RESUMED **[9.00 AM]**

COMMISSIONER: Good morning. Welcome back. We're starting with, again, topic 18, Financing and Investment in Nuclear Infrastructure, and I warmly welcome Mr Brendan Lyon and Mr Jonathan Kennedy from

Infrastructure Partnerships Australia. Gentlemen, thank you very much for joining us this morning. Counsel.

MR JACOBI: Mr Brendan Lyon was appointed chief executive of Infrastructure Partnerships Australia, IPA, in 2008, which is a non-government organisation built on a public policy partnership between Australia's federal and state governments in the private sector. The work of IPA focuses on opportunities for infrastructure policy and market reform, networking and research and data collection about the Australian infrastructure market. Mr Lyon currently serves on a range of boards and committees, including the Board of Transport for New South Wales and the ACCC's Infrastructure Regulation Advisory Committee.

He is a member of the Australian Institute of Company Directors and holds an MBA with distinction. Mr Lyon has authored and contributed to a large number of research and policy papers dealing with infrastructure funding, financing and sectoral reforms. He's joined by Mr Jonathan Kennedy who is the executive director of policy and strategy at IPA. In addition to that, during the evidence this morning the Commission will refer to some slides which, for technical reasons, we can't display electronically, and they'll be available to be downloaded from the Commission's website in due course.

COMMISSIONER: Gentlemen, if I can open the batting, can we firstly explore the sources for long-term investment funds in Australia?

MR LYON: Yes, certainly. I mean, Australia finds itself at the moment with a very high degree of global appetite for investment into infrastructure-type assets and IPA produced the first major survey of Australian and international infrastructure investors. Infrastructure is, you know, this very good time at the moment where, for a range of macro reasons, there is a very large amount of equity interest (indistinct) Australia, and that really reflects the lack of strong economic outlooks in many other parts of the world compared to Australia, but also reflects the relatively settled legal and institutional framework that we've enjoyed for a long period of time.

COMMISSIONER: Okay. Can we unpack that just a little; provide some examples of the major investors in infrastructure in Australia?

MR LYON: Yes. I mean, I think that the transaction announced in New South Wales last week is (indistinct) Transgrid for a multiple of about 1.59 times rab is a very good and timely demonstration of the type of interest and scaled interest that's there. IPA produced some work last year which found about 900 (indistinct) for infrastructure-type investment, and certainly the pricing of the capital markets shows that there's no concern around liquidity (indistinct) has certainly not been reflected in (indistinct) what I would say is that there is demonstrably a very high degree of (indistinct) estimates around (indistinct) areas that I think (indistinct) is about 900 (indistinct) give you an idea of the scale that's available, provided that we're able to create framework signals that (indistinct) assets (indistinct)

COMMISSIONER: And I think we'll come to the issue of framework in a minute, but perhaps we might finish off the start of this by identifying those areas where there is significant appetite for investment in Australia.

MR LYON: Yes. So in the survey we released recently, transport, water and social infrastructure are the most attractive. That's really a reflection of (indistinct) frameworks and known characteristics of those types of assets, and they have to resolve the very high degree of interest. What I would say there is going to be an insubstantial, and this was certainly reflected in (indistinct) the survey work IPA did, there is an expectation that there will be an insubstantial degree of investment opportunities, investment opportunities into infrastructure in the Australian market because we're not offering up brownfield and are therefore not able to offer up greenfield assets at the pace that the market would appreciate or indeed the Australian economy would benefit from.

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COMMISSIONER: I'm interested to understand from your report that energy transmission and distribution is in the top five. Can you give me some examples of recent significant projects in those areas?

MR LYON: Yes the Transgrid privatisation is publicly the best and Ausgrid then follow as the most relevant and timely examples of that. The reason that these assets are so popular, the reason that regulated type assets are popular is because it's got very stable long term cash flows, very stable economic regulation, and therefore risks are able to be easily understood by long-term equity investors. So transmission and distribution are regulated assets at a price determined by the Australian energy regulator, and so that creates a very good asset for long dated pension plans, long-dated superannuation funds in particular. It also gives a predictable long-term cash flow, a cash flow.

MR KENNEDY: When you look at the return that was yielded on the Transgrid transaction, that was 1.59 times RAB (Regulated Asset Base) and that was pretty unprecedented as a multiple. So again it just shows the degree of appetite for transmission and distribution assets for the reasons Brendan stated earlier. In terms of your earlier question as to where that capital came from, it was really a mix. It was an Australian led consortium, it had a mix of Canadian partners and Middle Eastern, and so we're seeing local investors partner with global investors for some of these assets.

MR JACOBI: I'm interested in picking up about this issue of sources of capital, and I'm interested in where the major sources of domestic capital are in

Australia and where their appetite is to invest.

MR LYON: Yes superannuation is clearly a very important source, together with the related other institutional type investors. They're very, very important sources of capital for infrastructure (indistinct) but those with organisations like Macquarie and AMP are able to bring and deploy capital out into the infrastructure market.

MR JACOBI: Are there particular challenges that domestic investment from superannuation poses in terms of the fact that superannuation funds have to act, I guess, on a footing that investors can withdraw their money in due course. Does that pose any particular constraint on their ability to invest?

MR LYON: No. I mean, discussion around superannuation and its role into infrastructure often is mischaracterised. There are no impediments for Australian superannuation (indistinct) you know, the point that some of the fund managers or fund trustees may have held out (indistinct) -type risks are really dealt with through having efficient sales in terms of super funds and I don’t think that there's any particular change that's needed in the structure of superannuation or to the structure of infrastructure to make the investment match work. Rather, I think there needs to be a focus on delivering up investment opportunities that efficiently signal to all sorts of equity and all sorts of debt to maximise the level of competition, and I don’t see any, I don’t see any impediment to investment occurring where projects are well-structured even within uncompetitive markets or (indistinct) creation of monopoly type concession.

MR JACOBI: You spoke earlier about there being familiarity for investors and investing in asset classes such as roads where the model for investment was well known as was thus predictable. And I am just interested about whether or not there have been new and emerging models for the purposes of investment and I particularly had in mind here that looking at your list, health care where different models had been developed in order to provide that sort of security?

MR LYON: Yes, I mean I think it was one of the really exciting things that’s going on with the infrastructure sector at the moment I mean governments increasingly are starting to look to purchase outcomes rather than specify the input they are seeking to buy and you are seeing this very much in social infrastructure programmes. I am starting to see it in terms of New Zealand’s building of roads, but one of the problems that Australia’s state governments and national government increasingly face is that revenues are not sufficient to meet expenditures and so that’s forcing, alongside the focus on privatisation-type activity like we’ve seen in New South Wales which gives a degree of relief in terms of – in terms of fiscal (indistinct) they’re obviously just a catch up opportunity in terms of releasing some tax payer capital. Then over the medium term we are having to look at how we rebalance expenditure and revenues. And so that is forcing a different focus out of governments. You know, the procurement of a prison in Victoria recently is a good example where alongside the requirement for the prison to have bars on doors and not let people escape and all the rest, there's actually an outcome requirement that that facility reduce the reoffending rate by 13 per cent below the public – the average of the public sector prisons for the same cohort so it puts a reasonable degree of revenue at risk, puts in place a measurement regime. Measurement is quite important to understand the impact of the thing but really shows that what they're trying to buy is not – is not a couple of hundred beds with bars and doors; what they are trying to buy is the rehabilitation of felons back into productive members of our society. And I think trying to align the interest of equity to operate the prison with the interests of the public sector client; I think this is a really exciting shift.

And New Zealand has been really at the forefront of this in recent times. They recently procured a major motorway and its output requirements as well as being available, having so many lanes and capacity to carry so many vehicles per hour et cetera, they also face an outcome requirement where they receive a half million dollar – New Zealand dollar fine each time there's a fatality on the motorway. So you can understand that it would create a very different incentive around the safety of design. And really, again, reflects that the public sector isn't just trying to buy a road; it's trying to buy a safe road. It's trying to bring down the whole of government cost of road trauma, (indistinct) road trauma and other things. So I think that it's – I think that this process of progressively exposing the circa 35 per cent of Australia's GDP that's currently spent without any contest whatsoever, in health and welfare, corrections, social housing, all of these different areas. I think we are going to see a progressive process of trying to open these up to benchmark competition so that we can drive down the cost, drive up the value so that the public sector can position itself, increasingly to buy what it really wants. It's not just a prison or a hospital, it's happy, healthy – happy healthy and productive members of society.

MR JACOBI: Can I pick up – go back to your survey, and perhaps if I can ask you – we are having some difficulties I think with the audio at our end and I'm just wondering about whether if you could talk as close to the microphone as you can, I'll let you know if that helps.

MR LYON: Yes, certainly.

MR JACOBI: Thank you. That's better at that point. I'm just interested in understanding from your survey whether there were preferences expressed with respect to investors either making their assets directly – sorry, their investments directly in to assets, or whether they had preferences to pool?

MR LYON: Yes, I mean there was a very strong preference towards direct investment and that really reflects the – you know, the ongoing maturation of that infrastructure type investment but people are less concerned about the immediate opportunity to exit the asset as they are much more focussed on the opportunities to directly manage and extract value, so that was a very firm finding. That was 10 per cent had a preference for pooled 90 per cent had a preference for direct investment.

MR JACOBI: I am also interested to pick up in terms of the key theme from the report, what you identify as the key factors that are thought to attract investment to – long-term investment to Australia as opposed to other jurisdictions?

MR LYON: 95 per cent of respondents, 95 per cent of respondents said they had strong – strong appetite to invest in the Australian market, and they really cited throughout the – throughout the survey things like sophistication of both the government and the existing financial services sector and infrastructure sector within the market here. But one of the things to note, and this really was quite a surprise to us in terms of the scale of the result, but particularly given the long term safe and secure nature of the Australian market, but 68 per cent of investors – and all of these investors have half of them are from offshore, half are from Australia, or they have an office located within Australia. For 68 per cent of them, their greatest concern about investing in to the Australian market moving forward is the spectre of political type risk and that was very much a reflection of the change of government in Queensland, the disappearance of the brownfield privatisation programme in that state, together with the almost sovereign type risk that we saw in Melbourne with regard to the (indistinct) motorway, the East West Link in that state. So that somewhat of a surprise to us because Australia has had a very strong track record of being a very safe and secure place to invest. Again, it’s reflected in the 95 per cent of respondents who intend or want to invest in to the Australian market. But it does show that unless we get the frameworks right, unless we manage to keep the politics not so much out of infrastructure which is perhaps a little bit of a naïve statement, but the over politicisation of a range of policies in recent times has definitely caught global attention. I was overseas a couple of weeks ago doing a round of briefings to the international equity investors and things like the East West link, the disappearance of Queensland’s privatisation programme, these are top of mind for these guys because it has been a surprise. Not that it doesn’t happen anywhere else, it’s just that it’s never happened here.

MR JACOBI: Yes, I just wanted to actually pick up on that particular result which I think is found at figure 15, which I think is on our slide three and I am just interested whether you might unpack this notion of political risk for us.

You have given us a number of examples. Is it more an issue of, I guess predictability in terms of party positional leadership, or is there – or are there other issues in terms of whether or not policy settled and people just keep changing their minds.

MR LYON: Yes, I mean I think the – I think in both cases that I cited there was particular factors at play. In Queensland you had a relatively unpopular first term premier. I don't think it was so much a reaction against the need to rebalance the books in Queensland as much as it was a political and personality type construct. Nonetheless the withdrawal of such a very large programme of well structured assets to be offered to the market, that is seen – you know, that has seen a lot of people who have had approval, and that money approved ready to be (indistinct) these assets suddenly facing half the pipeline and twice the competition in terms of the electricity assets. In Victoria a very different issue, it was – it was in my view, a straight political call around the number of seats that sat above the motorway corridor. We've always had a tradition in Australia, like every other democracy of people questioning individual projects, people campaigning against individual projects. Unfortunately what we have seen in the last little while is that opposition, that political contest around relative priority has not stopped at the point the contract was signed and that's really what surprised investors, contractors and others is this willingness, this seeming willingness to terminate semi-sovereign contract with the market and we have seen that in terms of – we have seen it in terms of the east-west link. We've now seen it in terms of the liberal opposition in the ACT. You're again facing a politically inconvenient project in the light rail – in the light rail project that the government's priority there. And they're talking about going back to remove that project some eight months after construction begins if they're elected. So this has been quite a change. I think the governments, our political government and policy makers need to act very cautiously in the way that they deal with these politically inconvenient, potentially fiscally inconvenient commitments by their predecessors because we don't want to develop the kind of country risk profile that we see over infrastructure programs in the US or other places where this is more common.

MR JACOBI: I'm interested to pick up the distinction shown in that slide between what's described as sovereign risk and what's described as political risk and I'm interested (indistinct) perhaps unpacking what's identified to be the distinction.

MR LYON: Yes. Political risk is really the change of, we would say that political risk is the risk that government will change its mind in terms of the policy setting. Sovereign risk would be more where a government uses its sovereign power to avoid its liability. So if we think about the discussions on the East West Link, initially the government was saying that it would not honour the contract, that it didn't believe the contract was valid or on foot and then when it became apparent that contract law has been relatively settled for a fairly long period of time in common law countries and that indeed it was a contract, then we saw a discussion around whether Victoria would use its legislative power to avoid its liability. That would've been political risk.

In the end, they moved very clearly from the investment community (indistinct) that sovereign risk, political risk is not something that's common in the Australian market, sovereign risk is not something (indistinct) and so in the end Victoria chose to discharge that contract in accordance with the terms of the contract. So ultimately it was a political risk that was verging on a discussion around straight sovereign-type risk.

MR JACOBI: I just want to pick up on the issue of cost bidding that's identified here. I think it's the fourth most significant factor equally, and I'm interested to understand what the particular difficulty or challenges associated with bidding in Australia are as opposed to elsewhere in the world.

MR LYON: I'm sorry. The transmission just cut out there at the end. Could you just say that question again?

MR JACOBI: Sorry. Cost of bidding is identified on figure 15, and I'm interested to understand what was understood to be the issue associated with bidding costs in Australia as opposed to in other jurisdictions.

MR LYON: Yes. This is an issue that's been talked about whatever, with bidders' resolution Australia is not the best. It's certainly not the worst in terms of bidding, but you know, it is a constant issue that's identified by the market as a potential barrier to entry and so on. I mean, in effect, the balance of the bid costs are basically around the design and operational type, and construction type, that type of (indistinct) and so in the public sector there is a trade-off to be had between bid costs and the degree of certainty and value they get out of the bid costs, and so people will often argue that bid costs need to be resolved, but when it comes to a discussion around how materially to do it, there are a range of inefficient add-ons that happen within bidding prospects, but by and large, if the public sector knows what it's going to buy it runs the process well.

Then the bidding costs, in large part, will be a straight part of the value going to the State because those costs do reflect the design competition. They do reflect the cost protection you get under that type of procurement, there are certainly savings that can be made, it certainly is an issue. Provided you've got a stable pipeline of opportunities for people to bid then it becomes the cost of doing business and as jurisdictions do more and more and more transactions they become more and more efficient in the way that they stick to the pipeline. (I would say there are some minor adjustments to be made around what needs to be handed in at different stages of the process, but at some point you do reach an efficient cost and again, it is that competition between equity and debt to win the right that ultimately is driving the value gain for the State and through State users.

MR JACOBI: I think this is probably going on your observation about saving cash flows you referred to earlier, and coming to what was figure 7 in the report, which is on our second slide, I'm interested to understand, I guess, and get you to unpack a bit, the preferences for regulated for unregulated assets with respect to long-term investments.

MR LYON: Yes. I'll give a brief answer to this and then I'll hand over to Johnathon to make a few remarks, but what I'll say is on the preference between regulated and unregulated I actually thought that was a pretty fair spread of interest between the two if you include the 'no clear preference' group. It's roughly symmetrical to a degree where I'd say that investors have an appetite for either provided they're well structured. Clearly people who are after, or investors who are after greater levels of return, greater levels of risk will generally head toward unregulated assets, whereas competition for a price-regulated asset will be much more around the cost of equity and (indistinct). For me, figure 7 really showed that we're quite a sophisticated market that's quite a sophisticated investment market and there is an appetite both for regulated and for unregulated assets within infrastructure (indistinct).

MR KENNEDY: I think you've covered most of it, the only point I would add is that, I mean this survey was of circa 150 billion of assets under management. So I think that split was pretty equal between regulated and unregulated, and also just reflects the diversity across that investor base. I mean some of them will be, particularly the pension funds, will be after the long-dated stable cash flows, others will be after assets within functioning markets, so energy market investments, for instance, where it's a competitive marketplace, so really, I think that figure just reflects the diversity of the respondents to the survey.

COMMISSIONER: Can I ask about whether there's a preference between brownfield and greenfield sites? Does that significantly alter the risk profile or the risk assessment?

MR LYON: It certainly alters the risk profile and, I mean, if you think about a greenfield site, on project you've got the construction - in broad terms you've got construction-type risks and then you've got the operating-type risks. On a brownfield-type asset you've got a cash flow, you've got a proven market model in terms of revenues and so on what I would say is that there is no shortage of appetite for either, and really I guess what I took most from the survey we did of investors and the briefings that we do and the meetings that we have and so on, is that there is no shortage of appetite. There is no shortage of capital that's available to flow into any sort of project that needs to be built or needs to be delivered provided that fundamentals are right.

There is a very high degree of visibility of the Australian market generally. People want exposure to Australia because our GDP story is comparatively strong. What I would say is that there is no shortage of money that's available for debt or equity for any type of government-style infrastructure-type investment. There is a shortage of opportunity to meet that appetite.

MR JACOBI: I just want to pick up again this distinction between regulated and unregulated. We notice that in one of the surveys there was a preference for investing in renewable energy generation over non-renewable sources, and I'm interested to understand whether you were given any particular reasons as to why that was the case, or why preferences were expressed.

MR LYON: We didn't spend a great deal of time, and when we moved to the one-on-one survey (indistinct) basically focus on that (indistinct) in any great depth. What I would say is that energy generation investments generally at the moment are a little more difficult because of the falling demand profile across national electricity markets, and there's also an overlay of a fairly bitter political discussion around the fuel sources for stationary energy generation, and we've seen ANZ Bank recently make a statement that it won't be banking any new coal generation type assets, so I think that preference obviously reflects both the realities of falling demand in the electricity market to some degree, some incentive schemes that have sat around various parts of renewable energy policy, the fact that there are some government sources of debt capital and other things that are available. That in both instances, I think that the signals for investing in to electricity generation at the moment are relatively subdued and they will recover as the demand profile recovers, as you would expect.

MR JACOBI: I just wanted to pick up at page 12 of the report, you address, I think the issue of the social responsibility aspect that you just mentioned but it goes on to say that the other issue was that others cited uncertainty over energy policy and I am just interested whether you can offer any further insights in to that?

MR LYON: Yes, I mean one of the challenges that we face in energy policy or electricity policy has been the range of interventions that has been made over time to get different types of outcomes but without perhaps due consideration of the total impact and if you think about the massive escalation in retail electricity prices where – you know, when here in Sydney we were getting ready to watch the Olympics we had the second lowest retail electricity prices in the OECD or something of that order. And if you fast forward to today and we're amongst the most expensive, that's really been a result of a range of different interventions that have been made around generation types, carbon abatement and other things. And you know, that has had quite true impacts in terms of cost. And in South Australia it's more visible than perhaps other jurisdictions where you've got a very large degree of wind power, very peaky demand profile within the electricity market there. It's had some very significant impacts in terms of the efficiency for South Australian economy, the cost of living for households. So electricity policy, you know it is something that we have yet to get right. It's really been around carbon mitigation that we've seen the most significant changes. We refer in some of the materials to a paper we did in 2008, I think, which we were anticipating the CPRS as it was then known at just (indistinct) then it became the (indistinct) (indistinct), that was scrapped, now we've got direct action.

If you're making a long-term investment in to electricity generation, then you want to know what the rules of the game are going to be, you want to know what the incentives if any, are going to be and what the distortions are going to be. And so again, I'd say that energy policy generally, electricity policy specifically really would benefit from a return to settled policy making around what the targets are in terms of carbon emissions, what the key outcomes are that we're seeking, is it efficient price, or is it a particular type of generation stock, and that we move cautiously when we move to destroy the market through things like feed in tariffs, and other mechanisms because ultimately the efficiency of the electricity, transport, water and labour markets are really a proxy for the productivity of the economy and (indistinct)

MR JACOBI: I know you've brought up your 2008 report and I've been reading it with interest and I am just interested to understand whether – and I particularly had in mind the table that's contained on page 25 of that report, about whether the sorts of factors and considerations that you had in mind, as they stood in 2008, whether they're still operative today in considerable respects or really what's changed. I know that the predictions of demand increasing haven't been realised but I am just interested in terms of the uncertainty and the other issues you've raised, do those factors still exist?

MR LYON: Well, look the context has changed but I'm very pleased, given how long ago this paper was done that the concepts that we've explored in there, we remain of that view. We remain of the view that uncertainty around electricity policy is retarding the market and that we do need to move to a settled view around where are we trying to get to and then how do we put it in place, the least cost market setting that we need to get there. The basic argument that we put in the paper, we've taken (indistinct) paper was that it really is the infrastructure sectors of transport electricity that have to do the heavy lifting and responding to carbon mitigation if that is an outcome and what we argue in that paper is set a very clear path, but noting that these are long term investments, set a long term path so that the market can adjust without putting a shock out to consumers, out to the economy.

MR JACOBI: Okay. I am just interested, I guess to pick up on some broad themes in terms of what governments might do to encourage greater private investment, not necessarily in energy but more generally. And what are the key things that you consider the governments need to do in order to encourage such investments?

MR LYON: Yes, well I'm a very simple man, so I'm going to keep it extremely simple. The best way for the public sector to deliver infrastructure is with money and the best way to find money is either to locate it on the budget or to create a market structure to be able to repay the cost of that project, be it debt and equity to the private sector, or whether it be public money. And so ultimately what governments – when the public sector wants the private sector to respond and invest, it needs to signal by creating a cash flow, at its most fundamental it needs to signal by creating a cash flow. That can be from creating a monopoly concession, like toll roads for example, it can be through creating a government revenue stream like you would use for say the Royal Adelaide Hospital where provided the asset is available there's no charging users at point of use, provided the asset is available and meets the terms and conditions. On track it needs a revenue stream that comes from the government to satisfy the operating capital costs. Or where possible, create a competitive market where competition replaces the need for regulation. The electricity generation sector, airports, air aviation are good examples of those.

MR JACOBI: Have you – you spoke about the need for there to be stability and I am just interested about whether you have a view about how you might go about building the sorts of consensus with respect to this long term decision that might be necessary if these sorts of investments are going to be made.

MR LYON: Yes, I mean I wrote my thesis largely on this topic of how does Australia contemplate difficult long term reforms and if you are wanting to take a cheeky – if you wanted to take a cheeky read from what I've done, it was that Australia will do complex, difficult, hard to explain reform after we've tried every other possible option first. If you want to take a more optimistic view of that, you know we have been exceptionally good at modernising the economy over the last 25 years. We've moved from you know, a closed highly regulated economy through to a very open, open capital markets, floated dollar deregulated financial sector and progressive articulation of infrastructure service markets over time. I want to say that a shared understanding or a shared acceptance of the outcomes is the most important aspect. And this comes back ultimately to this issue of settled policy making, of consistency. That doesn't talk about bipartisanship. I'm not sure that that's always achievable when you're talking about contentious changes, things like privatisation, creating markets, exposing health or corrections systems, or other things to degrees of benchmark competition. These are unlikely to always be able to achieve political consensus but where there is consensus across the community about the outcome that is sought, and there is agreement about the outcome that's sought then you can have a contest around the mechanisms to get there.

But my view is that Australia has always performed best when we've known where we want to get to and we've seen a contest around the alternative steps that we might use to get there. And when we talk about the 1980s and 1990s it was a (indistinct) period in hindsight but there was a very high degree of political contest around most of the aspects of national competition policy of different related periods of change. During that it would be a mistake to say that they were consensus issues but it would be correct to say that there was a genuine consensus across the parliament and across the community that Australia needed to fundamentally change because we were operating in a very different macro environment. We were facing an ongoing process of tariff deregulation,) there was the recession in Victoria in particular but also South Australia after the public sector banking type exercises that went on in those States so they really helped to create a burning platform. There was an acceptance from everyone that things need to change and while people might oppose individual aspects, provided there is a consensus that things need to change, that things can get better through change, then that I think is the key aspect to building a degree of consensus, if not about each individual issue but about the outcome that's being sought.

MR JACOBI: I just want to pick up, just at the end, the emissions trading reforms, and those reforms are having to be undertaken against a backdrop of an operating, liberalised electricity market, and I'm interested in whether you have a view about, if government is to go about interfering for some social purpose in such a market, how those alterations or changes ought to be brought about.

MR LYON: Well I mean they should be done in a way that - I mean, any change to an established operating market should be done in a way that has a very clear assessment of the impacts and the costs, and I think in electricity, as in transport, as in everything else, I think clarity around, "What's the outcome that we're trying to deliver" and then the best and most efficient pathway to respond. The CPRS paper we were arguing for a very long-term path toward emission targets and we did that on the basis that countries have made very long-term investments based on the rules that were in place at the time.

Exactly the same companies that are operating within the electricity market at the moment are the ones who most likely to have the best credentials to make alternative investments for other generations stock. So let's, rather than preferring particular technologies, rather than preferring particular steps, let's settle on the outcome and then let's this beautiful efficient national electricity market that we went to a lot of trouble to create during the 1990s and 2000 and we did it exactly so there could be long-term, efficient adjustment to a change in circumstance. Let's let the national electricity market operate. Let's specify what the long-term outcome is going to be around carbon, around smart metering, around wind power, around algae, nuclear, whatever it's going to be. Let's specify the long-term outcome and then let's let the market aggregate to deliver.

COMMISSIONER: Gentlemen, that's very concise. I thank you for participation this morning. We'll now adjourn until our early session on Wednesday morning with Mr Darryl Murphy from KPMG.

MATTER ADJOURNED AT 9.42 AM UNTIL WEDNESDAY, 2 DECEMBER 2015