records and they also had to provide

expenditure forecasts disaggregated by these service categories which really would have had to have been developed especially for the proposal, because they weren't actually categories that Orion used in the normal course of its business.

We found these to be of little value. It was difficult to formulate the relationship between the service measures that they were wanting to achieve and the required expenditure, and the other problem we had with the templates in respect of those service categories, that there was no provision for the inclusion of current period costs, and we need to as part of our review identify differences, the impact of differences, what they're planning to spend in the forecast from what they've spent in the past. So, that was an issue. But because we had been asked by the Commission to make sure we had covered everything, they wanted to be able to look at our report and look at the IM and make sure that everything had been covered, we couldn't just put this aside and say, it's no use and we just wouldn't take it further, so we had to at least try.

A few closing comments. We found it very difficult to fully reconcile the expectations of Orion and the Commission as to what the verification was supposed to achieve. I don't think that they're irreconcilable but it would be helpful if more thought was given to this and in the IM so that both parties have a better feel for the implications on the project, because it certainly impacted the way we could communicate both with the Commission and with Orion.

I've already said that the timeframe was tight and couldn't be extended.

We had to interpret the IM requirements in the context of a catastrophic event as best we could. In

noting that, the requirements are actually not written primarily with a catastrophic event in mind. The Commission would have liked us to have gone back to them when there was an issue for clarification but there was two problems with this from our perspective.

One is that they would probably have referred it to their legal section and come back a week later with a considered response, and that was just too late as far as we were concerned. The other was to do it properly we would have had to divulge confidential information that Orion at that stage wanted, considered was not for the Commission to see.

We got round this by treating the verification as a standard regulatory expenditure review. We've done a few of those, but of course we had the additional constraints of meeting the IM requirements, and I just reiterate as a final comment Dennis' point about the need to review 22 projects.

There's a lot of work, not so much in reviewing these projects but they all had to be written up and included in the report, and that was a time-consuming exercise, and certainly if the number of projects had been reduced, then the cost of the verification would have been lower.

From our point of view what's most important is we test the reasonableness of the assumptions and the robustness of the forecasting methodology, and generally speaking if they get both of those right you'll find that there won't be too much wrong with a DPP proposal. Thank you.

SIMON COPLAND: Thanks, Geoff. That was great to hear those detailed insights on the part of the verifier. I would now like to introduce Bill Heaps, Managing Director of Strata Energy Consulting, also a face that will be familiar to a lot of people in this room.

BILL HEAPS: Thanks, Simon. Well, I suppose we were at the tail end of the process as well, so Geoff has mentioned about the verifier at the time he came in, we came in with the Commission as the adviser when the verifier's report had come through, fortunately we were also involved right at the beginning in 2010 when the IMs were put together.

What I would like to do is put our experience of the CPP around CPP against what the expectation was. My perception of the expectation, what that was when the IMs were first discussed in 2010.

So, I'm going to cover the CPP and other regulators' approaches to expenditure and how they assess them. So, we've also got experience quite a bit of the detail now in the Australia regulatory area, and also how the CPP was intended, the review was intended to work; and then the Orion experience.

So, these are slides that I pulled out from 2010. They've actually been used in Australia and up in Singapore as well, getting us to describe these sort of reviews, very much as Geoff's just described, sort of top-down focus. So, the Commission was taking and intending to take a position relatively at a Board type level, a Board and executive level, on quality of governance, management information. So, that included the policy strategies, procedures that deliver services, and also take into account services demanded by customers, so the whole customer engagement framework.

Then of course there's all the bottom up information that comes through to develop the expenditure plans. So, in establishing and assessing the governance frameworks and the asset management policies and processes, basically the way that the expenditure proposals are intended to be put together. The Commission also said that they needed to assess

whether those policies and strategies had actually been implemented in practice, and so to do that they needed to do a sampled approach of the different projects coming through and the data and the information that had been relied upon to produce the expenditure plans.

In introducing the verifier it was considered that that would be a front-loaded, that was the expression that was used at the time, a front-loaded review. So, the verifier would be close to the business when they were putting the proposals together, that was the initial intention, not right at the end, and that the verifier would also inform the Commission and take into account the Commission's needs as the verification process went through.

So, the verifier would initially do the front-loading at the qualitative, governance and management level, assessing the processes and procedures, and then the Commission's review would look at areas of interest that the verifier had identified and also do a more detailed review if necessary of the information, the data and the way the proposal had been put together.

So, interestingly, the way that the information requirement, the IMs were put together, took into account in quite a lot of detail the regulatory information requirements over in Australia under the National Energy Regulations there.

So, they basically took into account the RIN, in fact a lot of requirements in the IMs were actually based on the RIN in the structure but it was actually reduced quite a bit at the time, so it wasn't a full Australian RIN, it was based on a lot of requirements and they were taken into account. And the Australian Energy Regulator has been applying the same

approach for electricity distribution businesses in the east of Australia where they operate under the NER.

There is a difference now that the Australian Energy Regulator operates under and that is that they can use benchmarking, and there is much more onerous consumer engagement requirements under the NER, and that's allowing the Australian energy regulator to rather consider the whole of the business approach, they can still do that, taking all this information that comes through, but what they can do is identify focus areas much more easily against benchmarking and then seek information and justification for the business for anywhere where the expenditure proposals step outside of those.

So, of course the Commission hasn't got that opportunity under the IMs to use the benchmarking of those approaches. So, that's really the only difference in the AER approach. However, in terms of quantity of information provided, of course there are, say in Queensland there are two distributors whereas in New Zealand there are 29. So, I think you can see how much more onerous it would be on the smaller distributors in New Zealand than the two large ones in Australia, but that's the shape of the industry more than the expenditure, the total expenditure for the state or the country.

So, just to summarise that. CPP proposals were subjected to a pre submission independent verification by a pre assessment verifier. The post submission assessment was to be done by the Commission. So there was an intended two-stage assessment. The initial focus was to be on qualitative aspects, so the policies and the procedures and the strategies, and then qualitative and quantitative information would assist to determine whether the EDB was actually applying its strategies,

policies etc in practice, and enhanced scrutiny will be placed on more material projects and programmes.

This is a slide from 2010, it's not one I've just made. When I look back to what we were engaged in with the Commission, actually followed this process. So we came in when the Commission wanted to identify focus areas for its review, Geoff's report, the verifier's report was taken into account and Geoff had identified focus areas in there.

When the Commission went through the proposal and we advised them, we found areas that required more explanation, and that's when the whole Commission process and engagement with Orion took place.

So, I think from a process point of view the Commission actually followed the steps that were intended but we've now got to take into account, and I think my sort of takings from the Orion CPP review process very much align with Dennis' and with Geoff's.

So, the proposal, the first CPP wasn't expected to be a post-earthquake recovery and rebuild, and all the issues that that sort of creates around the environment, the stress, the complexity, the urgency and all of those sort of things, but hey, it was.

The Orion proposal, you've got to say the stress they were under, with the resources, was extremely impressive. It was a huge achievement, and it was 2,000 pages, the proposal, I think that included Geoff's report maybe, and then a whole lot more information. So, it was extensive information that was produced.

The verifier, as Geoff just said, was engaged quite late in the proposal which was sort of different from my expectation back in 2010 I think when we were working with the Commission, that it was going to be much longer parallel process but you didn't have that opportunity,

Geoff, and it was extremely compact for such a very complex CPP proposal.

Some of the key issues, could have been developed further. The likes with the subtransmission was one definite area the Commission got into and found more issues in there, but again Geoff's timeframe was pretty compacted so that meant the Commission had to do quite a bit more analysis on its own.

So, the key lessons that I took out of it was that there needs to be closer engagement of the verifier on approach and Commission's objectives, I think that's been discussed and seen how we can achieve that.

I think there needs to be a very rigorous top down challenge that should be used by the business prior to submission, and again, that might be a timeframe issue and this is a lesson that the Australian distributors are learning as well, it has to be a rigorous top-down challenge so that the proposal is actually what is needed and can be fully explained to the Commission, and that the proposal should focus on the reasons and supporting evidence. So, I think again this comes down to the information requirements that the IMs may well be too detailed, too specific, not have sufficient context around them that's actually guiding the business and the verifier and the Commission in how they should be applied in practice, and I think that sort of context would be extremely useful rather than just an enormous legal document to rely on.

SIMON COPLAND: Thanks to Dennis, Geoff and Bill for those presentations as parties that experienced the process first hand, if you like. What I'll do now is just a quick summary of our written feedback we got from the parties and then I'll invite Lynne up after that.

We asked for feedback from interested parties just after we completed the Orion CPP. We wanted to know

what worked well in the process, what could be improved, and how those improvements could be made. We got some very considered and very detailed feedback from a range of interested persons and a list of those who contributed is shown up there and it included the ENA, Genesis, Powerco, Vector, and actually an individual consumer in Christchurch.

The Commission also spoke with Orion and its advisors in detail to understand how the process was experienced by them.

All the feedback is summarised on our website where the individual feedback documents are contained.

I think there's several speakers who have emphasised the particular context for the Orion CPP should be borne in mind, and this was also noted by some of the submitters, most of the submitters actually in the feedback we received. Most obvious point is that the CPP was made in response to a catastrophic even, the Canterbury earthquakes 2010/11.

Orion were placed in a very difficult situation given how significantly the region was affected and this included of course Orion's own staff. We though Orion did a very good job in extremely trying circumstances. It was also the case, however, I think as Dennis mentioned, that the Orion CPP application was the first one of its kind we had received under the amended Part 4 of the Commerce Act, and that brought with it challenges. Just because no-one had seen the whole process through before, and I think Dennis might have referred to an example of stress testing the regime.

The proposal involved an application document, a main body around 600 pages, plus technical appendices which, as Bill mentioned, took it to about 2,000 pages in total. It had consumers' consultation, verification, directors certification, and audit and did include a

reasonably complex financial model which contained a lot of data, including detailed asset-related figures.

And the timeframe we were working with centred around an application which was lodged in February 2013. Following completeness checking, we issued an issues paper in May 2013 and then a draft decision in August and then a final decision in November which took account of submitters' views we had received.

I was involved personally with the financial modelling side of things but I got to observe a number of other aspects of the process as well, and I should also note that the Orion CPP involved a number of IM variations which are permitted after the application is assessed for completeness with the agreement of the applicant.

So, the comments on the overall process we received were that the CPP process should be simplified to reduce the time and cost involved for suppliers and to avoid creating barriers for potential applicants, and that's of course what we've been discussing today.

Submitters suggested a reopener to a DPP may be a more suitable mechanism than a CPP to provide a temporary response to a catastrophic event, and we can note here this is something that actually already has been implemented as part of a package of IM changes made prior to the most recent DPP reset in 2014.

Another area we had feedback on was the pre-engagement with consumers and the Commission. As I've mentioned, it was noted that the timeframes were challenging. In Orion's case the comment was also made that the nature and extent of the consultation required needs to be clarified, particularly in respect of presenting the impact of alternative options to consumers, it can be a fraught area.

The point was made that engagement with consumers was a key part of the development of the CPP proposal and having flexibility in the types of mechanisms able to be used by applicants is something that should be encouraged. It was also thought that engagement with the Commission during the pre-application period should be continued and the sorts of things that could be done would be to clarify the interpretation of IMs, clarify the expectations of the CPP process and information requirements, and also possibly to discuss at an early stage input methodology variations, and it was also suggested that feedback provided by the Commission on draft proposals would be helpful.

On the CPP application itself the comments were that the volume of information required should be reduced, the way that information is required should be better aligned to existing EDB business practices. It was said that the IM requirements are too detailed and rigid for a catastrophic event and that audit requirements would need to focus on areas where an audit can add most value, such as confirmation of historic information and also consistency with the price path IMs.

When it came to the use of a verifier, and we've heard some experience there, it was suggested that a decision should be made as to whether to retain the formal requirement to engage a verifier under a tripartite arrangement with the Commission. If a verifier was required, then the expectations around how the verifier will be used and the Commission's own assessment of the CPP would need to be clarified. It was commented that the processes for selecting and approving verifiers could be streamlined. I think that's a topic that's just come up and the verifier's

terms of reference could be better targeted as to areas reviewed and objectives.

It was suggested that the potential overlap between the verifier and the independent engineer should be removed and you could possibly integrate the review of the proposed quality standards in the expenditure plan.

And then lastly there should be some relaxation of the timing constraints around the verifier's review, again a topic we heard about just now.

When it came to our approach to expenditure and valuation, the point was made by submitters that any new interpretations of IMs, or the development of new policy, should ideally be taken through a consultative process and not done at the time the application is being considered, and it was thought also that workshops should continue to be used where possible to test the proposal during the assessment verification phase.

On the financial models, a number of submitters noted that Orion's CPP model was difficult to engage with due to its large size and its PDF format but it was suggested that the Commission should publish a standard model which is comparable to the model used for setting the DPP. We actually did publish a standard model as part of the final decision but the point remains about it being comparable to the DPP I think.

When it came to our approach to expenditure evaluation, our use of expert advisors - should include all the necessary context for the experts and could even be prepared through a consultative process to ensure that the applicant's views will be understood by the experts.

Then lastly under that heading, there is a tension between the short-term and long-term outcomes when assessing a CPP proposal against the purpose of Part 4, and it was suggested that the CPP assessment criteria

needs to be carefully considered and documented as part of retaining the expert advice.

For our consultation with interested persons, submitters said there were a number of opportunities for them to contribute via consultation and the consultation material we produced was generally comprehensive and useful. However, a submitter commented that the questions posed by the Commission during the consultation, such as those in the issues paper, should be as neutral as possible and fairly represent the proposal.

It was acknowledged that the Commission made itself readily available to interested persons, for example, as part of the briefings in Christchurch and via the teleconferences we held at the time the draft and final decisions were announced.

Then lastly when it came to the suitability of the actual IMs themselves some submitters already had some suggestions for changes which were to reduce the level of disaggregation required for forecasting, RAB and tax allowance components. Undertake a comprehensive review of Schedules D and E relating to information provision to remove unnecessary repetition, inconsistencies, and to improve clarity, and review Schedule F to improve the process for engaging the verifier.

Then lastly including the additional costs associated with making a CPP application, could be something that's considered and that could be done by including new categories of recoverable costs such as costs of consumer consultation, costs of developing a financial model, and consultant reports and project management.

Then to finish with I would just like to make the point, the fast tracking our consideration of those certain proposed changes to CPP requirements to improve

certainty and reduce compliance costs will also address a number of the specific concerns that we've just heard about, and I have to reiterate that it's not going to be a line-by-line review of the requirements but it can potentially address current perceived difficulties with the form and requirements of the application itself, and there it might be able to address things as obviously reducing the volume of material, ensuring a better alignment with the existing information systems of the applicant, and possibly a better targeting of audit verification requirements.

Thank you, I would just now like to hand over to Lynne who can speak on behalf of ENA.

LYNNE TAYLOR: Thanks, Simon. I think it's really important for the effective operation of Part 4 for those businesses that are subject to price quality regulation, that the CPP is a real alternative and a real option for them, and I think that's what we're trying to get to the heart of in the session today, is to make sure and consider whether or not there are opportunities in this IM review to change the CPP IMs to improve that outcome and improve that accessibility to the CPP option for a number of businesses. And, I think all the points that have been raised this morning go to the heart of that and they're all really valuable suggestions and observations largely from Orion's experience that might help us get there.

The ENA has spent quite a lot of time considering and observing the Orion process and last year made a very comprehensive submission on suggestions for how the IMs could change to try and achieve those outcomes, so I don't have the time to go through it all today and a number of the points have already been said but the ENA has already gone on record on a lot of these issues.

I do want to very quickly work through some key points around the pre application process, the information to be included in the application, what happens after the CPP has been submitted, and finally just some tiny points on complexity and compliance costs.

So, I think there are options to improve the IMs in order to improve the quality of the CPP applications themselves. Obviously eliminate unnecessary costs and complexity and reduce uncertainty, and Dennis has already pointed out some of the constraints that exist in that pre application process that are in the IMs and therefore must be complied with and do constrain at what point you are able to embark on consultation, embark on verification, embark on audit etc. So, if some of those constraints could be removed, then there would be more time to adequately work your way through those audit verification etc processes and at the end of the day come out with a higher quality proposal potentially than is currently possible given those constraints.

Geoff I think has raised some really important issues around the role of the verifier in that pre application period and there's a real need for the verifier to be able to adequately balance their obligations to the applicant and their obligations to the Commission, and I think what Geoff highlighted to us today is that that was almost an impossible task for him and therefore we need to go back and revisit how that works and what the expectations are prior to the application, but I think importantly from the applicant's point of view the knowledge that the verifier learns during that verification process is important and it's relevant and it should be able to be factored into the post application review process as well, otherwise there's just new cost incurred by

getting someone else across all the material that the verifier has learned and understood before the application is made. So, therefore, we would promote retaining the verifier through that post application process.

Consultation is another topic which has been mentioned and I think one of the things perhaps that we do need to consider is the potential overlap in the consultation that the applicant might undertake before it submits its CPP proposal, and then the consultation that the Commission chooses to undertake after the CPP proposal has been submitted, and I think in our conversations about how we clarify what's required before the application is made, we need to be very careful to also think about what the Commission might do after the application is on the table.

And, we haven't talked much yet this morning about the DPP counterfactuals. This is a really important component of the pre application phase for an applicant, is understanding what the counterfactual is for them if they remain on the DPP, and there's certain aspects of the way these two mechanisms work which means you don't really know what your counterfactual is, and WACC is one of them but also there's a lot of discretion and uncertainty about what happens at the end of a CPP, what price path you roll on to and what quality standards will apply, and also it's likely a CPP will run across more than one DPP regulatory period and you may not know, you won't know what that DPP would be when you're trying to assess whether or not to go ahead with your CPP.

So, I think we just need to be mindful of that and that was a big issue for Orion particularly given their timing because their CPP actually applies for one year in the current DPP regulatory period and then four years

in the next DPP regulatory period and they didn't know what that was going to look like at the time.

In terms of information to be included in the CPP application, I think the IMs are too prescriptive and they do require businesses to juggle their information around to meet a set of very prescriptive and specific information requirements. I just think it's unhelpful. It actually complicated the proposal because Orion, as Dennis demonstrated, had to present their information in a way that wasn't consistent with the way the information was retained within the business and that made the explanations and the defence of the proposal far more complicated than it needed to be just because of this need to re-specify the information into a prescribed format.

So, I think we can really cut through that quite easily and my suggestion is that the CPP proposal simply includes these ten items and to enable the emphasis to be on the core reasons for the proposal, why it meets the Commission's evaluation criteria, the price path proposal which is embodied in the detailed model with sufficient information about how the data was, how the model was populated, the forecasting method and the underlying assumptions in it, obviously detailed information about expenditure, actual and forecast at the project programme level, and then rely on the asset management plan which is a feature of our regime in New Zealand, a little different to the Australian examples that Bill was talking about before, we already have an asset management plan, disclosure requirement that has comprehensive disclosure requirements in it. I think the applicant should be able to base their asset management plan explanation around that document and supplement it with additional information as required rather than having to take the AMP and pull it apart and

put it back together into a CPP format. Obviously the consultation piece is important and I do think the verification and audit components are appropriate as well.

The post application process is sort of interesting from an IM perspective. The IMs are very light on what happens after the application has been submitted. There's a set of criteria that the submission must use when it assesses the proposal. There are some things in the Act about the timeframes but apart from that there's very little in the IMs about after the application has been submitted, then what happens next, and some things emerged during the assessment of Orion's proposal that someone had to deal with on the hoof, if you like.

An example is information changes during that period and so should the proposal be changed to reflect things that are emerging over the assessment period? Some of these observations were made in the ENA submission around sort of how to articulate a complex proposal through a consultation phase, it's actually quite hard. There was comments around use of expert reports that were used during that assessment phase and transparency around what the terms of reference for those were and making sure that all of the communication during that assessment phase was appropriately balanced and weighted across the entire proposal.

Top down assessment, Bill has talked about top down assessment. I'm a little bit cynical of this, I think you start at top down assessment and you inevitably end up at bottom up, so I think we just need to be honest about that and not kid ourselves that top down will be sufficient, and, as I say, the information evolves during the assessment period.

Finally, complexity and compliance. There's a lot of this in the submission. Simon has touched on it.

There are errors and ambiguities in the IMs that we did have to work with the Commission and work a way around some of the problems in the templates etc, they do need to be resolved. Some inconsistency at the moment between what businesses have to disclose in information disclosure and what they have to disclose in CPPs. That's unhelpful and I do think it's timely there is a comprehensive review of all of the key schedules in the IMs and this is the time to do it. Thank you.

SIMON COPLAND: Right, thanks very much, Lynne. There's a lot of information being conveyed in a short amount of time but our last speaker today is Ollie Vincent who is or was the acting regulatory manager for Powerco but over to you Ollie.

OLIVER VINCENT: Thank you, Simon. So, as said today already by fellow presenters that this topic has already been discussed heavily, got a lot of information on it and out of the nine topics presented in the problem definition paper, it's quite clear that we're more closer to the solution space and we are still trying to define a problem. There's a clear problem and now we can start to move forward and address it, hence why it's suitable for the fast track process.

In general we support the conclusions that we've heard so far from the presenters around what is causing the complexities and what is causing the costs, and so rather than focus on these in detail we'll try and focus on the learnings to date that we've had looking at requirements of the CPP process and application.

So, as we've heard, the current CPP IM rules do not strike an appropriate balance between the cost effectiveness and the information complexity and the need to provide sufficient material for the verification and assessment purposes.

What this really means is that barriers exist to the CPPs to make them a viable alternative to DPPs and this is what Powerco is looking at and this would only be emphasised as you looked at smaller EDBs. We would like to emphasise the point that John Groot made earlier, around it's not materially broken, this is just simply a case of fine-tuning and streamlining the existing process to make it more user-friendly and applicable to the process.

So, the key drivers as we see them are the levels of prescription in the information requirements, the scope of verification requirements and the lack of flexibility to tailor materials to EDB circumstances, and these are all the three points that both Orion and Lynne has touched on.

So, the problem definition paper, as we've said, is pretty much narrowed down to the points quite clearly in respect of the customer consultation requirements, role of the verifier, information requirements financial model and process timings. From these we can see where we're positioning at the moment, in the complex and high costs area of this matrix rather than the flexible and tailored and low cost that would make it more of a process that's going to be picked up and a viable option to DPP for all distributors.

The challenge is that Powerco have experienced, as we've looked into this process further and started to understand what the requirements are for us for the application, exist around the resourcing, the amount of man hours that need to go into developing an application, the timing, that's internal decision-making about how shall we allocate the resourcing, the timing we need to deliver things out, and when is the best time to go for a CPP and the interpretation of the requirements. So, again sitting down and coming up with

consensus and agreement on what the requirements are, and these are all factors that are positioning the process currently in the more complex and therefore high cost area.

A lot of the points I think have been touched on around the service categories that are necessary for the information, how it's disaggregated.

Terminology within the rules themselves, the requirements whether to use all instead of either relevant material. Just little wording issues like this are what adds a huge amount of extra work potentially to an application and a lot of actual time, and these are the kinds of issues that we would like to look at without going through a line-by-line review but can be solved and make the application easier and a more cost effective process.

So, the aim of the fast track, and I should probably note that this isn't just so much the fast track but the full review process, is to amend the CPPs so mechanism can be used effectively and efficiently by suppliers. So, this isn't just about the fast track but this is about the subsequent full IM review, as trying to achieve the same goal and that is to reduce the complexity and costs of the process based on the learnings we've had so far, and best practice.

Suggested aims around streamlining the process without undermining 52A. Ensure the CPP can be assessed effectively, ensure the level of the costs and complexity is appropriate, and we're very conscious that there is a level of information that is needed and is required by the Commission to make an evaluation of an application, but it's just about working for that balance, and I think that's the key, it's understanding what can be provided and what is needed.

I think I see looking at the slides that Simon put up earlier about what he sees falling into the CPP fast track, is interesting, and I think is kind of a really good step in the right direction. I think there's definite points in there that will reduce the complexity and the costs of the process.

I have a note from there that it's very much based around the information at the moment, for someone like Powerco that's heavily involved in the CPP process already we're already down the path of trying to put a lot of information together. So, while it would be helpful, I think there are still other areas such as looking at can the verifier requirements and the audit ones still fall within the fast track process to actually reduce some areas? So, I think further work needs to be done in that space.

So, that's I suppose where we're trying to move to. The ideal fast track out and again the long-term outcome for the process would be to have a more balanced approach for the IMs that sit more flexible and tailored and at low cost.

This always comes down to, well, how is that actually achieved? And, the problem definition paper, solid starting point, I think it clearly outlines it but as usual the devil is in the detail and I think a lot of the issues we've discussed over the last two days are actually about having these further conversations and engaging with the Commission and suppliers to ensure that workable solutions can occur.

We're recommending that a working group is established to refine the scope and test these amendments. Again, the attempting to go through a line-by-line review, very difficult. There are some kind of easy wins out there that have material impact on the cost and complexity, within a few working groups

these could easily come to the surface and the majority we already know about.

The key I think is a flexible approach. That always causes problems to a certain degree when you're looking to move forward with a CPP type application but at the same time it is the key for the low cost approach, and for that to occur I think focus on guidance is key, I think it's one of the key principles in respect of providing the, the Commission providing guidance over a set of fixed rules that don't have the flexibility in them. So, that's the approach that would resolve that.

The introduction of a pre submission process, that's not so much a single conversation but an actual full process in ensuring that both the applicant, the Commissioners, and any other interested parties around the verification and so forth can actually have those conversations upfront so there's a ‘no surprises’ approach going forward.

Removal of information requirements. Again, very much a tidy-up exercise, a low cost to achieve, and logical, and many of these changes can be achieved through the fast track process and obviously these are discussions we'll have going forward. So yes, that's the summary from our perspective, thank you.

SIMON COPLAND: Thanks, Ollie. I'll now open the session to questions. We're a little bit compressed on time. I'm told that the room will be re-organised and we'll need a bit of time to do that, Keston can give you that information in a second, but I'm wondering if there is any questions or even comments? It was a lot of information conveyed in a short space of time, I can acknowledge that. Just remind people if they could state their name and organisation and also speak slowly and clearly.

RALPH MATTHES: Thank you, my question is for Oliver. Your slide 4, not too sure if we can bring that back up but basically just while it's coming back up what that slide said was that Powerco would like to move from a high cost sort of - there it is there, high cost application which is quite complex and detailed, and shift down to the left-hand side quadrant which is more flexible and tailored and lower cost to you, but I think that line which slopes downwards from the right-hand side down to the left-hand side is all about your costs. I think there's another line which is the Commission's costs.

Because just take, for example, the Commission getting two flexible and tailored applications in one year. I think that just adds on costs to the Commission. So, there's a balance here I think in terms of you may be taking costs out of your application but the Commission might be picking it up as well, just as a question.

OLIVER VINCENT: Thank you, Ralph. In response to that, not just looking from Powerco's perspective but all EDBs going forward, yes, it would be beneficial to Powerco but the idea would be enable it to be more of an attractive option to all EDBs, but at the same time I think a lot of the information when you start looking into the rules quite thoroughly you understand is of not great value to the Commission. So, a lot of their time is actually being tied up in information that's not either adding value to the application and providing them with any further insights and helping them with their assessment.

So, by moving it into this quadrant, yes, there's an element of flexibility, also could have some impacts around costs, but predominantly you'll find it's going to reduce down the unnecessary assessment of data provided to the Commission.

So, that's why I think it will work out better for all parties.

MEGAN WILLCOX: It's not so much a question but just a comment. As the Commission and stakeholders go through the process of assessing what is the appropriate balance of information to request as part of the initial proposal stage, I think there's two things to keep in mind.

One is that the burden of proof is on the supplier side, and if the supplier doesn't provide enough information on their own accord to the Commission, then they risk that not being approved. So, there's an incentive for the supplier to put up enough information and enough evidence to support their proposal.

On the flip side of it, if the Commission receives a proposal and feels it's not receiving enough information, then there should be an opportunity to use further information gathering powers to work with the business to seek further information, almost like a Q and A type session.

So, maybe if less information goes into the proposal to start with but that can be dealt with later on through a further information request, then maybe that will reduce or help to reduce the initial burden of cost and potentially reduce information being provided that wasn't required in the first place. So, it's really just something to think about.

SIMON COPLAND: Thanks, Megan. Was there a question at the back? Okay, unless anyone else has got any comments Keston would just like to explain what the arrangements are going to be around the lunchtime break. Could I just ask for people to show their appreciation for the panelists, I thought it was a great session. (Applause).

KESTON RUXTON: I guess before we break for lunch I just wanted to thank all the people that have spoken over the last day and a half. I'm aware this now brings to an end the part of our agenda which was involving sectors involved in price quality regulation, although we will as a marketing pitch have some very interesting sessions this afternoon on airports for anyone who wants to stay around.

Thank you very much for attending, I very much enjoyed the conversation this morning, particularly the last session, it brought back to me the realities of something I spent quite a lot of time on a couple of years ago.

Thank you very much to Richard Fletcher about his comments and questions that he raised on the WACC and the DPP and the CPP, and also to Greg Skelton, I think he raised some very good questions about how those two price paths sit together and what the options could be for something sitting between.

So, thank you very much to everyone who is attending and those of you who are leaving, and we will see everyone back at five past 1 this afternoon to start the airport sessions.

For those who are staying, as Simon has mentioned, we will be changing the layout for something added extra between now and this afternoon. It just means that during the lunch break we aren't able to come into this room and it does mean when you leave now you should take your bags and laptops and anything you've brought with you and just deposit it into the next room for the next luncheon period. Thank you very much.

(Adjournment from 12.17 p.m. until 1.08 p.m.)

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JOHN McLAREN: Hello everyone and thank you for coming to the afternoon session of today's forum where the focus is going to shift to airports.

My name is John McLaren and there are three things you should probably know about me before we get started. First, I'm a manager in the Regulation Branch of the Commerce Commission; second, in my role as a manager, I'm responsible for overseeing the information disclosure regime that is applicable to airports; and third, and perhaps most important of all for present purposes, I'm going to be your facilitator for the rest of the day.

So, let me start by saying a warm welcome, haere mai to all of you.

One thing you will have noticed is we've changed the layout especially for the airport session to accommodate a horseshoe formation in place of the stage and lectern that we've had previously. This layout reflects the smaller number of stakeholders in the airport sector and our desire to have everyone sitting around the table as we debate the issue.

We also hope that the layout will make for a more lively and interesting discussion for those watching in the audience.

Rest assured you will have the opportunity to ask questions as various points in the proceedings if you are in the audience, particularly after the break once we all have recharged with afternoon tea.

So, let's turn first to the purpose of this afternoon's session which, like the rest of the forum, is to assist people in preparing a response to the paper we published on the 16th of June. Relative to those that have been before the difference is that the subject matter is going to be airports rather than

energy transportation. So, let's take a look how we can achieve this purpose.

As you can see from the detailed agenda which I've summarised here, we've broken the session into two main parts which are divided by a break at 2.30. Before the break I'll start by providing an overview of the regulatory framework and a summary of our learning from recent regulatory processes; we'll then go around the table to hear from stakeholders on the issues with input methodologies as they see them; and, following on from this, we'll hear from Hamish Groves, seated beside me, who will be providing a perspective on behalf of the Commission on the challenges we face in assessing the profitability of regulated airports.

After the break we'll move from a high level, cruising altitude to take a journey into individual issues. We'll be hearing from stakeholders on subjects that are of most concern to them and each presentation will be followed by a round table discussion in which I'll also be looking to see if anyone in the audience has any questions or comments that they would like to contribute.

Okay, so let me begin by providing a brief overview of the regulatory framework as it applies to airports, as well as our learnings from recent regulatory processes.

As the people assembled around the table will be well aware, information disclosure regulation is the only form of regulation that applies to airports under Part 4 of the Commerce Act and the purpose of information disclosure is to ensure sufficient information is available to interested persons to assess whether the purpose of Part 4 is being met.

As I've represented on the slide, the disclosure regime is very much about putting a magnifying

glass over the airport to allow a transparent assessment of airport performance by anyone that is interested.

Now, to the extent that column inches provide an indication of what the public at large are interested in, this slide provides an illustration of the fact that profitability is one of the areas of performance that provokes significant stakeholder interest.

From my own point of view one of the big advantages of having a disclosure regime is it helps to provide an evidence base for stories of this sort that routinely appear in the media. This evidence base is important because it helps to ensure the debate is better informed, and therefore less prone to hearsay and conjecture.

It's worth saying at this stage, we do not see our role as being about mandating a particular approach to pricing. Rather, it is about ensuring that enough information is available for people to assess airport profitability in the context of the Part 4 purpose.

However, the disclosure regime is about understanding much more than just profitability. In fact, there are six areas of performance that we're interested in, also shown on the slide, covering investment, innovation, pricing, quality, efficiency, and last but not least profitability. Each of these areas of performance is interesting in its own right and appears on the slide because of specific references that appear in the wording of the Part 4 purpose.

The disclosure requirements we developed and determined were designed to provide information to stakeholders about all six of these areas of performance.

So let's take a look at the disclosure requirements in a bit more detail.

These disclosure requirements are underpinned by method methodologies, which affect the way that certain costs are disclosed and assessed.

In particular, as we know, input methodologies promote certainty in relation to cost allocation, asset valuation, cost allocation, the treatment of taxation, and the cost of capital.

These matters all relate to profitability assessments and it is for that reason that the focus today is on input methodologies in the context of the disclosure requirements as they apply to profitability assessments.

At this early stage in the process it's not yet clear whether changes will be required to the input methodologies, the information disclosure requirements, or to both. It is for this reason that we're considering the issues at a conceptual level today in the hope that we'll be able to separate the issues as we proceed further through the process.

Notably, however, one thing that is apparent in the current requirements is that there is currently a backward looking profitability indicator, but there is not currently a forward looking profitability indicator, and I'll return to that point shortly.

But before considering the areas for improvement we're interested in receiving views from stakeholders on what we've learned about profitability assessments from our recent regulatory processes. Therefore I'll provide a brief overview of the timeline of recent regulatory events, I'll explain our take on the lessons learned as they relate to profitability assessments; in light of the lessons learned I'll outline the main issues with the current disclosure requirements, and finally I'll finish with a run through of the secondary set of issues that we have identified.

After covering this material we should be up to speed with the main messages contained in the paper we published on the 16th of June and on which we are very much interested in receiving your comments and contributions.

So, let's look first at the timeline of recent processes in the context of current and future events.

The slide you see before you shows key points from the regulatory calendar broken down into two or three year chunks to highlight the main phases, and I don't intend to go through this timeline in too much detail, mostly because most of you will be very familiar with it, other than to note that if I had more room I would have included a section 2008 to 2012 which is when the input methodologies and information disclosure requirements were initially determined.

So, what appears on this slide is just a summary of everything that has occurred since the regime started, and we're now fast approaching that point in the regulatory cycle the input methodologies are due to be reviewed for the first time.

One thing the Commission has a commitment to is continuous improvement, and it is in this vein that we look to learn lessons from the experiences shown on this slide. So, what did we learn through the process of reporting on airport performance through the reports that we were required to write to the Ministers of Commerce and Transport?

Well, the main learning for me was that an assessment of target profitability is required to assess whether airports are limited in their ability to earn in excessive profits. This is because airports generally set prices for pricing periods that are around five or so years in length, and it is the prices they set, following consultation with airlines, that

determine the limits on the revenue that can be recovered.

How we went about assessing target returns was through an internal rate of return analysis which required information about future cash flows, and opening and closing asset values, which brings me to the problem as we see it with the current disclosure requirements, and by association the input methodologies.

So, the two main issues under the status quo as we've presented them are that there is no forward looking profitability indicator of the type that was so critical in assessing the limits on airport profitability through the section 56G reports, and the backward looking profitability indicator has proven ineffective when airports use approaches that are not consistent with input methodologies but where there appear to be good reasons for adopting alternative approaches.

These issues are outlined in the problem definition paper and we look forward to hearing feedback today and in submissions on whether we have characterised the problem correctly.

In the paper we published on the 16th of June we also noted a secondary set of related issues that we consider to be relevant. These are all shown on the slide and described in more detail in our consultation paper. I should note at this point that we have also identified the cost of capital as a separate issue deserving of a whole chapter in its own right, and for that reason I have not repeated it on this slide.

Unfortunately, however, we're unlikely to have time to canvass views on all of the issues shown on this slide in detail today, but we're fortunate to be

hearing from stakeholders on topics that are relevant to them.

Christchurch Airport have kindly offered to talk today about their experiences with alternative depreciation profiles; Auckland Airport will be speaking about land valuation and the treatment of land held for future use; the Board of Airline Representatives New Zealand will provide their perspectives on the appropriate treatment of unforecast asset revaluations; and, Wellington Airport will be outlining their views on any issues that may be associated with the regulatory treatment of the proposed runway extension.

As I say, the other issues may not get as much airtime today but that hopefully won't be the case in submissions.

I'll stop there because I'm keen to hear from stakeholders whether we've characterised the issues correctly, so perhaps now if we go around the table to hear from them on the top issues with input methodologies as they see them. If we could start with the airports for 20 minutes and then perhaps from airlines for the remainder of the time. Please start by stating your name and the organisation that you represent. Thank you.

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CRAIG SHRIVE: So, I'll go first, I'm Craig Shrive. I'm appearing on behalf of the New Zealand Airports Association. So, our top three issues in no particular order; profitability assessment, WACC, and MVAU valuations. So, before I just speak to those I just make some overarching comments as well.

So, our overall approach to this review and the regime as a whole is that we're very open to seeking improvements to the ID regime. Airports want it to be

a successful form of regulation and although we're not seeking major or extensive changes, we know the nature of information disclosure under Part 4 means it was never likely to be perfect first up, so we do need to learn and make improvements as we go.

So, our focus today and for this stage of the review is making sure in testing we've accurately identified and scoped each issue with the view to ensuring that the solutions then take us forward rather than backward. So, in that context we really welcome this initiative to have the forum, it's great to have an opportunity to engage in an open way and I'm sure we're all on the same page about the issues.

Look, and we appreciate the Commission has had quite a bit of time to think about airports, John you've had that timeline, and is already thinking about solutions but I just want to emphasise that making sure we've got the issues scoped correctly is the best way we find to get the right solutions.

So profitability assessment. So, we agree there's challenge that to assess performance when airports are taking tailored pricing approaches, but just in terms of characterising the issue. I mean, on the one hand we could say the problem is there is no forward looking profitability indicator, but if you take that approach then the solution sort of becomes we need a forward looking profitability indicator.

So, maybe if we take a step back and characterise it as there are challenges in assessing profitability that we should look into, then that may open up other potential solutions and the status quo may be one of those solutions and that being, you know, in the context of knowing that airports take tailored approaches, that would present challenges for ID.

There are extensive information disclosure requirements in place now. Airports do and are required to explain the variances in their approaches, and when mismatch, if I can call them those, issues arise, airports are very willing to engage with stakeholders, including the Commission, to work through the best way to deal with those and we're hoping that the section 56G processes provide a confidence to all that airports are genuine in that commitment.

So, not yet convinced that the lack of an IRR, IRR indicator in the disclosure itself is a problem but that's not to say that there we shouldn't focus on this. And, our concern in that respect is that trying to solve all the variances, or the potential variances is going to be a pretty complex process which could impose costs.

On the WACC IM, probably no surprises in our view there. There should be no pricing percentile and we're thinking of what's been done for energy is not necessarily a precedent for airports. We think there's a good opportunity here for the Commission to demonstrate that it's giving effect to the unique nature of the airport regulatory regime, which of course includes the Airport Authorities Act acting in tandem with Part 4.

We'll also be focusing on the intent of section 53F in Part 4 which of course says that WACC is not binding. We think that was put in there to avoid establishing the expectation that airports will price to the Commission's benchmark WACC. And, we appreciate that the Commission has been clear that it's not looking to impose de facto price control but I just wanted to highlight that we, if we go down that path we think there will be a challenge in explaining how this

is giving effect to that unique regime in the right way.

MVAU valuations, probably not a surprise to anyone that valuers applying schedule A are capable, or independent valuers are capable of coming up with different valuations but that's the nature of the exercise. It's sort of like telecommunications, if we're looking to a hypothetical exercise, expert judgement can come up with genuinely different positions, and we also think the Commission in recognition of that built protections and checks into the IM requirements and we think valuers are therefore coming up with independent and robust valuations.

So, our point is that the variances in valuations in themselves should not be seen as problem, and also I just highlight if changes are ultimately made to MVAU they need to be applied in a prospective and not a retrospective way.

So, just in summary, airports are very willing to disclose as much information as is needed to ensure that their performance and decisions are transparent but we're keen to make sure that any changes are to ensure that the information is disclosed in the most helpful way and doesn't introduce and unhelpful complexity. Thank you.

MICHAEL SINGLETON: Thank you, Michael Singleton, I'm the General Manager of Legal and Corporate Affairs at Christchurch Airport. I guess firstly with me today I've also got Tim May, our Chief Financial Officer, I'm also joined by Andy Nicholls from Chapman Tripp who has been with us on this journey throughout.

So, I guess firstly from Christchurch's perspective thanks for the opportunity to participate today and also for participating in the process to date. We think it's proving worthwhile so far and

we're appreciative of the effort that the Commission has gone to in putting this together today.

I guess, as with the other airports no doubt you'll hear from today which reinforce that we are committed in working towards achieving the outcomes which are in line with the Part 4 purposes that John has outlined earlier. We also appreciate the IMs need to be regularly reviewed and it's appropriate. We also appreciate the collaborative way the Commission is going about this to date.

At an operational level for us as an airport, though, we hope that should it be determined there is to be change that comes from this, that the level of any change is modest. For us as an airport I guess since 2008 we've undergone a high level of regulatory activity and change, and I think we all share that in the room today.

John and I were just talking about that at the start, we probably thought 2015 might have been the year that we all got to take breath before diving back into PSE 3 but we're committed to working through that. We're certainly not advocating relaxing much, the existing change, and in keeping with that we don't have any specific change to the existing IMs that we're sitting here promoting today.

From our perspective and experience the IMs to date have provided sufficient flexibility to us. You'll later be hearing from Tim in relation to the flexibility of the use the non-standard depreciation method has allowed us to date. From our perspective we would be concerned if that flexibility were eroded or sacrificed in favour of an overly prescriptive approach. It's that flexibility coupled with simple and clear rules that enables airports to explain their pricing decisions in a manner which can be easily

understood. Well, that's certainly the aim that we have.

It's fair that each of the airports brings in their own circumstances against which they can tailor their pricing approaches, and we remain to be convinced that it would be possible to, or desirable for that matter, to design a one size fits all approach around some of those matters.

Our preference is certainly for a period of stability within which our business can operate against a settled and well understood set of rules. If we're making change again we would just like to emphasise that any change should be able to be justified as clearly bringing benefits. Just perhaps following some of the matters that Craig raised and without repeating them, obviously the Commission is raising the possibility of change in the areas of WACC and the forward looking profitability assessment. That's significant for us and I've no doubt it's significant for the other airports and I think before we move into any change there we would want that to be very clear and the likely impacts well understood.

We're certainly looking forward to engaging going forward. We want the Commission to be familiar with all aspects of our business and for us to be aware at the earliest opportunity of if the Commission or our airline customers have any concerns about our performance or disclosure issues.

Perhaps one issue just to put on the table that does slightly worry us, and it perhaps follows the theme that John and I were having the discussions at the end of this year, and John you put up the timeline. We'll start work, we'll get hard to work on our next pricing consultation for the next pricing period. This will require us to undertake a fair bit of internal

work, develop those models, put together our pricing proposals in a way that we can present to our airline customers, and certainly one thing we learnt during the last process was obviously the airlines themselves need a good lead-in time if there is going to be pricing change. We need to factor all of that in.

The upshot of that would be that we will be well into the consultation process at the end of the IM review process, so to that extent there is some process risk in there for us and I think also for our customers. So, I guess when we're going through and looking at the benefits we just suggest that we need to be considering quite closely whether those benefits are sufficiently material to counter balance any of the risks that are introduced by adding complexity at that stage with our clear preference as we move into PSE 3 to get off on very much the right foot. So, thank you for the opportunity to participate.

JOHN McLAREN: Thank you, I've just been shown the sign that airports have about 10 minutes left so we'll hand over to Martin now.

MARTIN HARRINGTON: Thank you, John, I'll talk quickly in that case, Martin Harrington, CFO Wellington Airport. First I would like to thank or reiterate the comments earlier about the Commission, thanking you for holding this forum and providing an opportunity for each of us to provide input to the problem definition phase.

By way of introduction Wellington Airport has shown I believe considerable commitment to ensuring ID is effective and considers that the regime is working well. All three airports have now set prices under ID. The Commission has reported that the regime is effective and all three airports' returns are within its acceptable range. However, we also note that it is

a relatively new regime and still in the process of being bedded down.

We have all invested a significant amount of time and cost in setting up systems to manage our businesses within the regime. Wellington Airport is not looking to make major changes to the IMs. We look forward to working with the Commission to review the IMs and update them where it is appropriate to do so, and a completion of this review will provide improved transparency and clarity around the IMs and ultimately much desired certainty and stability for all.

So, Wellington's top three issues. Firstly, we have land valuation. We undertake an extensive process for asset valuations with respect to land. This included services of an urban planner to put forward viable options for the highest and best alternative use, a property economics advisor to confirm and test the demand for the alternative land uses, and a valuer to provide the land valuation. We consider this was a robust and extensive process. However, it's no surprise that different valuers may provide different valuations, in particular under a hypothetical highest and best alternative use.

We also note that our latest valuations used for PSE 3 pricing and the IMs look to address the points previously raised by Darroch to the Commission following our prior 2011 valuation and we look forward to consulting with the Commission on this as part of the fast track process.

Secondly, WACC. We're highly cognisant in the movement from the 75th to the 67th percentile that the Commission made for the energy businesses. The WACC consultation with airports was deferred and rolled into the current IM review. However, what has been done for energy obviously we believe should not be necessarily

transferred into the airports. We operate in a different industry and under a different regulatory regime and again look forward to consulting with the Commission further on this important matter.

Lastly the context of IMs and ID. We consider it's critical that the Commission assess airport performance over time. Wellington Airport has not exceeded the Commission's benchmark WACC since the start of ID and has also experienced revaluation short-falls versus forecast over that time. Wellington has not looked to recover these short-falls, wants to understand how the Commission views such performance. In our view it should be part of the longer term assessment of airport performance.

Similarly, the interaction between profitability and the other limbs of Part 4 is important. Wellington considers that it is investing appropriately, has high ASQ scores in service quality and is an efficient and low cost operator. However, we're still unclear as to how the Commission considers this in its assessment of superior or overall performance.

And, as I set out later in my presentation of Wellington's runway extension, airports play a key role in enabling airline competition. The proposed extension is not Wellington's first, in fact there have already been five previous extensions the runway. Importantly in 1972 the runway was extended 270 metres to allow trans-Tasman flights which incumbent airlines at the time said wasn't required. We now have 60 Trans-Tasman flights a week.

So, this investment must continue to be encouraged through incentives to invest and support for commercial and innovative arrangements with airline. This will arguably provide the largest benefits for consumers through competition and lower airfares, and also I look

forward to a constructive forum today and hope that this will assist the Commission in its problem definition phase and wider approach to the IM review. Thank you.

JOHN McLAREN: Brilliant, thank you Martin. That leaves five minutes for Auckland Airport, so thank you for that.

CHARLES SPILLANE: Thanks John, I'm Charles Spillane, General Manager Corporate Affairs at Auckland Airport. As highlighted by Craig this is a very important process for us and we support the matters that he has raised on the part of the Airports Association. Like the other airports we believe that the regime is working positively and delivering for the regulated airports, our airline customers and the travelling public. We are committed to ensuring that the information disclosure regime applying to airports continues to work. That commitment has extend today to actively ensuring that the concepts embedded in Part 4 are actually reflected in our corporate strategy.

We're committed to creating opportunities for economic growth in New Zealand by growing travel trade and tourism and thereby growing the success of our business and assisting our airline customers to succeed. We know this will only be achieved in the ambitious manner we are targeting by ensuring we are focused on innovation, efficiency and productivity improvements which pass on benefits to consumers, timely and appropriate investment in our crucial infrastructure providing the nature of services that our airline customers and travellers demand, and doing all of that at a reasonable price.

Now, that reasonable price means we do not intend to seek excess profits but we don't put it in that way

in our corporate strategy, we try to frame it more positively.

We believe we are achieving that and want it to continue to do so. To be able to continue, the regime within which we are operating needs to operate well so we are pleased to be here today to contribute to that in some way. We do believe the regime is operating well and that leads really to the first issue we feel ought to be recognised.

Although the regime is relatively new, it is working. It ought therefore be given time to bed in so that the benefits it is creating can be realised. The Commission should be wary of material change at such an early stage and focus instead on fine-tuning in areas only where there is a clear statement of the problem, broad consensus for any proposed change, and the benefits of the change outweigh its costs.

Our biggest concern, though, and it has been from the beginning of the implementation regime and it remains, is that a regime that was intended to deliver on the purposes recorded in Part 4 by providing transparent and consistent insight into the performance of airports in order to ensure that we operate as if we were operating in a competitive market, can easily turn into de facto price control if a very natural human desire for prescription and precision is enabled.

We have no issue with providing more information but it needs to have a real and useful purpose. We therefore encourage the Commission to avoid a desire for precision and compliance but instead to focus on ensuring that airports retain the flexibility to run their businesses in the real world and respond to the ever changing needs of our customers.

This can be achieved by acknowledging that prescriptive or rigid approaches to disclosure will not

always enable the real story to be told and that airports should have an opportunity to explain departures from the Commission's models or benchmarks.

In particular we believe that setting a pricing percentile would create real challenges. We're also concerned about another matter which relates to what is probably a fairly natural human foible.

The Commission should seek to ensure that there is a focus on what is working positively and on areas where agreement or positive outcomes are achieved, and not solely focus on areas where our airline customers or some of them may not agree with the approach taken by airports. We have through our consultation process built a high level of trust and engagement with our airline customers, or at least that's what we hope. We know we need that if we are to secure their commitment to grow their services to Auckland and that we need to share with them the risk that is inherent in that.

If the points where we have succeeded are simply banked and forgotten about and the focus is continually driven to areas where there are natural differences between suppliers and customers or where an airport has to balance the interest of competing customers, the nature of the engagement has the potential to become very negative and adversarial. We do not wish to go back to that sort of engagement with our customers and we would encourage the Commission to ensure that the regime is not designed and implemented in a manner which would inadvertently create the opportunity for such poor outcomes.

JOHN McLAREN: Great timing.

CHARLES SPILLANE: Not quite finished.

JOHN McLAREN: Another minute then.

CHARLES SPILLANE: You'll want to hear the end of it. These are the high level areas which I think the Commission

should be focused on. My colleagues, Simon Robertson and Adrienne Darling will be introducing specific examples of these matters through the course of this session. Simon will elaborate on issues surrounding the treatment of land held for the development of the northern runway in the future. This is a live example for us. Adrienne will engage for a more technical matter relating to the initial land RAB value for ID.

So, thanks for the opportunity but I've got a plea to the Commissioners, we've had very positive engagement with your staff members and we really implore you to ensure that the culture within the Commission is one that continues to encourage that sort of open engagement. I think it will serve the industry as whole very positively. Thanks.

JOHN McLAREN: Brilliant, thank you Charles, and it was worth the last minute, so thank you for that. Perhaps now if I hand over to the airlines to hear from their perspective what the top issues with are respect to input methodologies.

KRISTINA COOPER: I'm Kristina Cooper with the Board of Airline Representatives. To my left is John Beckett, the Executive Director of the Board of Airline Representatives, and also Aaron Schiff who's a consulting economist.

So, five years has now passed since the input methodologies were developed and as a whole BARNZ members consider that the methodologies have helped reduce the number of areas in contention in airport pricing. There are, however, five areas which remain live, three of which I wish to highlight as BARNZ's major issues.

So the first, no surprises, is the need to reconsider the appropriate WACC percentile for airports; second is the treatment of unforecast land

revaluations; and our third issue is BARNZ's support for the current input methodology excluding assets held from future use in the RAB.

So, turning to the first issue of the appropriate WACC percentile. Airlines consider that airports are the only industry regulated under Part 4 where the Commission is yet to reconsider the appropriate WACC percentile for assessing profitability in light of the High Court questioning whether it was in the long-term benefit of consumers for the 75th percentile to be applied rather than the mid-point estimate of a normal return.

So, airports are an industry where the providers earn considerable revenues from their retail and carparking activities and those are activities which are only made possible by the presence of airlines and the passengers which those airlines take to the airports. To pick on Auckland Airport, there are 100 retail shops that cover 16,000 square metres of space and earned that airport $127 million in revenue last year. At the same time there are 6,500 carparks which earned $43 million in revenue, and that's all as a result of passengers which the airlines deliver to the airport. So, passenger volumes are the key driver of revenue growth in those very profitable associated activities.

And, we would consider it's simply not necessary to measure the reasonableness of airport profitability against a higher than normal WACC in order to incentivise investment in aeronautical capacity. Those very large and profitably complimentary revenue streams already provide airports with additional incentives to invest in aeronautical facilities.

Second major issue for BARNZ members concerns the treatment of unforecast land revaluations and these can

be very large. In the past they have been over $100 million in a single pricing period, and growth in land values in New Zealand's main centres continues to outstrip CPI.

When the Commission developed its input methodologies it recognised the principle that if a nominal WACC is applied to an inflation adjusted asset base, then any revaluations must be treated as income in the ROI analysis for profits to be monitored effectively.

The Commission has applied this principle in its historic information based disclosures but in the reviews it undertook under section 56G it did not apply it to the forward looking profitability assessments.

As unforecast revaluations by their very definition are unknown when prices are set, the Commission's current approach will result in unforecast revaluations not being taken into account at all in forward looking profitability assessments. Moreover, airlines fear that the Commission's current approach would reopen the potential for airports to forecast low land revaluations and then retain the difference if actual revaluations exceed those forecasts. Historically this has been the most contentious issue between airports and airlines. BARNZ considers the Commission's approach is inconsistent with the NPV=0 principle and we consider it will significantly reduce constraints on the ability of regulated airports to extract excessive profits.

So, turning to the third major issue we wish to highlight, this is BARNZ's support for the current input methodology which excludes land held for future use or assets held for future use, or not used yet in the provision of regulated services from the RAB. Instead those assets are disclosed separately with

their net holding costs rolled forward. We consider this represents a sensible and balanced allocation of risk providing appropriate incentives for regulated airports not to acquire additional assets unnecessarily.

Under the Commission's approach if an asset which was originally acquired before it was needed subsequently comes into use, then at that time the asset and its holding costs will enter the RAB. If the asset is never used to provide regulated services, then it will never enter the RAB. If the asset is acquired a considerable period of time before it's needed, then that asset will spend a considerable period of time outside of the RAB.

So, we believe this places an appropriate discipline on the decision making by airports and we trust that the Commission will not lightly change this aspect of input methodologies, and do I have time to have - no, excellent, thank you very much

SEAN FORD: Kia ora, Sean Ford from Air New Zealand. On my right is my colleague, Duncan Small who is head of Government and Industry Affairs at Air New Zealand.

As is the case with BARNZ, Air New Zealand has been deeply involved in the development of the original input methodologies as part of efforts to ensure regulation of the airport sector in New Zealand reflects best practice and puts the interest of consumers, the travelling public, front of centre.

Unfortunately, while some progress has been made it is fair to say that we have not yet reached that position. Air New Zealand whole heartedly endorses the views dis-espoused by BARNZ, agrees with its characterisation of the three key areas where further action is required. I just want to take a couple of moments to comment on a couple of aspects.

In its discussion of the appropriate WACC percentile, BARNZ highlighted the key role of passenger volumes in driving revenue growth in the retail and carparking activities at airports which are key to airport overall profitability. To not acknowledge the existence of these revenue streams and the impact on the financial profile of an airport is flawed. Any assessment of airport profitability therefore must take these activities into account in addition to the activities currently covered by the information disclosure requirements.

Reviewing the performance of the airport as a single economic unit is certainly the basis on which investors in the airports make their assessment of airport performance and is certainly the basis on which airports should be making investment decisions.

Consumers are impacted by prices across all parts of the airport business, be it landing charges, carparking charges, charges for taxis, for accessing prime airport ranks, as well as the cost of a cup of coffee. Airport businesses are structured to capture every available bit of revenue possible throughout this passenger journey, a journey where the customer has little option but to pay the price put to them. A policy approach which does not recognise this is failing the consumer.

BARNZ also raised the issue of revaluations, specifically the treatment of unforecast land revaluations, and will be presenting on this issue in more depth later this afternoon.

Unlike most other regulated sectors, land forms a significant part of an airport's asset base. Proximity to urban centres and growth of these centres has resulted in significant increases in the opportunity cost value of these land holdings to the extent that

more than 50% of current airport asset values consistent of revaluations, effectively phantom assets created by accounting policies rather than capital actually invested in the business in terms of bricks and mortar. We estimate that approximately $90 million per year of airport charges is directed towards providing return on these revalued assets, a significant portion of which simply are windfall profit for airport shareholders.

New Zealand is now facing a significant opportunity in terms of developing tourism flows to this country. In order that we can maximise the national economic benefits of this opportunity, it is essential that we ensure we are operating in the most competitive and productive manner, it is essentially then that policy settings governing the provision of this infrastructure ensure that the hurdles we now face to fund additional structure not be raised even higher through inappropriate approaches to revaluations. Thank you.

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JOHN McLAREN: Excellent, thank you for those statements. I think you'll all agree that the summaries provided by the various stakeholders were very helpful in highlighting the issues as they see them, which is great for us to hear so early in the process. So, thank you to each and every one of you.

The focus for the rest of the day is on exploring stakeholder views on potential improvements to profitability assessments through changes to input methodologies, disclosure requirements, and/or providing additional guidance, and of course parts of that discussion requires consideration of the current requirements and whether they create any challenges

which I think goes to the points raised by the airports.

But before leaping into those discussions I would like to talk briefly about the scope of today's session and it seems to me that the best way to define what is in scope is often to start by identifying the things that are out of scope. These can be thought of in two main ways.

The first two relate to matters that are relating to input methodologies that we just won't have time to do justice to today. The two items I have in mind are the cost of capital and the land valuation methodology. We do recognise that both of these are important issues and our intention is to discuss these topics in more detail at a later date.

Second, there are matters that sit squarely outside of input methodologies which include things like other aspects of the disclosure requirements and the debate around single till and dual till. Again, this is not the correct forum to have those discussions. Doing so will allow us to focus more on the other topics we have before us today.

Overall this means that the things that remain in scope include almost everything else to do with profitability assessments. For example, although the land valuation methodology is outside of scope, the treatment of land valuation is firmly within the scope of discussions today.

So, to start the ball rolling I'll hand over to Hamish Groves who will be inviting comments on a discussion piece he's prepared on the challenges the Commission faces in discussing airport performance. So Hamish, over to you.

HAMISH GROVES: Thanks, John. So, I'm Hamish Groves, I'm representing the Commerce Commission. My experience

with the airport regulation is with the establishment of the information disclosure requirements. I haven't been involved with 56G reports so I apologise, I'm playing a bit of catch up on that. As John mentioned today, I'll be talking about the airport profitability assessment and the challenges that we face with that.

An overview of what I'm planning to cover today. First I wanted to discuss briefly the airport context and why that is unique compared to other regulated industries. I also wanted to talk a little bit about assessing target profitability. That's the forward looking profitability and why that is important. Responding to your comments, Craig. Then I'm going to dive into some stylised examples.

The purpose of the stylised example is to present three potential approaches to resolving issues. The approaches are not aimed at any particular issue but we thought it would be helpful to get our approaches on the table so when people respond to through submissions can go: are we looking at it this way; this option, this option or this option.

The stylised example, on that basis, are provided to initiate discussion and to get stakeholders thinking about the various options.

We believe the approaches presented can be applied to the forward and backward looking assessment of profitability, but before I get into that let's talk about the airport context.

I think the first most important point is airports can set prices as they see fit, as the Airport Authorities Act allows them to do. This is unique for us and creates some challenges on how we're used to looking at the world. So a key point.

The second point is the Commerce Commission is required to set information disclosure requirements and

the purpose of those information disclosure requirements is to ensure that there is sufficient information for interested persons to assess performance.

The third point is the Commission is required to do a summary and analysis. So, they have to, therefore, analyse that information that is presented.

Under these circumstances we think it's important to be clear on how we will assess profitability. In doing so it gives airports the ability to make decisions, pricing decisions for example, and to be clear when making those decisions how the Commission will view them. It is also important to note that the Commission has flexibility during the summary analysis process to review how airports have priced and analyse it at that stage as well.

So assessing target profitability. Target profitability is determined at the price-setting event. This is also unique for airports in the sense that it's usually over a longer period than what we're used to. In our view it's important to assess it at that point because it's locked in, that is when the intention for pricing is determined. If we leave it until after the price setting period the horse, to an extent has bolted.

So, as I mentioned earlier, being clear on how profitability will be assessed, we think is important and we really welcome feedback from the airports on this.

Also on the flip side to that, it's also important to understand how the prices have been set so that we can compare to how profitability will be assessed. There's information that needs to go both ways and I think as we go through this process I hope it's that transparency that comes through.

At this point I would like to open it up to the floor to see if there's any views on forward looking profitability and in particular, would it be helpful for airports if we have a clear basis for how we're assessing profitability or is there an alternative? I know, Craig, you mentioned something earlier.

CRAIG SHRIVE: Thanks, Hamish, certainly appreciate that and airports will certainly be able to speak to this with a greater experience than me. But as you put it, there's two sides to the coin. One is, and appreciate the Commission wanting to be clear in providing guidance on how it is going to assess profitability. I think the airports will say we have got a pretty good idea now, especially through the section 56G process. We didn't before that but we do now. And, especially in terms of what the key fundamental principles are.

So, as I said, they'll be able to speak to that in more detail so I don't think that in itself is something that leads to we need to do something more in the disclosures.

And, in terms of the other side, which is absolutely right, people need to understand what airports have done. As I've said in my opening remarks, airports have absolutely no problem with that and are very keen to make sure people understand what they've done. I suppose the point of distinction we might have is to say, if and when the difficulties arise because airports are taking tailored approaches, it's best to work it through with full context and discussion at that point rather than try and solve for every potential complexity in advance and put it in that disclosure. That in fact might create more trouble and I think in terms of what Charles is saying, is the more there's a focus on a number or numbers the greater the risk that people won't actually be

assessing the airport performance in the round, in the full context.

JOHN McLAREN: Sorry, could I just take that comment and maybe direct it towards Charles and just ask, given that you did state that Auckland doesn't target excessive profits, even though it doesn't appear in the corporate material and is stated that way, what method would you suggest the Commission adopt to demonstrate that fact?

CHARLES SPILLANE: I think Simon Robertson, our CFO, is much more well placed than me to deal with that.

SIMON ROBERTSON: I'd just follow up with what Craig has said. I think in the context of Auckland Airport where we have a moratorium which is different to the input methodologies, we now fully understand how the Commerce Commission having gone through the 56G process will assess profitability. The information was able to be disclosed and shared subsequently as well with inquiries and more information, it was able to be passed back to the Commission to be able to understand fully what we actually did, and our concern is prescription upfront doesn't necessarily have full knowledge of what the future may hold with regards to pricing decisions.

So, we fully support transparency, we're just cautious around prescriptiveness when you don't know what the future will hold. So, we have the brought understanding of how you will assess profitability, I'm sure the airlines also have a full understanding of how you will assess profitability and I think that will aid further discussions in the next price-setting event with that full understanding without necessarily saying you have to be very prescriptive on how things be disclosed, because you can create more complexity and

more challenge and understanding when things are misaligned with what actual decisions have been made.

JOHN McLAREN: Excellent, thank you for that contribution. Perhaps then if I take the hot potato, you alluded to the airlines so if I could hear from them and their perspective on whether or not a forward looking profitability assessment indicator would be helpful.

KRISTINA COOPER: If I can just respond first to Simon saying he thinks the airlines have got full knowledge of how the Commission will assess profitability. We thought we did but following the Commerce Commission's section 56G review into Christchurch Airport we now don't. We honestly have no idea how the Commission will be looking at the unforecast revaluations going forward, and that's a significant issue because Christchurch Airport has committed that if they have unforecast revaluations, they will treat them as income and carry it forward as a credit to the next pricing period but what will the Commission do?

And, Auckland Airport has said it has no intention to revalue its assets at the end of the moratorium. If it does, then it will treat those revaluations as income, but what will the Commission do?

So, for us there is still a very big unknown as to how the Commission will assess profitability going forward. So, I think I'm right in saying we would like a forward looking profitability assessment. We think it would provide clarity and transparency. We recognise the airports do not need to price to that but it gives airlines some certainty as to knowing how the Commission will assess the forward looking targeted profitability.

Second point I'd note is I think we do agree with Craig though, that we don't believe that there can be prescription on every single element, and I think we

would like to see perhaps some overall principle that the Commission builds into its information disclosure requirements, that if an airport has departed from a standard input methodology or taken a different approach, then there is a principle that that airport must ensure that sufficient information is disclosed for interested persons to be able to understand the approach and assess it against Part 4, and I think that's possibly the way that you achieve the transparency without the prescription.

HAMISH GROVES: Thank you for that. Obviously I think there's some common ground there and I think there's some opinions there too. So it would be great to see those comments come through in the submissions in three weeks' time.

So, moving on to the stylised examples. What I want to do over the next part of the presentation, as I indicated earlier, is outline some stylised examples. I intend putting out an issue for us to use, please don't focus on the issue. The issue is just there so we can show how the three different approaches can be used or applied. Also on that, if you can have in the back of your mind, as you go away thinking about it, how those three approaches can be applied to other issues that are on the table.

We think these approaches, as I mentioned earlier, can be applied both forward and backward looking. So, I think keep that in mind as well.

Once I've worked through the examples I hope to open it up again, if we've got enough time, to seek your views on these three approaches but if you can bear with me until the end.

So, the first slide I've got here is the example, the stylised example. Obviously with the numbers that I've got up there we've got the unusual situation of

the airports pricing assumptions equalling exactly what the profitability assumption is. I've got it there so we can focus on how it works first.

In the left-hand column I've got airports pricing assumptions. Now, as you work down through the column obviously you've got an opening asset value, you've got a depreciation figure, a revaluation figure and then a closing asset value. Obviously the closing asset value can be determined from those three earlier assumptions. You're more than welcome to check my math but I'm pretty sure it works.

Then we have an expenses number. For the purpose of keeping this simple, I haven't included a tax number etc etc, just trying to keep it simple.

And from that, and along with the targeted return, I've got a targeted return of 8% that the airport is targeting, an airport can calculate their revenue, their target revenue. Again, the 63 should work.

Now, if you move over to the second column, the profitability assessment. So, the profitability assessment would work in the same way. You have an opening asset value, depreciation 10%, revaluations, you can determine your closing asset value, you've got the expenses. Now with the revenue number, the purpose of the arrow there is to represent that the profitability assessment picks up the revenue number. So, as the numbers change those two numbers will always be consistent in the two columns. The number that does change in the profitability assessment is the assessed return. This is how the Commission has done it through the 56G reports.

And, as I move through the examples you'll see differences pop up in the right-hand column.

As I was saying, that is a stylised example, it represents an airport that has used IM consistent

assumptions. We appreciate that is not always the case. As we get through the examples we'll identify where airports may vary from the profitability assessment.

The model is simplified because it's a single asset, it's simplified because it's got a single asset depreciation.

Obviously if you add land in there, there's another complexity to it. There's no tax, as I mentioned before. It also assumes a year end cash flow, and it also assumes that airports are targeting a WACC, the WACC return, which may not be the case. But for the simplicity of this example that's what we've done.

So, the complexities. The complexities, as I've mentioned, airports have and may continue to adopt approaches that are not consistent with current profitability assessment when setting prices.

Now, this in itself is not a bad thing, there is flexibility for airports to do that. And it's the Commission's intention to allow the airports to do that but then to understand, as we've talked about, bring that transparency through and understand where the difference is and what implication it has.

So, the examples that I'm going to put on the table as we work through the slides, the first one is a non-standard depreciation; the second one is the amendment to the profitability assessment; and, the third one is a disclosed difference.

So, if you can think about it with the table, it's amending. Can we amend the profitability, the pricing assumptions by a line or two. Or do we amend the profitability assessment so that they align? Or do we just leave a difference to fall out the bottom? Sorry, that's probably a bit confusing without the context. I will be bringing that in later.

So, let's look at an assumption. I've called it the revaluation assumption In this instance we've got an airport that's chosen not to revalue their assets, and as you flow down the column, the airport pricing assumption column, you have an opening asset base of 100 as we did in the earlier slide, we've got depreciation 10%, we've got no revaluations which gives us a closing asset base of 90 rather than the 95 we had earlier. The 50 expenses are still the same, the revenue increases from 63 to 68 because there's not $5 of revaluations, and, as I mentioned, that 68 flows through into the profitability assessment.

If you run down the profitability assessment column you've got asset base of $100, you've got the depreciation 10%, you've got the revaluations at 5% which the airport pricing assumption doesn't have, so you have a different closing asset base of 95 rather than 90. Expenses, 50; revenue of 68, as I've said, but what that throws out is an assessed return of 13% versus the 8%.

So, that's where we've got a departure. A different approach has been taken. As we've said, that's not necessarily a bad thing or a wrong thing, it's just occurred. So the question is what do we do with it?

So, potential solution number 1 is a non-standard depreciation. So I've put this as the first potential approach. I've done that because it's actually currently there in the requirements, we can use this now if it fits with the situation. I appreciate it won't fit in every circumstance but our feeling is that it is there and so we should look to see if it can be applied and where it can be applied.

So, in this example we've got an opening asset base of $100, the depreciation, the airport has chosen

to increase the depreciation to 15%, and then decided to include the revaluations of 5% to give them the same closing asset base that they were targeting in the example, the $90, and as you flow through it comes down to revenue number which is the same as well, the $68. $68 flows through into the profitability assessment.

Now, interestingly, the second arrow that's now been brought into the table is the transfer of the 15% over to the profitability assessment. That's because if non-standard depreciation is used, the Commission will pick that up, or the profitability assessment will pick that up.

So, we get a situation where we've got the two columns aligned, there's no assessed under or over recovery, the airport is able to get the $68 that they were wanting to get. Now, I do appreciate that there will be commercial reasons, the airports will have a revenue number that they think is appropriate and it may be. That may be for the airline or for themselves. So, in this example we're getting to an outcome that is right.

I think it's also worth noting here that Christchurch have used this just recently, and also Christchurch will be presenting on this later how they've used non-standard depreciation to get to a revenue number that they wanted to.

Moving on to the second potential approach, amended profitability assessment, and I think this amended profitability assessment is probably what we're going to be doing over the next 18 months. Let's have a look at the profitability assessment. Have we got it the right way? Shall we provide some flexibility in there? Shall we change how it's done?

Obviously this approach is a little bit more challenging to put in place. It's not a case of just

creating a new standard depreciation and doing a disclosure on it. We have to go in and change the rules, and when we're looking at changing the rules obviously the Commission is going to put its thinking hat on, as we all should, about what are the long-term consequences of that rule change? So, yes, it is an option but it's a little bit more challenging.

So, in this instance you've got the opening asset base, you've got the depreciation of 10%, no revaluations, closing asset base, expenses and the revenue of $68. And, the Commission decides yes, it's appropriate to take that zero revaluations, so it's amended on the profitability assessment side and we end up with the 68, target return of 8%, no assessed under or over recovery. We've got alignment

Now moving on to potential approach number 3 which is a disclosed difference.

As you'll see I've cheekily just brought in the revaluation slide, that I had earlier, and changed the name. So, we're going back to where there is a difference. Now, the question here is, is that necessarily an issue, and we say no. If there is a difference and there's good reasons for that difference, the Commission would look at that difference and the reason for it. That's the summary analysis part that I was talking about before.

I won't run through the numbers. I think everyone is up with the numbers now. So, if we just look at that, the difference, when a difference does fall out the bottom. I think the question is, what do you do with that? In this case it's an over recovery. In another instance it might be an under recovery of revenue, and certainly when it's an under recovery you'd think the Commission would think that's an okay thing.

The question then is, when you move between pricing periods, is what do you do with those under or over recoveries? That was in the opening statements, as you know. It's that transparency around how do you look at the ups and downs between the periods and what happens in one period versus another. I think that is a challenge we face. On that basis I'll move to the next slide before I start talking about my next slide.

So, tracking under or over recoveries. So, as I said, pricing profitability assessment assumptions may not always align. I think that's a fact and I think that's come through quite strongly in the earlier statements. We're not trying to make them always align. I think it would be helpful for us to have a mechanism that, when they don't align, can deal with it.

Now, looking at why they may not align. They may not align, as we say, because we don't have perfect foresight. We're all going to go through this process of looking at the IMs and trying to get that profitability assessment to work, but we may not all see what's going to happen tomorrow and be ready for that.

Or we may get to a situation where we just can't agree on how the profitability assessment should be, and the airports take a different approach. That, in itself, is not necessarily a bad thing.

So the question for us is how should over or under recoveries in one period be taken into account in another?

By looking at it the way I've shown it, the first idea that comes to mind is a carry-over balance that flows between periods, accumulates over time. That's one way.

Another option is to use a profitability assessment from the beginning of the regime which has the effect of smoothing out all those under and overs. I ask the question, are there any other options? And I really look forward to hearing responses to that in submissions.

So, in summary, the three potential approaches that we've talked about is the non-standard depreciation, it's an option that's currently available. We appreciate that it won't be applicable in all scenarios.

Potential approach number 2 is the profitability assessment reflects the pricing decision. As we've all talked about, that's not always going to be that easy to achieve, especially if the airports are using different approaches. We don't have perfect foresight. Also when we go to look at the profitability assessment, consideration of the implications will be required. Also it will be required to be enduring.

So, the third option is a disclosed difference. That there is a difference. That it falls out and we're okay with that. But I think the key to that is we need to have clarity of what that difference is and what the reasons for that is. I think that brings back to the earlier point around the transparency. And, also, as I've just said, the tracking of the under or over recoveries. How do we do that? I think it's a good question. I think it's helpful to clarify upfront how that would be done.

So, at this point I open it up to the floor for stakeholder views, if anyone has any comments on those three options.

I think when we go through that my questions that I have in my mind are: have we outlined all the options; have we adequately described the potential

approaches; what are the pros and cons of each; is there a preference to either of the options; is there a need to track the under or over recoveries? So, with that I open it up to the floor.

JOHN McLAREN: Thank you, Hamish. We do have about ten minutes left so perhaps five minutes from either side. If I could look for who would like to comment first? Don't all rush at once.

AARON SCHIFF: I'll go first. Aaron Schiff speaking for BARNZ today. Obviously probably need a bit more time to think about all these options in your example in detail but one thing that struck me, just as a preliminary comment, is everyone has been talking about transparency and to me the first option, using the non-standard depreciation seems to kind of go against that a little bit. It seems to be trying to put a round peg in a square hole sort of solution to the problem. I mean you can always use the depreciation kind of mathematically to make things work out like you want but then it kind of muddles up what exactly is this depreciation number. So, when we come back to look at that later we have to unpack that into the actual depreciation depreciation and then this kind of adjustment factor that you were using to solve these kind of problems that you're talking. But that's just my reaction, probably not so positive on that particular option from that perspective.

But yeah, the other two, I probably need to think about those a bit more, and the implications of those.

JOHN McLAREN: Excellent, thank you. From the airports perhaps?

SIMON ROBERTSON: Simon Robertson, Auckland Airport. First of all I welcome you bringing some innovative thinking to the thought process, especially in the area of

non-standard depreciation. We would like some time to consider that and think how it might work.

We perhaps have a similar view in that if it's to solve something else that's not to do with depreciation, it probably won't necessarily help with transparency. However, there may be other very valid reasons for using it so we'd like to take some time to think about it.

I think overall, certainly with regards to Auckland Airport where we have a moratorium yet our information disclosure requires us to put in CPI adjustments in our annual disclosures, we have gone to great lengths, we believe, to actually take some time in those disclosures to not just do the form filling but actually try and explain as best we can why there are differences between what we assumed at pricing with no revaluations and our requirement to place a CPI adjustment in the information disclosure, because we do believe in transparency so that goes beyond just filling out the form but to actually adding commentary within it, and in fact to add in an exec summary not required by the ID but to hopefully build in greater transparency on the decisions we made, and we may have taken a different approach while entirely valid but just a different approach and therefore trying to explain that assessment.

My last point would just be on disclosing differences. Even in your revaluation example there can be a valid difference which doesn't necessarily indicate a problem. Auckland Airport again are deciding not to revalue our assets, but having a requirement to disclose with a revaluation component so those under and over differences can be explained. But of course in most of those scenarios everything turned out perfectly as assumed.

The reality is the world is quite different and there can be multiple reasons why actual outcomes are different to those that were projected. Most of our scenarios, we would believe that which party is best to take on risk of differences, and are there appropriate incentives to actually try and achieve better outcomes, and if that was the case and better outcomes were achieved, is that a good thing?

We've had cases where we would like to chase better outcomes. We've also had GFC components where passenger volumes have declined substantially and we've underperformed compared to what we expected to do. We haven't sought to seek recovery subsequently from that.

So, I think again it's that transparency about the actual decisions and an assessment about whether something should be carried forward or thought to be carried forward, or whether that was just the actual outcomes were different in real life compared to what was anticipated at the pricing decision.

JOHN McLAREN: Thank you. So, I guess my take on what you said, and I'd be interested in your reaction, would be that you kind of said that you go to great lengths to explain the variances at the moment and so in some respects it could be made easier but you feel like the current system does it, at least on a kind of primitive level, and you mentioned non-standard depreciation and wanting a bit more time to consider that.

What's your view on the second one in terms of building an additional flexibility? So, as the example revaluations, leaving that open for airports to adopt different approaches, kind of similar to what we do under the current rules with depreciation.

SIMON ROBERTSON: Sure, speaking from Auckland Airport's experience I think having the ability specifically on

revaluations, having the ability to put zero percent in there rather than CPI would be more helpful.

JOHN McLAREN: Okay, that's good to know, thank you. Given we've just heard from airports, do airlines have anything else to add before we break for tea, or any other airports? I'm particularly interested to hear from Christchurch but we've got you first up in order of play after the break.

MARTIN HARRINGTON: If there's no other comments from the airlines just one other thing just to reiterate maybe what Simon was saying regarding narrative and context.

I think it's really important just from a parallel being the CFO at the airport obviously doing annual reports and half yearly reports, there are certain numbers that have primacy of importance for net profit after tax, but businesses take great lengths to try and explain a bit more context about the business, the underlying EBITDA comes through, cash flow comes through. I think certainly from the parallels for any report you try and present sufficient information which the readers can then take an informed opinion on. So, I think having one number return on its own can be a bit hopeful that that's one number that everyone will, I guess, understand the business clearly from, which won't be the case.

The second thing is assessing over time. Again, you know, you might have particularly where areas of increase or decrease in revaluations but over time it's important just to assess that return. Once again the context and adding narrative to that can help readers understand the true performance of the airport in this case.

JOHN McLAREN: Brilliant, thank you. I'll just quickly look around the table in case there's any other comments or questions on the presentation that we've just provided,

otherwise it's a safe landing for afternoon tea at half past 2. So, if we wrap up now and we'll be back at quarter to, thank you.

(Adjournment taken from 2.26 p.m. until 2.48 p.m.)

JOHN McLAREN: Hello again everyone, it looks like we've all taken our seats so perhaps if we're ready to kick off and I'll hand over first to Christchurch to present on alternative depreciation, so over to you.

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TIM MAY: Thanks, John. Just as an introduction, my name is Tim May, Chief Financial Officer at Christchurch Airport. So, thanks John, certainly welcome the opportunity.

What we wanted to do this afternoon was really talk through Christchurch's journey and experience we've been through since our last price-setting event, and I think as John and Hamish talked through in the last session they raised this concept of alternative depreciation, so we just wanted really to talk through where Christchurch has got to in terms of the journey we've been on over the last 12 to 18 months.

Quick overview of the session, what we wanted to talk through briefly was firstly just remind ourselves of the background to the last Christchurch price-setting decision and the use of a long-term long-run levelised price path.

Secondly, having done our disclosures in terms of that, just outline some of the points that came through, through the section 56G review, then think about how we address some of those comments in terms of some revised disclosure with particular reference to the relative depreciation approach that we've talked through, then have a think about some of the remaining issues that remain on the table as we move through into

our next price consultation, and then finally just some reflections on the journey that we've talked about.

Just to recap on our background. When Christchurch Airport came to set out prices in 2012 the major challenge for us was pricing the new integrated terminal which was just being completed at that time. Obviously the new terminal was a significant investment in addition to our RAB and it was also dimensioned for future growth in volumes.

When we consider all of that, those factors meant that the standard pricing model as applied would obviously result in a significant price shock and price jump at that time with potentially meaning high unit prices in the early years and lower unit prices in later years.

For these reasons and under that rationale the approach taken then in setting prices was based on a long-term levelised price path. This was designed to ensure that the economic returns were achieved over the life-cycle of the asset and to avoid the price shocks for our customers between price reset periods.

In implementing this approach, in terms of the initial model prices were set for approximately a five year period, that's actually a four year and seven month period, with reference to that 20 year levelised price path.

In terms of our initial price-setting event disclosure, in coming to that disclosure we used a straight line depreciation approach as is allowable under the IM determinations, the effect of this being that profit basically becomes the residual amount in a smooth price path type model. As such, this leads us to tending to report profits as relatively low in the early years and relatively high in the outer years.

So, moving on in terms of the Commission section 56G review of our initial disclosures. I think, as has been well documented, they raised, identified a number of concerns with the transparency of our initial disclosure. The table here outlines from our perspective the key concerns that were outlined in that section 56G review.

Christchurch Airport certainly accepted all of the Commission's concerns at the time and that the areas they raised would provide greater transparency. As a result of that, and our response to that was to make some changes in a revised disclosure and we are sort of committed to adopting these revised disclosures moving forward.

So, what did we do in particular? In particular we engaged Jeff Balchin, Jeff is a consultant, to develop an alternative non-standard depreciation approach model. In conjunction with this and the concerns raised by the Commission we also adopted the methodology to use a post-tax WACC, again as raised by the Commission, and to use a fixed 20 year period, and we remain committed to both of those changes as we move forward.

So, briefly just touching on the use of the alternative depreciation approach, just reminding ourselves that this approach and the prices set to 2007 didn't change, this was in respect to us addressing some of the transparency concerns around our disclosures. A revised methodology was developed by Jeff, as we mentioned before and again, as something I think as Hamish and John have raised earlier in this forum is something that is certainly allowable and contained within the current IM framework.

During this period of the revised model we consulted with our stakeholders, including our customers and the Commission.

The key focus, as I think Hamish sort of raised this in his simplifiers models but in essence the key feature of an implied depreciation approach is depreciation is calculated as the residual amount once you've taken into account forecast cost, tax, and return on capital and that's subtracted from the targeted revenues.

I guess the general concept with levelised prices is that using an alternative depreciation concept means that the target return will be earned in each year if all the forecasts are borne out, which once again mirrors closely Hamish's simplistic view of the world.

I guess from Christchurch Airport's perspective in terms of this approach we agree that it makes our disclosures more meaningful and transparent. In particular from our perspective applying the methodology means that the stakeholders will be able to identify from these disclosures a closing RAB at the end of the pricing period that's consistent with our pricing decision and will accurately show how much of our investment we recover in PSE 2 in terms of the current pricing period, and it will also inform our stakeholders how much of our investment we intend to recover in the future. As also noted it will be a simple exercise to derive from the closing RAB the opening asset base on which prices will be reset in 2017.

In terms of just another way of coaxing those points, from our perspective we believe customers will be able to assess our performance in PSE 2 without having to guess how we're going to behave in the future, and similarly we can have a good consultation

period which will just commence leading into 2017 with a forward looking basis in terms that we don't believe any of these changes are going to create windfall gains or losses that need to be dealt with in the next period.

As a part of this forum and in the context of what we're talking about today, we recognise that there are some remaining concerns that have been raised by both BARNZ and the Commission in terms of their approach, and we're obviously aware of those and looking to address those when we reset our prices for PSE 3.

Some of these points that we've noted below, specifically the requirement for some more detailed forecasts of costs and demand for the remaining life of the 23 year period, noting that the forecasts are reset each five year period, with those forecasts for the next five years as detailed as they would be under the standard methodology, some discussion around the process for reforecasting, resetting the long-term price path, some stakeholders remain concerned from a complexity point of view which we may have already heard some views around that already today, and obviously there remain some concerns around the long-term level of targeted returns.

All these concerns were difficult to address in the current exercise with Jeff because we weren't going through a reprice setting process consultation process, but we remain committed to addressing these as part of resetting our prices for 2017.

I guess finally it's probably worth just sitting back and just thinking about what our key reflections are in terms of the journey we've been on in the last 12 to 18 months.

I guess the key reflection in this forum is that while we were late in our adoption of alternative

depreciation, this wasn't driven by the IM or ID requirements. The levelised price path was a good idea and the regulations allow the airport to adopt a term of depreciation as long as they're disclosed, and this is what we'll do next time.

I guess the other key reflection is we've been on the learning curve as to the best way of disclosure of this non-standard approach together with our customers and the Commission.

One last reflection, which I think Michael talked about in our initial statement, reflects one back to the concept of process risk for us. When we work back from our price change, we will start, contemplate starting work on our pricing approach very shortly. For that reason if there are any clarification of the concerns with our approach that we're not aware of, we would appreciate knowing these now or as we consult on the process for resetting our prices. Thanks, John.

JOHN McLAREN: Thank you, appreciate that question. Running to time, now have got ten minutes for questions or comments which is great. I suppose my initial reflections, picking up on what you commented there, was you have been on a journey and we have reviewed the pricing disclosure that you provided to us and we kind of saw where you were going with non-standard depreciation, and we can see the merit in the approach in terms of reflecting the low utilisation at the start, building over time, and it's for that reason one of the things we were quite interested in was the perception of it by your stakeholders which wasn't quite as favourable. So, I'm interested now in handing over to the airlines just to hear from you guys what your perspective was on the approach that Christchurch adopted.

KRISTINA COOPER: We'll get Aaron first to talk about it from an economic perspective, then I've got a forward looking comment or suggestion.

AARON SCHIFF: Since we're in a reflective mood perhaps I can just speak honestly and say that certainly I struggled with understanding the initial pricing model, and I'm sure there are others who are in the same boat if we're all completely honest, but I also very much appreciated the work that Jeff Balchin then did to try and make things a bit easier for us to understand, and so there are definitely improvements that came from that in terms of the transparency and just understanding what was going on.

I think we've made submissions on this and I don't want to sort of relitigate the past but I think the difficulty for customers of Christchurch Airport was essentially what at least appeared to be a change in the depreciation methodology sort of part way through our pricing period, and so the implication of that being a potentially higher asset base in future pricing periods and consequently higher prices as a result. And, so that was something of a surprise, shall we say, that obviously is of some concern.

But maybe, just trying to look towards the future and perhaps making things better, I think in principle there's no reason for anyone around this table to be opposed to a non-standard depreciation or in particular an economic depreciation kind of approach, which is effectively what Christchurch Airport's approach is. It's a type of economic depreciation when you combined their pricing, constant pricing path with calculating the depreciation like they did. So, I think there's no reason to be opposed to that and, in fact, it's probably something that would be quite favourable in certain kinds of circumstances, so you certainly

wouldn't want to rule that out I wouldn't think, at all.

The question though is obviously in the details of the implementation, so how that's done, how it's communicated to the people that need to understand it, the timing of changes to any new depreciation approach, I think are quite important. So, there needs to be quite a robust basis for making those changes if they occur, and they need to be communicated quite well to those who need to understand them.

So, in terms of specifics, I think Kristina has a particular suggestion of what might be helpful.

KRISTINA COOPER: It's not so much particular but when I was thinking about this in preparation for the conference it occurred to me this isn't a Christchurch Airport issue. Christchurch Airport was just the first airport cab off the rank in this new information disclosure regime we had, but Auckland Airport is going to have a, I would guess $200-300 million, I don't know, plus, domestic terminal, it's going to have a $600 million, or plus, second runway, Wellington Airport might have a runway extension, and all of these large capital investments will quite probably create the same question, you know, what should the economic depreciation profile be?

I actually wonder if it's worth the Commission considering setting out a principle for how economic depreciation could work. It's not a principle or a set of rules that the airports would have to follow because of course they're free to set prices as they think fit but if a standard/non-standard depreciation profile was set up, if an economic depreciation approach or input methodology was developed, then it would give greater certainty to users and to the airports as they looked

at what to do with this large stepped investment which they're facing.

JOHN McLAREN: So, would that be a principle based approach you're suggesting as opposed to formulaic based approach?

KRISTINA COOPER: I think so because the unit, or how you apply the depreciation would probably differ depending on what the asset was. For example, when Christchurch Airport was thinking of its terminal originally there was an example from Ireland where there was a new, a second terminal had been authorised by the Irish regulator at Dublin, and they had followed an approach of unitised depreciation based on passenger throughput, and that struck us as something that was actually quite simple and logical. One could simply forecast out passengers for 20-25 years, divide it by the amount of depreciation needed, throw in some inflation adjustments, and then each time you set prices for the next pricing period you would estimate how many passengers are going to go through that terminal and there goes your depreciation.

JOHN McLAREN: Excellent, thank you for that. I guess I'm, kind of looking to Auckland Airport to see if they've got any thoughts on that principles based approach given what you're saying about not getting too prescriptive and allowing some kind of flexibility around the approaches the airports can adopt, particularly in the context of assets that may be coming online soon that maybe aren't fully utilised when that happens.

SIMON ROBERTSON: I guess we're open, very open to the concept of dealing with depreciation in different ways. We've had earlier discussions and we've got more exploration to think about, but at this stage principles based makes sense to us because you can't

think of every scenario, and airlines and airports might agree on something that's different that hasn't been contemplated before. So, principles makes sense to me.

JOHN McLAREN: Thank you for that, in submissions welcome any suggestions on the sorts of principles that we could apply to that principles based approach. Perhaps before we move on from non-standard depreciation I'll just look to the audience to see if they have any questions or comments they want to chip in? Doesn't look like it. Any other comments from around the table?

CRAIG SHRIVE: Just to help with submissions, a question really. Yes principles but, Kristina, are you thinking it would be an amendment to an IM, or something separate?

KRISTINA COOPER: Haven't got that far yet. I mean the IM I think currently says what's standard depreciation, does it? What I'm really looking at is I think if there was greater guidance on the non-standard depreciation or the economic depreciation, then if the airport chose to follow the particular route, the principles that the Commission had laid out, it would give greater certainty to the airport, it would give greater transparency to the airlines, there would have to be less disclosure. On the other hand, an airport remains free to set prices as they think fit and could go down a route like Christchurch Airport did, but it becomes much much more complex. I have to confess I still don't fully understand it.

JOHN BECKETT: As Kristina is saying, having a standardised approach to a non-standard depreciation can make sense and I'd like to think that could be worked out in some sort of understanding between the airport and airlines.

What didn't make sense in this case was saying that here is a residual and in that residual is the depreciation. I mean, the depreciation kind of should start to reflect the usage and deterioration of the asset over its life and it could be by time, which is the normal thing, which gives the straight line, or it could be by usage which is the passengers.

You know, it would be possible to work out something like that which is very simple and which would have a good base from one pricing period to the next pricing period, but to actually work backwards to me seemed false and artificial. It seemed to be saying we were really entitled to this amount of profit in the first period and so we've got a device here for carrying it forward in the next pricing period by using the regulatory asset base at the end of that period and the beginning of the next.

And so, it just didn't feel right whereas an agreed schedule that you can look up on a graph and say, bang, that's it, I would have thought would make a lot of sense for these lumpy investments.

JOHN McLAREN: Thank you for that view. Anyone else like to comment before we move on to the next presentation?

ANDY NICHOLLS: I think I will only be able to address part of that, John, and that is something we will consider going forward. I think where we landed, again some of this is with the benefit of hindsight, some of it also is that when you were in 2011-2012 in Christchurch thinking about forecasting say passenger numbers was quite tricky, so after the earthquake and so on, and so there might have been simpler ways to do it, but for better or worse where Christchurch landed was the initial cut of using straight line depreciation and then treating profit as a residual as far as smoothing the price path goes. And, then under heavy criticism

from the Commission about the transparency, that didn't really show the sort of returns that were implicit in the pricing. The only alternative was to do it the way we've done it, which is to show the returns that are implicit in the pricing and then the depreciation becomes the residual.

So, I think from where we were that was the best cut as showing what that pricing decision implied by way of what the returns were that were targeted and therefore what that meant those prices were aspiring to recover for the residual of the asset. I think one of the things we can do is think about what you're saying for the way we reset the prices for 2017 and we've signalled that we're very up for that both on sort of making sure that you feel like the depreciation is sort of reflective going, you know, fairly reflects future aspirations and all those, the complexity versus simplicity in some of the methods we could use.

JOHN McLAREN: Thank you for that comment, Andy. I was interested, I think there is a point of difference potentially on the two sides that I would be interested in receiving views on through submissions.

I think, John, you were referring to depreciation as reflecting the rate at which assets are worn out over time, and I think this slide shows in that first bullet point just a difference in the way that Christchurch have approached it, which is it's more about showing how much of the investment they recovered during the pricing period and therefore the corollary of that at the end of the period have a closing RAB that is consistent with that pricing decision. So, I would be interested in submissions from both sides as to which is the principle that should be reflected, and any guidance, or changes to methodologies, or the disclosure requirements.

So, I would kind of pause there just to make that invitation but perhaps now if we can move on to the next presentation because I'm conscious of time. Adrienne, if I could hand over to you to give us a quick summary of your views on the initial regulatory asset value for land.

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ADRIENNE DARLING: Thank you, John. For those that don't know me my name is Adrienne Darling, I'm the Aeronautical Pricing Manager at Auckland Airport. The topic I've been asked to talk to today is the initial regulatory asset value for land.

In November 2014 the Commission published the amendments to the initial RAB. As I understand it the question at hand today is how to give effect to the High Court decision in respect of the date for the initial regulatory asset value for land assets as at the last day of 2010 rather than 2009.

This presentation summarises the informal suggestions made by Auckland Airport, made to the Commission in 2014. Recognising that Air New Zealand was a party to the appeals, they joined us at our meeting with the Commission to see whether we could agree on a pragmatic way forward. It should be noted that the presentation was developed using Auckland Airport land assets as an example.

So, the Commission sought our view and Air New Zealand's view on the draft orders in response to the High Court Judgment. We made the following points.

Firstly, we did not wish to make inefficiencies for our own business or the Commission's when these could be reasonably avoided; secondly, we were supportive of transparency provided that it is meaningful and efficient for all involved; thirdly, we

considered that complex changes to the IMs may not be the best way to give effect to the High Court decision.

We proposed a pragmatic way forward which I will outline shortly as we did not consider that the benefits of a new valuation outweighed the costs.

As part of the section 56G reviews the Commission also sought feedback on the effect of the judgment on those reviews. BARNZ noted that while updating the section 56G analysis for Auckland Airport would result in a different quantification of the returned target by the airport. It would not affect the Commission's overall conclusions. Indeed, it would strengthen rather than alter the Commission's conclusions. The general view was that a later asset valuation of 2010 instead of 2009 would not change the conclusions presented in the Commission's final section 56G reports for any of the three airports. Therefore, BARNZ, Air New Zealand, Auckland Airport and each of the airports supported the Commission's pragmatic proposal not to update the analysis. BARNZ noted that such an exercise would merely have caused a delay of at least six months of the finalisation of the section 56G process while not affecting the outcome in any material way. I'm tempted to comment on the length, but I won't.

So, in order to determine a fit for purpose method of dealing with the determination, we think that it's relevant that there has been a significant passage of time. 2010 was the logical starting point for the ID regime if the merits review proceedings had been determined quickly but ID has moved on significantly. All airports have revalued land since 2009. A new 2010 valuation would come at material cost with no clear benefits as there would be no difference to practical carrying values.

There is no requirement to re-disclose the initial RAB for information disclosure. Nevertheless, we understand that there may be some interest in having an initial RAB reference point if this is required. We propose that this can be achieved in a simple way in reference to existing valuations.

So, we propose that if it was indeed necessary to establish initial RAB, this could be achieved through a simple interpretation of the initial asset values. Using Auckland Airport as an example our opening RAB in 2009, as assessed according to schedule A and 30th of June 2009 was land asset of 305 million, a further valuation was done in 2011 which established a RAB asset carrying value for land at 356 million. Fairly uncontentious midpoint of those two numbers is 331 million. We think that it's not unreasonable to expect that the valuation as at 2010 would be in a small range of this number.

So, putting the change to the initial RAB date in, in perspective it would not affect the current valuation disclosures of the RAB land as these have been subsequently surpassed by new valuations. The amended IM would affect the initial RAB in the disclosed ROI and FY11 with no ongoing impact on disclosure values.

At the time we had our discussions with the Commerce Commission there was consideration of whether this would also affect the non-RAB land, however the lawyers determined that land outside the RAB was not affected by the High Court Judgment, year five removed reference to this in the presentation.

So, in summary we propose that there is a pragmatic answer to a purely technical problem. We query whether requiring a new land valuation is an appropriate solution to the matter at hand. We note

that the initial RAB already involved different dates for different classes of assets for PPNE versus land. Nevertheless, if an initial RAB asset value is required for land, we consider that it would be efficient to confirm that a new valuation is not required and would not make a material difference to disclosures or transparency.

We recommend that it could be proxied by the interpolation of the 2009 valuation with a subsequent land valuation, and we note that there was broad support for pragmatism in the industry at the time of the discussions and we hope that this will prevail, and we'll find out very shortly.

I understand the Commission was keen to have some discussion on this and I took the liberty of discussing it briefly with BARNZ in advance, and I appreciate that because the land IM is now part of a fast track process there is potential that this may colour the issue that's been discussed.

So, I wondered whether it was sensible to think about it in two parts, and that is to get feedback on whether if we set aside the review of the land valuation IM what's the feedback to the proposal to take a simpler approach to the 2010 compliance issue, let's say, versus how does the land valuation issue affect stakeholders' views.

JOHN McLAREN: Thank you, Adrienne. Who would you like to ask first?

ADRIENNE DARLING: Whoever would like to answer.

JOHN McLAREN: Perhaps if we go to the airlines then.

KRISTINA COOPER: We're always pragmatic. I think it's a simple solution for Auckland. I think it would be a simple solution for Christchurch. For Wellington Airport it's unfortunately complicated by the fact that there was a further revaluation

undertaken I think in 2013 in which the airport took I would say partial account of some of the points raised by Darrochs during the 2009, well during their review of the 2009 and 2011 valuation, and Darrochs had been appointed by the Commission to review all airport valuations actually and came up with a number of areas where they questioned whether Wellington Airport's approach was in line with the schedule A requirements, things like the amount of time that the airport had allowed for the change in zoning requirements and the development, things like the amount of commercial space, reserves etc, and as a result of that review, when Wellington Airport undertook its 2013 revaluation there was something like I think about a $16 million reduction in the valuation. So, from our perspective averaging the '09 and '11 for Wellington wouldn't quite work. I don't know if there's an alternative pragmatic solution such as a desktop exercise to create a 2010 number using the market evidence from, the averaged market evidence but the change approach from 2013.

JOHN McLAREN: Thank you, I've just seen the sign saying we've got five minutes to go so perhaps if we hand over to Wellington to see if they've got any views on an approach that would be pragmatic for them.

MARTIN HARRINGTON: I don't have a solution right here, right now, but I guess the simple response is we have to submit and just break down the $16 million that Kristina talks about. But from memory it's a valuation that was done at that time which looked at a multitude of things.

There were movements between houses bringing the looming scheme which would have effectively by bringing them into an MVAU valuation brought them down, so it's just now an allocation issue. The market valuation impact as well. We've had impacts. There are a number

of reasons which I would say that that valuation we had in 2013 was reflected at that time and it would be strange to go backwards in time to compare it to a different date but for fullness we obviously need to explain it more, substantially or more clearly in submission.

JOHN McLAREN: Thank you for that. Hamish has just drawn my attention to the second question on Adrienne's slide so if someone would like to address that question, specifically how does the fast track issue affect stakeholder views.

CRAIG SHRIVE: So, I think the principle might be the same as has just been addressed and I think I disagree with it. So, if a valuation is changed tomorrow for whatever reason, say the IMs are changed and we do a new valuation, well that should apply going forward, that's the way of the future.

So, first of all I don't fully understand why if a valuation has changed therefore we need to go back and we can't do the pragmatic exercise that Adrienne was explaining, and I think it's the same principle for if any changes come out of this review, bearing in mind IMs are there to provide certainty, they should only apply on a forward looking basis.

JOHN McLAREN: Thank you for that comment, perhaps over to the airlines.

KRISTINA COOPER: So, I think the concern we have is that Wellington Airport's valuation in the first place in 2009 was not in accordance with the Schedule A requirements and therefore when it was later reduced, why should that count as a devaluation which goes to reduce the airport's revenue? It was a false revaluation that should not have been at that level in the first place. So, really, it's a correction that needs to happen ab initio.

JOHN McLAREN: So, that's for Wellington?

KRISTINA COOPER: Yes.

JOHN McLAREN: How about with the other airports, do you agree that any changes to the valuation methodology should be applied forward looking or do you think that they should be applied to previous valuations?

KRISTINA COOPER: I think it depends, it depends on whether there's a change which clarifies an ambiguity that was existing in the current guidelines which I think I would say should be applied retrospectively, or whether it's a completely new change which I think would then apply from that time.

JOHN McLAREN: Interesting. We've run out of time for a response from airports but of course we do have a few weeks to get pen to paper on submissions, so thank you Adrienne for that presentation. Perhaps now we're kind of segueing into this topic anyway and that's the treatment of unforecast land revaluations. We're fortunate to have Kristina Cooper presenting on with support from the two gentlemen on either side.

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AARON SCHIFF: I'm just going to kick this off with a quick introduction, and then Kristina is going to talk in more detail about the definition of the problem and then I think offer some pragmatic solutions.

So, it should be clear, but just to be clear what we're talking about here, we're talking about revaluations of land that actually occurred but which were not forecast at the time that prices were set some time in the past. And, so the issue, as it says here, is how and when do we treat these as income in profitability assessments and what are the implications, I guess, of alternative treatments of that?

So, everybody likes a good principle so let's kick off with just quickly quoting from the Commission's reasons paper on this issue, and I won't read out the whole thing but it starts off saying, "if a nominal cost of capital is applied to an inflated or indexed asset base, then any revaluations of the asset such as an upward revaluation for inflation must be treated as income in the ROI for profits to be monitored effectively".

Then I'll paraphrase the second part which essentially says that this principle should apply whether or not that revaluation was caused by sort of general CPI inflation, or something else. And, so this general principle I think has been confirmed by the High Court decisions on these matters and so I want to talk through a little bit about the implications of what that might be.

So, the current requirements under ID is that unforecast revaluations are to be disclosed as income in the year in which they occur, and so the implication of that obviously is that the closing asset base includes any actual revaluations that were undertaken during that year. A practical matter is there's no requirement on how often or when in the pricing cycle these revaluations should be undertaken, so they just kind of happen I guess when they happen, or when airports want them to happen.

The practical effect of this disclosure is essentially nothing. They're disclosed and it will affect your backward looking historical assessments of return on investment, but because it won't affect the prices that actually go forward in future, so it's kind of, to my mind it's kind of an accounting exercise. We're looking back at what happened in the past, but that's already happened, we can't really change that.

It will affect our assessment of that but it doesn't really affect what actually happens in the future.

Now, just to give a little bit of context and I don't want to go into details of the numbers on this slide but just to kind of describe the size of the problem.

Historically unforecast revaluations that have actually occurred have been relatively large, and importantly they've always been positive numbers as well, or mostly been positive numbers.

In principle it's possible that an unforecast revaluation could be a negative number, you can get your forecast wrong in both directions and if that happened there shouldn't be any difference in the treatment between an unforecast positive or a negative revaluation but in practice the numbers, well, it seems we've seen they're generally large and positive numbers so that's why this issue is perhaps of more concern.

Now, taking that into consideration, taking that into account, if you think about what do we use to forecast land revaluations, and it's the CPI. Now, the CPI it seems, doesn't seem to be a very good way of forecasting land base, particularly in cities in New Zealand. We've only got data here on house prices but you'd think that would be quite closely related to land prices, and historically we've seen house prices increasing much faster than CPI. So, it suggests that CPI is not really a good forecasting tool for forecasting land valuations. Certainly if you asked me to come up with a land value forecast I wouldn't go and look at the CPI and say, here's your answer, I would feel a bit bad about doing that. I'd certainly try to come up with a forecast that I think had less of a bias than the CPI would in that case.

So, the situation we find ourselves in essentially is there's not really any incentive or any mechanism to ensure that these forecast valuations in a statistical sense are unbiased, that you expect them to be equal to the actual valuation that occurs. It doesn't mean you're going to get them right, your forecasts are always wrong but you want them to be on average wrong in both directions and that essentially doesn't seem to be occurring.

So, that's a bit of context and Kristina is now going to talk about some more of the details and then get to some solutions.

KRISTINA COOPER: So, the problem is obviously airports set prices on a forward looking basis and by their very definition unforecast revaluations are unknown when that occurs. Therefore, if they're going to be treated as income for pricing purposes, or if they're going to be used in assessments of targeted profitability, then that can only occur after those unforecast revaluations crystallise, and in our view if the unforecast revaluations are included in the asset base used to set charges or to assess profitability, and if they haven't been treated as income at some point either in the price-setting process, or in the assessment of profitability process, then that breaches the NPV=0 principle.

So in the Commerce Commission's forward looking ROI they only treated forecast revaluations as income, and this issue really only became clear in the case of Christchurch Airport which had a $33 million unforecast revaluation from the previous pricing period which Christchurch Airport had carried forward as a credit, and the airport and BARNZ were both as one on that but the Commission's assessment was done differently.

So, we believe that the Commission's forward looking assessment significantly understated the level of targeted returns for Christchurch Airport. So, the unforecast land revaluations will only affect the prices paid by consumers when the prices are reset, and so effectively it's the forward looking assessment of targeted profitability which actually affects the customers and the consumers, not so much the backward looking.

So, in essence we believe that the approach the Commission took to unforecast revaluations in the case of its analysis of Christchurch Airport led to the revenue from the unforecast revaluations being treated as income in one historic looking pricing period, but the effect on prices for consumers was taking place in the next pricing period, so there was a mismatch.

So, the outcome, we believe profitability in the first period when you have a positive unforecast revaluation will exceed what was targeted. This potentially can lead, if you leave that revaluation there it can lead to actually dampening incentives on controlling opex and capex because they're disguised by the unforecast revaluation. If the unforecast revaluation is left in the historic pricing period then it will never be taken into account in assessing targeted profitability on a forward looking basis by the Commission. And, if it's not being taken into account by the Commission on a forward looking basis, then it actually becomes less likely that an airport will take it into account as it sets prices. So, the end result is that the unforecast revaluation could well become a windfall profit to the supplier.

What does this mean for Part 4? It means reduced limitations on suppliers extracting excessive profits, it means a windfall gain to suppliers from that

unforecast land revaluation, a matter which should actually be outside the influence of the regulated supplier. There's no efficiency incentive by leaving that unforecast revaluation there with the regulated supplier. Rather, it just leads to excess returns and which isn't in the long-term interest of consumers.

So, the next slide I just set out how the Commission's approach differed to how Christchurch Airport treated the unforecast revaluations, which I've mentioned several times today. Christchurch Airport has made a commitment going forward that if there's unforecast revaluations in the future, they will treat them as income in the following pricing period, and we agree with that but we're now unsure what approach the Commission would take to assessing profitability in that situation.

In the Commission's approach, also differs to the commitment given by Auckland Airport, that if at the next pricing period it moved away from its moratorium, which it says it has no intention of doing, but it committed that if it did then it would treat any revaluations at that time as income in the following pricing period. But again, we're left uncertain as to what approach the Commission would take to that analysis.

So, that's our problem and I'm putting three solutions on the table, some of which are pragmatic, and would particularly like to invite discussion on, and I'll just introduce each solution and then ask Aaron to comment.

The first solution, that if the Commission is going to be putting out a forward looking profitability assessment, then it could simply be a requirement of that forward looking profitability assessment that any unforecast land revaluations, positive or negative,

which occurred during a previous pricing period should be treated as income for the purposes of assessing profitability for that new pricing period.

The second solution, which is my personal favourite, is to amend the ID requirements so that - I'll just backtrack. Right now, as Aaron mentioned, there's no requirement on when unforecast land revaluations can occur. In fact, it's actually implicit in the rules that you could even do them twice in one year if you wanted to. So, my second solution is to simply change that and make it a requirement that if an airport wants to revalue its land assets using Schedule A, then that can only occur at the beginning of a pricing period and that would then mean that you didn't have unknown unforecast revaluations because you would know them because they had just occurred on the very first day of the pricing period, so they would be able to be taken into account by the airport as it set charges and by the Commission as it assessed profitability going forward for that pricing period.

The third potential solution would be to amend the input methodologies to align the land revaluation principles with those of specialised assets, so in other words not to have ongoing revaluations of land but instead just index land at CPI like occurs for the specialised assets. I have noted that could trigger merits review applications because it is a significant change but it is an option, not one of our favoured ones though.

AARON SCHIFF: Just a quick comment on the solutions, since Kristina asked. I mean, if I had to pick one I would pick the second one. I'm in favour of simple solutions. It seems like a complicated problem but potentially there's quite a simple way to fix that.

JOHN McLAREN: Thank you for that presentation. I guess if I throw over to the airports to see what their reaction is and you've got a menu of options to choose from, if any of them appeal?

CHARLES SPILLANE: Can you explain your favourite one again? I just don't get it.

KRISTINA COOPER: Well, at the moment there's no restriction on when an unforecast land revaluation can occur, so an airport can revalue its land under Schedule A, you know, any time. Traditionally it's done towards the end of the fourth year pricing period so that the information is there to be used in the fifth year as one resets charges, and it's usually, usually booked in the last day of the last year of that pricing period so that the opening asset base in the next period has had the revaluation.

What we're simply saying here is if one required the revaluation to occur at the beginning of the new pricing period, then it would be showing up in the disclosures as revaluation and income in that first year of the pricing period. So, effectively you have matched the timing of the revenue from the unforecast land revaluation to the same pricing period where it takes effect on the amount of charges being levied if an airport chooses to price off the revaluation.

CHARLES SPILLANE: Got it.

ANDY NICHOLLS: Kristina, I think I can see what you're wanting to achieve and just again to make sure I'm understanding the option, and this might just be a language thing. When you say the land revaluation has to occur, do you mean sort of deemed to occur?

So, I'm thinking about, to set prices in June 2017 Christchurch is looking to go in and engage airlines in the second half of 2016 which means that prior you're going to want to see a land valuation, if we do a land

revaluation, which we haven't made any decisions to do, and so that I think is part of a dynamic you're talking about which is the physical requirements of a consultation meaning that you have to get a land valuer to produce a land valuation 18 months out and then you get stuck in this cycle you're talking about which is the annual disclosures - you've actually done your asset valuation so your annual disclosure requires that it will be booked and around you go.

So, just the language you were using I think what I took was something like, I mean it's going to have to be done well ahead of time but it's going to have deemed to be, or somehow treated in that first year of the pricing period which is what you're after, is that right?

KRISTINA COOPER: That's exactly right. For the information disclosures requirements it hits the books or it hits Schedule 4, I think it is, in the first year of the new pricing period.

ADRIENNE DARLING: That's a point of detail which is not particularly relevant for Auckland Airport with a moratorium, but I'm wondering whether there is a slight difference between the first day and the last day of that first disclosure year? Because actually, in order for it to be relevant for pricing, if you're including revaluations or an undated valuation, you would probably want it to be on the first day of the disclosure year in order for you to be consulted on it.

KRISTINA COOPER: Yes.

JOHN McLAREN: Okay, so we understand the option a bit better now I think. So, does that affect choices or thoughts on the options proposed, or indeed comments on the presentation more generally, or should I take the silence as unanimous approval?

CHARLES SPILLANE: Sorry, do you want us to reply to that for the record?

ANDY NICHOLLS: Well, to be sort of transparent, I mean part of the silence - I'm not silent, it's hard to keep me silent, we did the, you know in 2012 we did another valuation because we wanted to use a valuation that was consistent with the IMs, and so we went through that process that generated the revaluation and we treated it as BARNZ has highlighted. At least for his part, you know, Jeff's saying to us just not a quick skim, just don't bother, why would you just revalue your land, so just keep it simple kind of thing.

So, part of the silence here I guess is weighing up, we'll think through this and respond more theoretically, or whether this is a huge practical issue going forward is going to depend on the appetite that airports have to keep revaluing their land and keep booking these revaluations and have the cash flow go everywhere.

JOHN McLAREN: So, let's assume that airports did have the appetite, because obviously if they didn't then I suppose the question does go away. As you say, it's a moot point, but if there was to be revaluation, if the moratorium was to end, does Auckland Airport have any views on how that revaluation should be treated?

ADRIENNE DARLING: I think our views are already on the record as to how that would be treated. It would be treated in a principled way in future periods. Transparency would be necessary and it we'd be open to the issues, but for the present point in time it's completely moot for us.

JOHN McLAREN: I think you said in a principled way. By that do you mean that the principle that they've enunciated in terms of all unforecast revaluation gains

or losses being booked as income, or would that be a decision at the time?

SIMON ROBERTSON: Yeah, we're not seeking to gain things. As we've said before, we'll recognise the income in future periods. As Adrienne said, it's a bit of a moot point. It's a theoretical discussion for us as we have no appetite at this point to see why we would revalue the assets in 2017.

ADRIENNE DARLING: I think also looking that 56% rise in Manukau prices, we're very thankful that we agreed to the moratorium or we might not be speaking without having pre-agreed something.

JOHN BECKETT: My understanding of this, we're in a situation where the players actually agree on what the principles should be. We would just like the referee to adopt that too.

JOHN McLAREN: Noted, thank you, and appreciate all those views from around the table. Perhaps now if I look at the audience again and see if anyone has any questions they want to chip in or comment? Quiet bunch, tough crowd. Okay perhaps we'll move on then.

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SIMON ROBERTSON: First, I would like to start by thanking the Commission for holding this event, including attempting to create an environment for discussion rather than inquiry. I think it's bold and so we think you're brave, so thank you because we think it's more constructive.

Would also like to thank all the parties here for the opportunity to discuss land held for future use in an airport context.

I guess ultimately for Auckland Airport the land held for future use is a significant asset and it is held for the long-term benefit of the wider aviation industry. It impacts both current and future travel

trade and tourism stakeholders, and we believe will make a significant contribution to Auckland and New Zealand's future economic growth.

So, again to provide a little bit of quick background. The current IMs exclude future use land from the RAB until it is commissioned. However, an airport can expect to earn a full return inclusive of the holding costs once the land is commissioned. So, we understand that this does provide the transparency of returns on land in use as well as the carrying value of land held for future use.

The challenge for us in the IM is that this is one way of approaching the issue for pricing purposes but it is not the only approach that could be undertaken in a principled and transparent way, and for many years right at the start actually of the process to determine the IMs we stated that this was a very important issue to Auckland Airport, and so therefore quite clearly we agree that it should be considered as part of the IM review process.

Again, just to understand I guess that context and the materiality of this issue at Auckland Airport, must start by saying that airports are very land hungry businesses. Auckland Airport in itself owns 1,500 hectares of freehold land. Now, I'm a bit slow and a bit stupid and 1,500 hectares doesn't actually mean that much to me, it's a number, but you can fit the entire Auckland central business district on our land holding. So, just to try and give you that sense of scale.

You can see from this aerial shot of our land holding that the area to what I would call the south is pretty intensively used for the core current operations of the airport today. The land to the north is held for the development of the northern runway, the

taxiways and taxi lanes appropriately required to connect that northern runway to both the current and the future expansion of existing terminal facilities.

The value of that land is also significant. At 30 June 2014 our disclosures would say that the value is about $235 million, so roll forward another year of holding costs and let's just call it a quarter of a billion dollars of land that Auckland Airport is holding for future aviation requirements.

There is today a true opportunity cost of holding that land, it's a real cost. There's a real funding cost associated with holding that land that is a real cost to Auckland Airport.

To just again talk about the issue based on the current IMs, and it's not to make an issue of the current IMs, you'll see I'll conclude that they're actually okay, but the significance of the issue gets played out from what might be implied by the IMs.

I do slightly apologise for this slide, I was looking at it again last night and thought maybe a line graph might have been a little bit easier rather than these blocks, because every year the holding costs increase. This sort of implies it goes in five year chunks, but our estimate of the commissioning of a second runway at Auckland Airport remains at 2025 plus or minus three years. At that stage the land held for future use inclusive of those holding costs could be in the order of $500 million to $600 million depending on the exact date, and at the same time, of course, the actual runway works would have been contemplated as well and let's just call that a similar cost in today's dollars and so we're not too far away with the back of an envelope there, Kristina.

So, not only will the actual build be a very challenging investment for Auckland Airport, but also

we have a significant challenge on how to create an appropriate price path. The issue, we did raise this issue during the price-setting event 2 and it's becoming more and more relevant as time moves forward. You can see that I guess as the holding costs keep growing and compounding on themselves, that the issue rises large before us.

We think that if the price path was mirroring exactly the IMs, then there will be a very significant price shock at commissioning. You know, again to give you that context, that land value of $500 million to $600 million and equivalent value for the runway works would broadly double the RAB that it is today. But we do think that there's an opportunity to take a long-term view of a stable price path in a transparent and net present value neutral way.

In the development of the IMs the Commission noted that no specific treatment is implied by reference to workably competitive markets. So, as discussed earlier, we appreciate that the IMs theoretically represent one form of workable competition but we also don't think that it's commercially realistic to have such a volatile price path. Price shocks expose Auckland Airport to potential non-recovery, they provide the potential for much greater regulatory risk in the future when you propose to increase prices by such a substantial amount, and therefore they would also attract negative media interest and potentially provide a significant challenge to the actual business case for the investment.

In terms of the High Court's view, was that it can be prudent for airports to price for land held for future use. However, we note as an airport we would not undertake that decision lightly. We are always committed to following a strong consultation process,

to seek a wide range of views, and to consider all stakeholder feedback.

So, to be clear again, we have formed no view on pricing of land held for future use. We just know today it's a really important issue.

Consistent with the Commission's stated objective we believe it's important as part of the IM review to build our understanding of net present value neutral options for the long-term price path and how the assessment of profitability would be undertaken both before and after price setting.

We do think there are some pretty clear principles that might provide some clear guidance and we agree that these would be important. For example, on just the land held for future use, assessing whether the future expansion based on that land is prudently and efficiently held, whether by holding it today it generates positive expected cost savings compared to not holding that asset, and whether there is a genuine reasonable expectation of that future expansion.

I guess I note earlier Kristina's comments in her opening address about her concern about an airport having incentives to acquire assets that are not required or not expected to ever be required. I guess I would put on the record that that is not the expectations for this land held for the future northern runway.

Equally, we think some other principles that are required would be transparency and it would need to be aiming to be net present value neutral over time. That's important not just in terms of what asset we're talking to but here we talk about the future price path decision on any land held for future use.

An option for pricing was tested, as I said, with airlines both during and after the last price-setting

event, and we note another option has been raised with us quite recently by the Commission on non-standard depreciation. We acknowledge at this point in time we have not explored that alternative but we are open to other ways of addressing this in a transparent net present value neutral way.

To go through some of the price-setting event number 2 consultation. During that price-setting event Auckland Airport decided not to include the land held for future use in pricing, however we did seek substantial customers' views on the different scenarios for charging for that land. We explored the introduction of a northern runway land charge in the price-setting event number 3, in the future periods; we explored the introduction of a smooth northern runway land charge from 2015; the introduction of a smooth runway land charge from 2013; and, the introduction of a land charge that sort of stepped up over time from a start date in 2013.

It is fair to say that for the most part airlines want charges deferred for as long as possible. Our economists held a different view to that general airline view.

Further discussions were had with one airline subsequently to explore that issue further. However, what we could say is there has been no disagreement on the transparency required on any future mechanism for getting a recovery on the existing land held for the future benefit of the aviation industry. We are now turning our minds to this for the next price-setting event and will be exploring these alternatives again.

For that land held for future use there has been quite a lot of work that's gone on subsequent to the last price-setting event decision, both a large amount of work on planning, a large amount of work on initial

design and operations. The Auckland Unitary Plan process has required Auckland Airport to ensure that we have appropriate planning controls in place to protect the use of that future runway. We've had discussions with Air New Zealand, Cathay Pacific, Emirates, Singapore Airlines, Virgin Australia and Airways, to test the proposed northern runway options and ensure that the preferred option is technically justifiable and that its planned operation has wide aviation industry support.

We do have aviation industry support for option 2A sitting here which avoids reclamation into the harbour which we believe is sensible. It's been we'll validated and noise controllers agreed. The investment on getting to this stage in the planning would not occur if there wasn't wide aviation industry support for a future second runway, and therefore really the prudent protection of that land for airfield uses.

Given the materiality of this issue it is important that the IM and the ID regime can provide the transparency required. The good news is we believe they can, so we believe that the land values can be monitored through ID showing the holding costs and any net income attributed to that land, any net income reduces the holding costs associated with that land.

Then on transition to commissioning a reduced value, I'm including here the original value plus the holding costs less any net income, can be transferred to the RAB when the asset is commissioned. So, clearly we believe that is very transparent and net present value neutral. So, we believe the current IMs and ID regime can deal with that issue. But, as I said earlier, we're equally interested in other ways a price path can be delivered in a net present value neutral way and the pros and cons of those alternatives.

So, in summary there's no issue per se with the IMs save for what we've said from very early on with a technical error in the actual form of this which ignores tax, and equally there is some transparency which could be improved I think with better disclosure there, but nothing wrong per se with the IMs. But we do think that the IM review can consider what other net present value neutral options for earning return on assets held for future use, and we clearly are interested in how any price smoothing alternatives in future will be assessed in terms of being a clear assessment of profitability both before and after price setting.

JOHN McLAREN: Great presentation, thank you Simon. If I can I'll make a few comments, I've got three comments I would like to just chip in before I go across to airlines to see what their perspective is on the presentation.

The first comment is that I really like the graph for illustrating the size of the problem. I think that's a very good one for bringing it into stark focus. One thing I would be interested in through submissions is an estimate of how much that impact actually translates into charges to achieve price smoothing, and when, I suppose. So, just taking that to the natural conclusion I guess.

Second comment was that I really appreciate the fact that you proposed those principles and I propose those would be useful to get comment on through the submission process.

And, the third comment is on depreciation and the alternative approach to depreciation. It really goes to a couple of slides you had actually and I'll take the liberty of taking control if I can.

First of all this one on the signalling of demand growth in capacity utilisation, and then again on, it's great to see people quoting the Commission's papers. So, I thought I would put that one up again. Again it kind of goes to that utilisation point and it seems to me you're in the flip side of the situation to the situation that Christchurch finds themselves in, where instead of utilisation being low and growing, you might be coming into the situation where it's reaching that peak and it seems like depreciation was an approach that worked for Christchurch, in their opinion. Obviously there's question marks on the stakeholder angle that we could explore, so I suppose it would be worthwhile seeing in submissions once you've given further thought to how depreciation might have a role to play, if at all, particularly in the context of the numbers that you're, we're talking about that bring that graph to life.

So, maybe that's enough from me and over to the other participants at the table

KRISTINA COOPER: I can always remember the day when I had to outline Auckland Airport's approach to the airlines about the proposal for including a charge for the land held for future use, it was the day that Qantas had announced that it was withdrawing or ceasing its operations to Los Angeles from Auckland, and that was the end I could see on everyone's faces of considering this question because they were like if Qantas isn't going to be flying here - and, it really, the question was whether they still would be at all or whether Jetstar would be taking over their operations. If Qantas can't be guaranteed to be continuing to fly, can I?

And, that is the question, that if Auckland Airport is proposing putting forward that

airlines should be paying for this land held for future use 10 to 15 years before the runway comes into use, all those airlines that are currently flying and currently paying that charge, will they still be here in 15 years' time? And, so I'm quite interested Simon that one of the key principles you have is sort of, is that it has to be NPV=0. It seems to me that it's transferring the risk of holding that land from the airport to the airlines who then have the risk about whether they will be there or not.

On a more positive note I think I can say that when it becomes clearer when the northern runway will be needed, then I think people would be more receptive to beginning to pay for return on that land earlier, particularly I understand it's a five year construction period. I don't think there could be any logical objection to starting to pay for return on the land when construction had commenced, which is earlier I think than the current IDs.

Final point is we are wary, I think, like Aaron said, about putting the square peg of depreciation into a round hole. It just doesn't seem transparent and clear to us. If there's a price smoothing we'd rather it was called a price smoothing and not tried to be called something else.

SEAN FORD: I just want to make an observation more than anything. Obviously this is an issue which has been considered in some depth by the UK CAA around the third runway at Heathrow, or the Airports Commission process that they're going through at the moment in relation to a third runway for the area. I see the Commission has come down in saying it should be at Heathrow but that decision is yet to be finalised by the Government.

But the UK CAA has been toying with the idea as to whether Heathrow should be able to start charging for

that now, and just looking at what aspects of the costs it should be able to charge for. Interestingly, First Economics did a paper for a number of the airlines just looking at the whole issue of in principle of pre funding and whether it is appropriate or not, which I think would be instructive for people to have a look at. It's a very balanced paper I believe.

Effectively where they come down to is saying, from the examples that they've seen in a competitive market situation, pre funding doesn't happen. Looking at the examples of power stations and 4G mobile networks, the only places that it has happened is in industries that are actually quite regulated, ie where the regulator is actually setting prices, ie Heathrow Terminal 5. But also just in terms of the NPV issue one of the points they raise is it depends on whose NPV you're looking at. From a supply point of view, yes, it might be NPV neutral but if the user is actually having a higher discount rate and having to pay upfront, then it's not NPV neutral to them.

So there's a whole range of issues that need to be looked at in terms of understanding where you go on this but yep, anyway.

JOHN McLAREN: Thank you for those comments. So, it looks like we're approaching the end of the land held for future use session but before we bring it to a close is there any response you have to the comments just made or does any other airport wish to chip in?

SIMON ROBERTSON: I would just acknowledge the complexity that's involved, so we're not hiding from that fact. It's equally, you know, it's a massive challenge for us to think about what that may mean for our ability to fund this kind of activity.

The word "pre funding" I've always struggled with, to be fair, because the land is there so it's not pre,

we're not talking about pre funding runway construction costs, we're talking about obtaining a return for land that's already held, and of course you've also got to look across to other areas where debate about where you put airports in airport expansion is terribly difficult and fraught.

You know, you raised the London scenario where that debate has been raging for quite some time. You can look across at Sydney, at the Battery Creek example is another very challenging aspect.

The fantastic opportunity we have in New Zealand is actually we already have the land at Auckland Airport, there doesn't have to be a debate about where we're putting it in, what other places, what other businesses get displaced, what other residential issues come about? So, we start from a good footing but the issues are complex and incredibly challenging, so hence why we think it's an important part of the IM review.

JOHN McLAREN: Thank you for those comments. Funny that you should mention the challenge of airport expansion because our next topic is the regulatory treatment of the proposed runway extension at Wellington Airport, very much looking to see, although it's early days at the moment, what the potential problems might be with current rules and requirements for disclosing information about the costs. So, perhaps if I hand over to Martin to give a run through perspective from Wellington Airport.

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MARTIN HARRINGTON: Just by way of introduction, if you can't build a second runway you have to extend one so this is what Wellington Airport is hoping to do. So I'm going to take you through a reasonably brief presentation on Wellington's proposed runway extension,

provide a little bit of background to the project and then set out some of the points in relation to both AAA and the IM implications.

So, just quickly by way of background just to put it into context which might help people understand the current facts and situation of Wellington Airport's proposed extension.

We're currently progressing a submission to the EPA to obtain a resource consent and that will hopefully give us, if we're successful, a 15 year option to extend our runway. What we're looking to do is a 355 metre extension to the south to enable long-haul flights. We've had some economic assessment done by EUI which you'll see in those pie charts there which look at the direct economic benefits to New Zealand of $1.7 billion and to the Wellington region of $0.7 billion, and we're also doing a cost benefit analysis with SUPRA now the construction and environmental costs have been assessed.

We've also looked at with InterVISTAS, the aviation consultant expert that works for airports and airlines around the world. They've confirmed the viable market and route for the airlines which you can see in the little graph or table on the right-hand side showing effectively there's the current demand or the demand per the business case that we've currently got is the one return a day or the 220 passengers per day one-way, whereas the current demand today is the 3 and a half planes or 750 passengers a day one-way. So, there's obviously sufficient demand today to have long-haul services from Wellington Airport. The problem is we don't have a runway to service those aircraft.

So, there's also going to be pretty extensive stakeholder consultation on the consent and that is, as

it says in the second bullet point up from the bottom, that is the first step.

The next steps which people are sort of jumping to a little bit are the funding and what are the charges and what are the charges for airlines, but we're very much at the first base at the moment trying to get a resource consent.

The thing that is clear is it requires external support from central and local Government as well.

So then just from a consultation AAA, Airport Authorities Act, perspective. For PSE 3 which is the current pricing period we're in, there's no runway extension costs included in PSE 3. What we did forecast was we targeted and discussed with airlines and BARNZ that we were going undertake some resource consents processes and costs associated with that but we excluded those from PSE 3 and approximately about $3 million, and obviously while Wellington Airport bears that risk should the consent not be approved.

The second aspect of the Airport Authorities Act is the major capex project. Obviously the scale of the project will require AAA consultation separate from the five yearly price setting. We've estimated the cost to be $300 million which has gone through a couple of eyes of construction engineers, and external funding is yet to be determined but expected to be about 80% external funding, so about $60 million or thereabouts for Wellington Airport.

There's obviously, as you can imagine, an array of issues to be undertaken and addressed as part of the resource consent process and there will undoubtedly be significant oversight and interest from Government and other stakeholders and we fully expect to take stakeholders through the approach, including the Commission, as we step through this process.

As I said, we have reliance on public funding which will require economic justification as well, but again, just to put the obvious or to state the obvious, that Wellington Airport and the funding partners, if this goes ahead, take considerable risk should the airlines not deliver forecast services over the longer term.

The next couple of slides are on approach under IMs which I think is pretty, for us there doesn't seem to be any issues or conjecture, or certainly not that we can see at the moment.

The treating each of the costs. The resource consent costs are currently held as work in progress and excluded from the RAB because the works are not commissioned. Construction of the runway is still some way off, expecting about 5 to 7 years post approval and obviously once construction costs, or once the construction is complete and the runway is commissioned and they will enter the RAB per the IMs.

The last bullet point there is the asset value to be included into the RABs will be the net invested by WIAL. You can see here we've just got an extract again from the Commission's IMs under section 3.9. There's two key clauses under section 3.9(1), being (h) and (i), without reading them out the first one for (h) is regarding capital contributions which effectively says that the airport can only put into the RAB the amount that it's contributed itself and should not exclude third party contributions, and the second point regarding invested asset, again within the RAB, should exclude any invested asset, which to me makes obvious perfectly clear sense. So I don't think the extension will be an issue under the IMs or for this particular review.

Coming on to prospective charging. I've just set out here on the following page some considerations, to say it's very early stages because we haven't really got to first base, really, so far as resource consent but just following through I guess this understanding where it, what it could look like but we've yet to discuss the charging structure, yet with airlines or parties, because there's no point to do so yet, there's too many moving parts, but once the resource hopefully is approved and then when we've got confirmation of funding, then we can actually work out exactly what the charging could look like, and in consideration also of market demand as well have those discussions with the airlines.

The main beneficiaries of the extension, obviously bringing new long-haul operators will be the main beneficiaries, ie new routes not currently operating from Wellington Airport, whether it's through to Asia or through the States, and I said before, the business case is pretty conservative, it's one return a day growing to three returns a day over about 20 plus years, so it's not big movements from a Wellington Airport perspective but it obviously has huge impacts for the region and for New Zealand.

The other beneficiaries for airlines though will be, we do have pay load restrictions currently, so by having a longer runway, that will lift some of the pay load restrictions and also enable potentially other short-haul routes to places like Adelaide, Cairns and some of the Pacific Islands like Samoa and Cook Islands.

Another point at the bottom here is we do currently have, sorry, coming back here, the other point here is the extension we believe will facilitate more traffic and ultimately it's the increase in asset

base will be off-set by an increase in traffic, ie existing users will not pay more than they would without the extension.

There's also a number of things to consider which we are at the very early stages of really turning our minds to, but historically Wellington Airport has used a building block approach so we'll need to consider if we do that going forward, and ultimately the WACC and the price path.

So, following obviously extensive consultation with airlines the main considerations listed there, one is obviously the regulatory regime, what it may look like as and when construction starts and we're talking 5-7 years post resource consent, so it could be 6-8 years' time before construction is complete, maybe longer. So, one thing is setting the regime at that time.

Looking at costs recovery over a longer time period, so again looking at ways in which we can make, reduce maybe, or to make the service competitive and working with airlines to actually get a good proposition for consumers. And, other way of doing that is obviously transitioning the costs of construction to the asset base over time or potentially doing the non-standard depreciation that we talked about earlier.

The other point up there is, well we currently do have published incentives so our published incentives for Wellington Airport now are 100% rebate for each of the first three years, and we would imagine that when we have those discussions with the airlines about bringing in new services, that there will be quite a lot of pressure on to extend those, extend those rebates going further into in time.

The last slide is just wrapping up, really, just where we're at.

So, we submit the resource consent in late this year, probably December. Thereafter it's a nine month EPA process, so hopefully we'll have some good news at the end of that. We'll continue to have obviously extensive and ongoing stakeholder and AAA consultations as part of the resource consent process, and then provided the resource consent approval, the next steps will be progressing the funding discussion with airlines and other stakeholders. That's it from me.

JOHN McLAREN: Thank you, Martin, very interesting presentation. Good to see that you don't think that there's too many potential problems on the horizon from a regulatory treatment perspective. If I could open it up to comments or questions around the table.

JOHN BECKETT: It's good to now be engaging with the airport on this particular project. The airport has said quite clearly that it expects public money to go into it which means either Government money or Wellington City Council and the other councils in the Wellington region's money. That quite clearly does need a cost benefit analysis carried out and that means a proper cost benefit analysis that looks at it on a basis where there's a counterfactual and the benefits of calculated as the net benefits and specifically calculated, largely tourism, and that's not using multiplier analysis, it's using specific analysis addressed to it, and it's pleasing that the airport is now commissioning such a study.

So, having done that if those councils do contribute those funds and if those funds and that investment can be separated off so that the amount that entered the regulatory asset base was quite small, then it's conceivable that it could all work. The important

thing is seeing how those numbers all come through and seeing commitments that, for example the public money is kept out of the RAB. So, those are the sorts of things that would need to be addressed but the framework that's available, the framework that's been built is available to deal with it.

JOHN McLAREN: Thank you for that comment. Focus today is very much on the rules and requirements so glad to hear they stand up to scrutiny, they usually do. So if I could perhaps see if there's anyone else that has any questions, any airports around the table or a last chance to ask a question from the floor.

KRISTINA COOPER: Very quick comment, I would please encourage the Commission to think strongly about putting forward some guidelines on the non-standard depreciation and the principles of economic depreciation, because we wouldn't want to go through another reverse calculation exercise.

JOHN McLAREN: Okay, thank you for that. I will be asking anyone around the table if they've got any closing remarks, so perhaps you could pick that up again during that.

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JOHN McLAREN: You'll see that I've set aside 25 minutes for the wrap-up and we're running ahead of schedule for that, so I don't have much to say by way of closing remarks and so the astute amongst you all will realise that that was a tactical decision to include a wee bit of extra time at the end. I should never really have doubted the people sitting around the table to run on time and it seems you've delivered so thank you for running on time.

On behalf of the organisation I would like to say that I've been very impressed by the constructive tone and the attitude that you've brought to the table quite

literally today, and it does suggest that a similar approach may have merit for tackling similar issues in the future, so I would like to thank you all for your participation today.

On a more personal level I appreciate the patience that you've shown with my puns, I recognise some of them were trying some people more than others and I'll resist the temptation to show you the exits, I think you'll be able to find your own way there.

So, perhaps I'll stop talking in case I do say another pun but I'll perhaps open it up to anyone that wants to make any closing remarks and observations on the day and perhaps if we go around the table and start with Auckland.

SEAN FORD: Just want to thank the Commission for this process. I think it's been useful. Thank also the airports for the presentations they've made. Some interesting issues, food for thought, and we look forward to continuing the process and submitting on the 21st of August.

KRISTINA COOPER: I'm going to reiterate thanks to the Commissioners and staff for organising the round table discussion, I think it's really useful to draw issues out and see where similarities exist. I think what I've taken out of today is there's a common feeling around the table that people want principles-based regulation without detailed prescription. It's a matter of getting the balance right but I don't think airlines or airports want the airports tied up in having to follow exact rules.

I think we all agree that transparency is important. I would acknowledge Auckland Airport goes over and beyond its disclosure requirements to try and have explanations of its different approach with the moratorium. I think it would be good to have an

overall principle in the disclosure requirements so that airports know that it is a matter of ensuring transparency exists as well as ticking the boxes.

For BARNZ I would like to indicate that we do believe that a profitability assessment, forward looking profitability assessment would be useful, and for us I think we would definitely seek clarification of how the Commission will be taking into account unforecast revaluations in the future, I mean in the Wellington Airport final 53B I think it was reported that the Commission said it would be looking closely at what happened with the unforecast revaluations when Wellington Airport next set prices but we don't know how that will occur.

Finally, again as I said earlier, I think some principles guiding non-standard depreciation would be useful because we're going to be faced with that on future occasions within the next ten years.

CRAIG SHRIVE: Thanks also to the Commission. Personally I've found this to be a very productive exercise and I think so I can probably speak for everyone in that way.

Just going back to my opening statements and the need to focus on issues and think about different options, so I've been very encouraged in that respect. There seems to be quite a lot of consensus around the table that, I think Kristina has just said the same thing, let's not go overboard on prescription but let's just focus on the context and the full circumstances. And, it's also been in that context very helpful to understand, and I've the different perspectives from both the Commission and the airlines, so it's going to be very helpful for the submissions I think.

MICHAEL SINGLETON: Again just echoing those comments again around the vote of thanks for putting this together. I think it has been a productive session. I think it's

clear there's a bit of a narrowing of some of the issues which has been good.

I think we've heard, the things that stick in my mind, we've heard from three airports on three different things. I guess that highlights probably the need for flexibility to be built into the system and that that one size fits all will have its challenges come implementation.

I guess other things that have stuck in my mind as you've heard all three airports talk about engagement which I think is productive and also it's nice to hear pragmatism coming into that as well, so hopefully that makes a good formula going forward and, Aaron, it's good to hear there's no, I guess any major objections to the non-standard depreciation but that we're talking about implementation issues. You know, we've given some commitment about that and as Andy said, we're up for it, so thank you.

MARTIN HARRINGTON: I'll keep it very brief, I don't think I've got much more to add, just reiterate the comments just said and a very constructive forum. So, thank you for that.

CHARLES SPILLANE: It's good to for once have the last word. I again echo the comments that have been made around the table. It's been really good to take part in a forum of this sort of nature, so well done on organising it and I would just like all passengers to check the seat back pockets and underneath the chairs and make sure they take all their belongings when they exit the aircraft, so thanks very much.

JOHN McLAREN: I should know better not to enter into a pun competition with an airport representative. So, the purpose of today was to try and assist you guys in preparing your submissions on the paper that we published on the 16th of June so it's good to hear it

has kind of fulfilled that purpose and has helped to narrow some of the views and hopefully will lead to more targeted and focused submissions which we very much looking forward to reading on the 21st of August and beyond. So, please do get all those views down on paper and we look forward to reading them. So, thanks all for your time today and I'll see you again soon.

(Concluded at 4.33 p.m.)

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