REPORT ON PROCEEDINGS BEFORE

SELECT COMMITTEE ON ELECTRICITY SUPPLY, DEMAND AND PRICES IN NEW SOUTH WALES

INQUIRY INTO ELECTRICITY SUPPLY, DEMAND AND PRICES IN NEW SOUTH WALES

CORRECTED

At Macquarie Room, Parliament House, Sydney, on Monday 18 June 2018

The Committee met at 9.30 a.m.

PRESENT

The Hon. Paul Green (Chair)

The Hon. Ben Franklin
The Hon. John Graham
The Hon. Taylor Martin
The Hon. Adam Searle

The CHAIR: Good morning and welcome to the fifth public hearing of the inquiry into the Select Committee into Electricity Supply, Demand and Prices in New South Wales. Before I commence I acknowledge the Gadigal people, who are the traditional custodians of this land. I also pay respects to the elders past and present of the Eora nation and extend that respect to other Aboriginals present. Today the Committee will hear evidence from the following industry and government groups and energy experts: The New South Wales Department of Planning and Environment, Essential Energy, Ausgrid, Endeavour Energy, Delta Electricity and AGL. Dairy Connect was meant to present today but the President is unwell so those witnesses are likely to be heard at the next hearing. In the afternoon we will hear from the Energy Security Board, the Victoria Energy Policy Centre and TransGrid.

Today's hearing is open to the public and is being broadcast live via the parliamentary website. A transcript of today's hearing will be placed on the Committee's website when it becomes available. In accordance with the broadcasting guidelines, while members of the media may film or record Committee members and witnesses, people in the public gallery should not be the primary focus of any filming or photography. I remind media representatives that they must take responsibility for what they publish about the Committee's proceedings. It is important to remember that parliamentary privilege does not apply to what witnesses may say outside their evidence at the hearing, so I urge witnesses to be careful about any comments they may make to the media or to others after completing their evidence, as such comments would not be protected by parliamentary privilege if another person decided to take an action for defamation. The guidelines for the broadcast of proceedings are available from the secretariat.

There may be some questions that witnesses could only answer if they had more time or with certain documents to hand. In these circumstances witnesses are advised that they can take the question on notice and provide an answer within 21 days. Witnesses are advised that any messages or documents tendered to the committee should be delivered to the Committee members through the secretariat. I remind Committee members and witnesses to speak into the microphones. Several seats have been reserved for persons in the public gallery who may have hearing difficulties. Finally, I ask everyone to turn their phones to silent or off for the duration of the hearing.

CAMERON O'REILLY, Principal Energy Adviser, Department of Planning and Environment, sworn and examined

KATHARINE HOLE, Executive Director, Energy Strategy, Department of Planning and Environment, sworn and examined

The CHAIR: I welcome our first witnesses, from the Department of Planning and Environment. Do you have an opening statement?

Ms HOLE: Yes, I have a short opening statement. The Department of Planning and Environment leads the development and delivery of the New South Wales Government's energy policy, legislation and programs. The work of the department aims to support affordable, reliable and clean energy for the people of New South Wales. The department pursues these aims through work programs at both a national and New South Wales level. The Council of Australian Governments [COAG] Energy Council is the decision-making body with the overarching responsibility for Australian gas and electricity markets. The department supports the Minister for Energy and Utilities in his role representing New South Wales on the council by providing advice and contributing to technical working groups established under the council.

At a national level, the department provides policy advice on matters relating to electricity and gas networks and wholesale markets. The department also supports New South Wales's engagement with energy market institutions that sit within the national framework. These are the Australian Energy Regulator, the Australian Energy Market Commission and the Australian Energy Market Operator [AEMO]. The department's policy development at a State level to support energy consumers and competition includes enabling retail market competition, monitoring prices, putting consumer protections in place as energy markets are changing, energy efficiency and demand management and energy infrastructure planning.

The department delivers New South Wales Government programs that help customers manage their energy costs, including the energy rebate programs and the Energy Accounts Payment Assistance Scheme. The department also monitors and coordinates electricity network safety and technical performance, and provides advice to the Minister on these issues. As part of this work, the department assists New South Wales organisations and communities to prepare for electricity emergency events, and provides support and coordination to energy utility services and energy emergency management organisations during electricity emergency events.

The CHAIR: Thank you.

The Hon. ADAM SEARLE: In relation to the Government's submission to this inquiry, and looking, in particular at page 2 in terms of the action New South Wales is taking around energy security and its priorities, is it one of the objectives of your energy security function for New South Wales to achieve energy independence, or at least to have enough installed in generating capacity to meet all New South Wales's needs at any given time? Is that one of our objectives?

Mr O'REILLY: As you know, the Minister commissioned the New South Wales Energy Security Taskforce. It has been the policy of the Government—it has been for many years—that the National Electricity Market, which New South Wales is a willing participant in, is run by the national market bodies. They provide the best advice as to the operations of the market. By nature, the National Electricity Market is regional. So there are a range of different regions based around State borders. Interconnection obviously helps efficient development—and has over time—of generation across the different States.

But, still, the majority of generation in each region is intra-state. So, any future discussions around generation will largely be based on that principle. The Australian Energy Market Operator will soon be releasing an Integrated System Plan, which will look at some of the needs of the grid going forward. The Minister has announced that New South Wales will look at a transmission strategy for New South Wales. That will consider inputs from AEMO and at the future needs of New South Wales. In terms of generation in the State that is private-sector owned, and market determinants and the needs of New South Wales will drive that. But the policy will be able to ensure, as is consistent with the Energy Security Taskforce, that there is always sufficient generation to meet New South Wales needs. AEMO will advise jurisdictional governments around that point.

The Hon. ADAM SEARLE: Thank you for that. What is the current total installed generation capacity of New South Wales?

Mr O'REILLY: It is of the order of 20,000 megawatts. New South Wales peaks have been of the order of 15,000 or 16,000 megawatts. New South Wales, as I said, always adopts advice in relation to AEMO as to whether that is sufficient. The most recent advice from AEMO has been that New South Wales has sufficient generation to cover market needs. It does short-term and regular updates. It does an electricity statement of opportunities, which indicates, for future planning, whether there is a need for new investment. It has advised most recently that, in terms of its short-term needs, New South Wales has adequate generation cover.

The Hon. ADAM SEARLE: A week or two ago we had a situation where both Bayswater and Liddell had not only planned, but also unplanned, outages. There was a lot of hysterical front page news. There was a lot of concern genuinely held about whether or not there was still sufficient generating capacity able to be called on at short notice. How did New South Wales perform at that particular time, are you able to inform us?

Mr O'REILLY: New South Wales in conjunction with TransGrid and Australian Energy Market Operator on the night of 7 June, had to deal with a situation where there was 3,800 megawatts offline at a time of relative winter peak, because of the weather conditions. Working together, they were able to deal with that contingency. Part of that did involve some voluntary demand response by some major energy users. That is a matter between them and their individual retailer. But, the situation was only for a short period. It was managed in conjunction with New South Wales, AEMO and TransGrid. There was also an issue with a particular transmission line being unavailable and the situation was managed in a way that provided no inconvenience to New South Wales' energy users.

There has been some commentary around that, but I am advised that AEMO did not ask anyone to engage in compulsory demand response and situations where there is occasional unforeseen or unplanned maintenance that has to be dealt with, are dealt with by the Government working in conjunction with the market authorities.

The Hon. ADAM SEARLE: What impact did that event have on the wholesale market in New South Wales?

Mr O'REILLY: It did lead to significant peak in the market and that is the way the market is structured to respond. It is structured to respond that high price events bring forward other peaking generation to support those events, but it was for a relatively short period. That is the way the National Electricity Market [NEM] is supposed to operate.

The Hon. ADAM SEARLE: How much capacity for new electricity generation is currently under construction in New South Wales?

Mr O'REILLY: I would have to take the actual amounts on notice. There is a range of proposals both in the planning system that are at various stages of planning and approval. There are a range of proposals that have submitted connection enquiries. It is sometimes particularly difficult for the Government to judge at what stage particular proposals are at. Some major gentailers—generator retailers such as EnergyAustralia have flagged potential gas-fired development here. As you know, AGL has announced an increase in the capacity of Bayswater. We keep abreast of market developments, but sometimes because you have of the order of up to 15,000 megawatts of proposed new generation, largely of a renewable nature, in the planning system, it is difficult for the Government to pre-judge how much of that will come online.

The Hon. ADAM SEARLE: The Government's submission says there is approximately 1,000 megawatts of clean energy under construction as of October of last year, could you please update that. It says a further 3,600 megawatts have development approval and a further 6,600 were seeking approval. Leaving aside the last component, of the 3,600 megawatts that have development approval, what measures does planning or other elements of government have in place to retain visibility of projects that have been approved to see whether or not they are moving into construction and potential operation?

Mr O'REILLY: Obviously, it is a market arrangement whereby the private sector runs generation in New South Wales and we keep abreast of stages of approval and we keep an eye on the outlook. But the most important thing is that when it comes to security of supply in New South Wales, we maintain close relations with AEMO, who advise on whether generation is adequate for New South Wales. That is the key consideration because the market by nature has to be operated by AEMO and AEMO's advice is critical to the Government's position. We maintain close relations with AEMO to ensure that New South Wales' position is adequately covered.

The Hon. ADAM SEARLE: I understand AEMO is somewhat in the driver's seat, but for instance, looking at the age profile of the coal-fired power stations that I think provide something like 75 per cent of our electricity today, something like 50 to 60 per cent of our current energy supply will be exiting the market over the next decade and a half. That is a lot of capacity leaving the system. I understand AEMO is in touch with current market participants and I understand that we are dealing with a private market, but essentially the buck always stops with Government if the music stops and there is not enough energy. This great pipeline of projects has been approved, but are they being built, because if they are not going to be built in, say, five years or so, that could potentially be a supply problem down the track.

Mr O'REILLY: The most important thing in relation to future generation investment is obviously policy certainty. The Government has been keen to see policy certainty for investors in generation and been supportive of that objective. We are aware of the fact that over time various large generators in New South Wales will reach the end of their operational life, if you are looking at a 10, 20 year horizon and we will be extensively monitoring to make sure that developments coming forward will help to deal with that situation. Most recently when AEMO gave advice in relation to Liddell's potential closure, we sought a briefing from AEMO on their particular advice. We maintain as a close watching brief on developments in the market, but the most important thing is that we have an environment in which generation investment can take place. New South Wales, obviously working within the COAG environment, is supportive of policies that see that environment most conducive to replacing any generation that may be retiring in coming decades.

In relation to the longer term, obviously by the nature of the generation that is coming forward, a lot of proposals are not necessarily located close to the existing transmission grid, which is why we are undertaking a transmission strategy. Whilst we will be informed by AEMO's Integrated System Plan as to the transmission needs of the market going forward and how they may relate to New South Wales, the transmission strategy has deliberately been undertaken to ensure that we have a clear New South Wales' position and New South Wales view on future needs of the transmission grid to support incoming generation. Transmission is only built to support generation, it is not built for its own sake.

The Hon. ADAM SEARLE: Just on that, the Committee recently visited part of the Snowy Mountains Scheme and had a briefing on the potential Snowy Hydro 2.0. One of my concerns is that the new generation that is constructed may well have transmission constraints. What consideration has been given to how that might be unlocked to make sure that any new capacity is able to be delivered to market?

Mr O'REILLY: The Snowy Mountains Scheme potential expansion is very much going to be considered as part of the Integrated System Plan, but no doubt it will figure in consideration in relation to the New South Wales' transmission strategy. The Snowy Board, as I understand, have indicated that they will make a decision in relation to the project by the end of the year. Certainly, that capacity can only be brought online within the NEM both in New South Wales and within the NEM more broadly by some extension of the transmission grid. There is a process run by the Australian Energy Regulator called the Regulatory Investment Test for Transmission [RIT-T] and that is one means by which it could be considered how that will be brought forward. That is the expectation at this stage. That will run an economic ruler by the regulator over whether this transmission investment is required and that is the way the market operates. We would expect that that is how that investment will be considered to ensure that it is brought to the market as required.

The Hon. JOHN GRAHAM: What can you tell the Committee about the timing of that transmission strategy, given Snowy is due to make a decision quite shortly?

Mr O'REILLY: I cannot advise on a particular time frame, other than the fact that it is something that we will be informed by the Integrated System Plan, but it is a New South Wales particular view. The Government will give due consideration to that, informed by the national market authorities but looking at it from a New South Wales perspective.

The Hon. JOHN GRAHAM: Can you give us some assurance that that will occur before Snowy needs to make that decision, though?

Mr O'REILLY: No. I am not in a position to do that.

The Hon. JOHN GRAHAM: At this stage what are the discussions around who will pay the cost of that transmission upgrade that is required for the Snowy scheme?

Mr O'REILLY: The assumption is that any transmission supplementation at this stage is subject to the usual market rules. If the issue is to do with the required test to ensure that that investment is made and who pays for that, it is administered by the Australian Energy Regulator.

The Hon. JOHN GRAHAM: What are the consequences, if that decision about the transmission strategy is not made by the end of the year, for the Snowy scheme?

Mr O'REILLY: The Snowy scheme is a decision that will have to be made by their board. We will have to consider that in the context of New South Wales' future needs. I would imagine we cannot prejudge or presume what factors go into the Snowy board's decision-making process, but the Government will have to consider that in the light of whether Snowy decides to proceed with that project.

The Hon. ADAM SEARLE: But surely a material factor for the Snowy board would be whether or not any new amount of product can actually be got out into the marketplace—to homes and businesses—not only in New South Wales but also in Victoria?

Mr O'REILLY: At the time it was announced the Government simply undertook that the Snowy would be considered a project of State significance, so it has been given priority. Other than that there is the planning system, but it will still be subject to all the normal tests.

The Hon. JOHN GRAHAM: But the Snowy is saying that it will make a decision by the end of the year. You are saying you can give us no guarantee that the Government will have its transmission strategy in place. I am asking what are the consequences of missing that deadline, if that occurs?

Mr O'REILLY: In the end, transmission is a decision made in relation to the proper regulatory test in relation to developments in the generation market. There can be no presumption that Snowy or any other generator will get particular favours from the process. It is simply that that is a matter for the Snowy board. It is not a matter for us.

The Hon. ADAM SEARLE: I understand. But one possible consequence, for example, might be that the board decides not to go with Snowy 2.0 because they have no guarantee that the transmission system will be upgraded, so it would not be economically worthwhile. They may of course be dependent on the upgrade of any transmission networks in order to make that decision. I am happy for you to take this on notice, but we would really like to know when those decisions around the transmission upgrade arrangements may likely be made. Are you happy to take that on notice?

Mr O'REILLY: Yes.

The Hon. JOHN GRAHAM: Could you also give us some guidance about what are the factors that may cause that to be delayed beyond that relevant date at the end of the year? If you are able to provide some guidance on that on notice, are you happy to do so?

Mr O'REILLY: We would do our best to answer in relation to the questions that you ask, but at the end of the day the transmission strategy will be developed in a way that is based around the long-term interests of New South Wales. It has to be considered in that light rather than being any particular timetable.

The Hon. JOHN GRAHAM: Sure. I have to say that they are not very reassuring answers for the prospects of Snowy 2.0. You have not given us a lot of confidence in relation to that this morning.

Mr O'REILLY: I think that what was indicated was that the transmission strategy is driven by the investment needs and generation needs of New South Wales. It will be informed by the Integrated System Plan, which is something that forms it. In New South Wales we will look at the strategy going forward. It is not based on one proponent's particular generation proposal. It is based upon the long-term interests of New South Wales' energy security and its generation needs. You would not want the New South Wales transmission strategy, I assume, to be based upon the interests of one particular company or proponent in the system.

The Hon. JOHN GRAHAM: No, not at all. I think that is a sensible approach. But what you are describing is potentially a major hurdle for a major project.

The Hon. BEN FRANKLIN: But surely, with respect, Mr O'Reilly, this is just the normal process.

Mr O'REILLY: That is right.

The Hon. BEN FRANKLIN: There are thousands of potential megawatts coming into the system of new projects. For you to give some sort of commitment that transmission lines would be upgraded to all of them before they were done is just ludicrous. So you have to go through the process exactly as you have described. You would agree with that?

The Hon. ADAM SEARLE: Mr Franklin, thank you for the advertorial, but it was my questioning time, I think.

The Hon. BEN FRANKLIN: You have had quite a long time, Mr Searle, actually.

The CHAIR: Order! We were being fairly fluid. I think the Hon. Ben Franklin thought it was consistent with a question that was previously asked. We have had a random inquiry in the spirit of that. If you do want to ask that question, do so; otherwise, I will go back to Mr Franklin to finish it.

The Hon. ADAM SEARLE: I think Mr O'Reilly was about to answer it.

The CHAIR: Yes.

Mr O'REILLY: That is correct.

The Hon. BEN FRANKLIN: Thank you.

Mr O'REILLY: Transmission has an existing test administered by the Australian Energy Regulator, which is in the interests of the National Electricity Market objective. It is to ensure that any investment is in the long-term interests of consumers. It considers all transmission supplementation in that light and transmission is driven by generation development. In this State it is done by the market; you are quite correct. Decisions in relation to the long-term transition needs cannot be based on interests of one particular generation proposal. As I have indicated there is of the order of 15,000 megawatts of generation proposals in the New South Wales system. Because of the nature of generation not necessarily being close to the transmission grid, that is exactly why we should be considering those issues. But they will not be based upon the particular interest of one company or one particular proposal.

The Hon. ADAM SEARLE: Mr O'Reilly, you said there are 15,000 megawatts of various proposals in the system. Are they currently seeking approval?

Mr O'REILLY: Yes, of the order of that in terms of the planning system. There is a range of steps that you can take. Obviously there is a large amount of interest.

The Hon. ADAM SEARLE: I am just trying to understand. In terms of the submission made by the Minister in October last year, it was said there were 6,600 megawatts seeking approval through the planning system. It is not a trick question. I am happy for you to take it on notice and just give us updated figures for each of those.

Mr O'REILLY: Yes. We will take that on notice and give you updated figures. In this space, because of the nature of the incentives that are available, like the renewable energy scheme, there is a reason why there is a large amount of flow in generation proposals coming forward.

The Hon. ADAM SEARLE: Indeed. Obviously, the National Energy Guarantee [NEG] potential framework will have a significant impact on future planning and development of the market. How is New South Wales approaching that to ensure that any NEG framework does not inhibit or put a brake on the development of renewable energy proposals?

Ms HOLE: We are looking closely at the detailed design of the NEG. Stakeholder feedback on all of this is obviously very important as the people on the ground actually are putting investment in. We want to make sure it has the right incentives in place for them. We are working closely with the Energy Security Board. We are also, as I say, talking to stakeholders to make sure it does have the right incentives in place to bring forward that investment because it is the key policy for bringing investment certainty to the market. We want to make sure that it is doing that.

The Hon. ADAM SEARLE: We want to make sure that certainty does not, for example, lead to a flight of capital from the renewable energy space, given that with the coal-fired power stations getting older and no-one proposing to build new ones, we do not want to make sure that we lose our new supplier, do we?

Ms HOLE: Absolutely not, but I think the idea of the NEG is that it is technology-neutral. It should encourage all that investment to come forward currently in the New South Wales planning system. We do have a number of projects currently under development. As Mr O'Reilly mentioned, we will get you the exact figures. But my understanding is that we now have about 1,200 megawatts under construction, or around that amount. The key question for us, particularly in the development of the NEG is not only does it bring forth the new development, which we seem to be seeing both with approved and proposals in the planning system, but it brings forth that development to deliver reliable supply at the times we need it. That is what the NEG is about, and it is not just about renewables. It is looking at how we can integrate demand management and all the tools available in the electricity market.

The Hon. ADAM SEARLE: Around 380,000 households in New South Wales have rooftop solar. Can you update the Committee as to how many of those solar households have smart meters? For example, a lot of the retail energy companies at the end of the Solar Bonus Scheme said that they could not properly account for or give solar households a full credit for their solar feed-in without them having smart meters. The last time I was briefed, towards the end of last year, I think there were only about 40,000 households that had smart meters. Can you update us as to how many have smart meters?

Ms HOLE: Just to clarify, are you looking for the number of customers with smart meters who were part of the Solar Bonus Scheme or the total number of customers with solar?

The Hon. ADAM SEARLE: No, just the total. There are 380,000 solar homes in New South Wales. How many of them have smart meters?

Ms HOLE: I have to confirm. I will have to get back to you on that number.

The Hon. ADAM SEARLE: That is okay. This is a genuine inquiry, not a trick question. I move to the proposed reduction of the recommended feed-in tariff by Independent Pricing and Regulatory Tribunal [IPART]. For many years, the recommended feed-in tariff was 4¢ to 6¢. There was a lot of community dissatisfaction with that and then IPART lifted that to between roughly 11¢ and 15¢. Now it has proposed to slash that back to 7.5¢ only. Can you tell the Committee what impact that is likely to have on the uptake of new installations of rooftop solar and the financial impact that that is likely to have on those 380,000 New South Wales households that currently have rooftop solar?

Ms HOLE: The subsidised feed-in tariff ended in New South Wales quite some time ago.

The Hon. ADAM SEARLE: It did.

Ms HOLE: Even with the fluctuations in feed-in tariff rates, the uptake in solar has continued to be very strong. Indeed, more panels have been installed since the closure of the scheme and with the introduction of a benchmark rate. We will wait to see what IPART's final report says on the feed-in tariff but solar panels are obviously a matter for each individual household and will depend on their electricity bills. But with the changes in solar rates, I expect that we will continue to see uptake of the solar panels.

The Hon. ADAM SEARLE: I understand, but it is commonly accepted that those who have invested in rooftop solar have collectively made a good contribution towards new generation and putting downward pressure on wholesale prices. In terms of informing IPART as to its final decision, has any modelling been done by the New South Wales Government about the impact on solar households of the proposed cutting of the recommended feed-in tariff?

Ms HOLE: IPART is the independent regulator that looks at various matters when it determines the benchmark feed-in tariff. Solar panel uptake remains closely monitored by the Australian Energy Market Operator and all parties as it becomes an increasingly important part of our supply chain. In fact, the total solar panels installation is now almost equivalent to one of the largest power stations in New South Wales. We will continue to watch through those routes.

The CHAIR: Surely, it would be a great initiative if more houses took on solar and took the burden off the grid. It is an initiative and a reward to the Government to be able to do that, so why penalise solar consumers with a feed-in tariff when they are actually carrying a huge burden off the grid?

Ms HOLE: The feed-in tariff is reflective of wholesale prices in the electricity market. That is the rate that people receive for selling their electricity into the grid. The key challenge for us with solar panels is how to integrate them with storage and other technologies to make sure that we get the benefits and the broad scale support that they can provide to the grid. That was reflected in the recent announcement that the Government is looking at trials about how to better integrate solar and storage into the network.

The Hon. ADAM SEARLE: I will continue on this issue. I do not want to put words in your mouth so feel free to disagree with me. In the planning space, there is an independent planning commission which makes the final decision but that does not stop the Department of Planning making submissions. Here we have IPART proposing to seriously reduce the feed-in tariff for solar households. Full disclosure: I am a solar household, so there is some impact on me but that is not why I am asking the question. Is it the case that the planning department—and the New South Wales Government more generally—is simply not providing any submission to IPART to help inform IPART's final decision? Accepting that it is an independent body and has the final word, does the New South Wales Government simply not have a view on this?

Ms HOLE: I think the fact that the New South Wales Government asks IPART to go and look at this independently to ensure that there are no subsidies borne by other consumers or other affordability impacts—we are obviously concerned about whatever level it is, but it is an independent process that is in place.

The Hon. ADAM SEARLE: I understand.

The Hon. BEN FRANKLIN: I have two questions on this issue. Is it a fact that the reason why the IPART benchmark has come down is entirely and directly related to the fact that wholesale prices have come down?

Ms HOLE: Yes, predominantly. That is the same benefit that we are now seeing being passed through to consumers in retail energy prices.

The Hon. BEN FRANKLIN: I understand. Is it a fact that one of the reasons why the take-up of solar is going up and continues to go up significantly is that, as we have heard in evidence, within six or seven years if one installs solar onto one's home, it basically pays for itself?

Ms HOLE: Yes. That is why we continue to see high uptake even without the generous Solar Bonus Scheme. Households are not just installing it for financial benefits.

Mr O'REILLY: I should add that the IPART rate is a benchmark rate. There is a competitive retail market. There are some retailers who specifically pursue solar customers and may offer a more generous rate than the benchmark rate. We would encourage solar customers to make themselves aware of those offers. They can do so through comparison at the Australian Energy Regulator's Energy Made Easy site.

The Hon. BEN FRANKLIN: I will now move to prices, particularly the price guarantee which is something that the Government has established. In saying that network prices need to be lower in 2019 than in 2014, can you explain how that is working in practice?

Ms HOLE: The network pricing guarantee is being monitored by the Pricing Commissioner, Mr Allan Fels, who is ensuring that the networks—Ausgrid and Endeavour—to whom the pricing guarantee applies are meeting that target. On top of that, the Government has taken a number of steps to reduce overall costs of the New South Wales networks through the New South Wales networks reform program. It cut around $7 billion in costs from the networks and that is being seen flowing through into our reduced network costs.

The Hon. BEN FRANKLIN: So where are we? Are they lower than they were in 2014?

Ms HOLE: Yes.

The Hon. ADAM SEARLE: They must have been trousered by the retailers.

The Hon. BEN FRANKLIN: Can you also comment on the support for those households who are potentially under financial stress? This is probably best directed to you, Ms Hole. What actions are being utilised in order to ease pressures on those who are most vulnerable? We have had quite a lot of evidence about the impacts on real people. What is being done to help them? Has it been effective?

Mr O'REILLY: As you know, particularly last year there were some movements in wholesale prices which led to high retail prices. In September last year it was announced that the family rebate and the low-income rebate would be increased by 20 per cent. Those figures have flown through. There are about 900,000 New South Welshmen who access energy rebates. For those experiencing some short-term difficulties, there is the Energy Accounts Payments Assistance [EAPA] Scheme which has assisted 49,906 customers in most recent times. A total of $20.4 million was paid out through EAPA and the actual rebate scheme that has now been expanded is worth $312 million a year to assist customers, helping meet their energy bills.

Recently it has been announced that advice in relation to access to things such as rebates and assistance programs will be available through Service NSW. The Government, both in terms of increasing the rebates in line with the movements in retail energy prices, ensuring that there is emergency assistance for those perhaps experiencing short term difficulties through the EAPA Scheme, that is targeted assistance for short-term issues. The longer term you have the rebate scheme and now particular areas inside Service NSW to get advice as to eligibility and access to these schemes. The range of measures taken by the government have been targeted by nature at longer term assistance for those with long-term affordability issues and emergency assistance for those who require it.

The Hon. BEN FRANKLIN: Would it be your contention that anyone who is particularly impacted, anyone watching the Committee or anyone reading the transcript impacted by energy prices at a deleterious level to their household finances should seek out Service NSW to see if there is any assistance available to them?

Mr O'REILLY: Indeed, that new service is available. Also they should always, if they are having trouble meeting payments to a retailer, under the Australian Energy Regulator framework, the national energy customer framework, there are hardship policies. All retailers are required to have hardship policies. They should also get in touch with the retailer and there are measures that retailers have to offer, such as payment plans, to help people get through issues such as customer debt and payment difficulties, and no customer on a payment plan can be disconnected.

The Hon. BEN FRANKLIN: One final question, back to Mr Searle's questions about new generation, I appreciate the comments you made, my question is on a macro level: What umbrella work is being done to encourage new generation into New South Wales? Rather than talking about the specifics of the planning challenges and so forth, at a high level what work is being done to encourage people to invest in the new technologies?

Mr O'REILLY: Obviously, in terms of most recently the Government announced that it would look at a transmission strategy and the range of generation coming forward is by nature located in different parts of the State and when it is looked at long-term that generation, as it is brought forward by the market, can access the market and customers through the transmission grid. We are looking at a proactive approach in looking at future transmission needs of the State to support the growth in generation. New South Wales has been a supportive environment whereby there is policy certainty for investors and it has engaged extensively, as my colleague said, in the COAG Energy Council ensuring there is a policy environment to support investment by private sector investors in new generation. We maintain a strong relationship with AEMO and keep an eye on issues to do with New South Wales long-term security and the advice they provide us with the electricity statement of opportunities and short-term energy generation needs.

New South Wales had a Renewable Energy Action Plan. The first priority there was improved connection processes for renewable energy generators. I note recently the Energy Networks Association themselves came forward and noted that they need to improve the arrangements applying to the connection arrangements for renewable generators across the NEM, and including New South Wales. If you combine the Renewable Energy Action Plan with the transmission strategy and supporting a positive environment for generation in New South Wales going forward through the Council of Australian Governments Energy Council arrangements then we are very much trying to create a conducive environment for new generation as required by the market going forward in New South Wales.

The Hon. TAYLOR MARTIN: We talk a lot about how more generation coming on and what options generators are looking at investing in. We hear a lot about gas. I would like to hear more about the New South Wales gas plan. Are you in a position to give the Committee more information about that?

Ms HOLE: I can give you very high level information. The gas plan is actually managed by the resources and geoscience portfolio component of the department. It will be a quick summary. My understanding is that all the actions from the New South Wales gas plan have been implemented and the focus is now on potential strategic release areas in the west of the State to look at what can be done to increase domestic supplies. This is in addition to the work that is being done through COAG Energy Council and the Commonwealth with the gas supply guarantee.

The Hon. TAYLOR MARTIN: Those regulations are supposed to be best practice?

Ms HOLE: That is my understanding, yes.

The Hon. JOHN GRAHAM: You have talked about the 900,000 households that are eligible for the rebate schemes, can you give us a breakdown between how many are accessing the low income household rebate and how many are accessing the family energy rebate?

Mr O'REILLY: To ensure I give you an accurate answer I will take that on notice and come back to you.

The CHAIR: Could you compare that over the last three years?

The Hon. JOHN GRAHAM: That is how many people have taken up the rebates. Could you also take on notice how many people are eligible to take up those rebates?

The Hon. BEN FRANKLIN: If that is possible.

The CHAIR: If it is, just so it is apples with apples, what you are comparing with previous years so it is consistent. Thank for your time, your evidence has been helpful. You have taken questions on notice and you will have 21 days to answer those in writing. The secretariat will be happy to assist you if you require it. Thank you for presenting today at the inquiry.

(The witnesses withdrew)

JUSTIN HILLIER, Chief Financial Officer, Essential Energy, sworn and examined

NATALIE LINDSAY, Head of Regulatory Affairs, Essential Energy, sworn and examined

The CHAIR: Do either of you have an opening statement you would like to present?

Mr HILLIER: I do. Essential Energy's core business is building, operating and maintaining one of Australia's largest electricity distribution networks across a footprint that is environmentally and geographically dispersed. Our network consists of over 180,000 kilometres of powerlines, with our longest powerline approximately 1,900 kilometres and serving just 330 customers. We are 100 per cent owned by the New South Wales Government and are regulated under the national electricity rules by the Australian Energy Regulator [AER]. We provide essential services to approximately 840,000 customers across 95 per cent of the State and are a key enabler of economic activity in regional, rural and remote New South Wales. The geographic spread of our network and demographics of the communities we serve sets Essential Energy apart from other electricity distributors. Compared to the average customer density across the national electricity market, Essential Energy has about one-third the number of customers per kilometre of powerline. By comparison to some city networks that have as many as 46 customers to fund every kilometre of powerline, Essential Energy has only 4.6. This illustrates the high pressure on cost to serve our communities.

Our vision is to empower communities, to share and use energy for a better tomorrow. Essential Energy is aware of the impact of network charges on our customers and has been transforming the business to deliver better value. Today, our distribution network charges account for approximately 37 per cent of a customer's retail electricity bill. Network charges are bundled together by the retailers with generation, transmission, retail and climate charges. Since 2012, Essential Energy has reduced operating costs by 35 per cent and capital costs by 41 per cent. This has resulted in a reduction in network charges for customers of 40 per cent while ensuring our obligations in safety, reliability, asset inspection and maintenance have been met.

The CHAIR: Order! It is unusual to put microphones in front of people while they are giving their evidence. If the witnesses are uncomfortable with the microphone being there, I will have it removed.

Mr HILLIER: I am comfortable. The reliability of power supply across our network has continued to improve with today's performance approximately 20 per cent better than 10 years ago. We are extremely proud of this record. As our business becomes more efficient, the resulting savings have and will continue to directly benefit our customers in the future, but there is more work to be done. As part of the extensive customer engagement undertaken for our 2019-24 regulatory submission, our customers have told us that affordability and reliability is most important to them and that a safe network is an absolute overriding expectation.

In response, by 2024 we plan to reduce operating costs to the lowest levels in 20 years and reduce capital expenditure to the lowest levels in 19 years. We will maintain overall reliability performance while targeting improvement on some of our worst-performing feeders. Despite the decline in operating costs, capital expenditure, and the expected return allowed on our asset base, our charges will increase for this regulatory period by 1.43 per cent per annum above consumer price index. This is primarily due to ongoing growth in the underlying value of our asset base. Our 2019-24 plan builds a platform for future customer needs and supports Essential Energy moving closer to achieving its objective to deliver real reductions to network charges beyond the 2024 period.

The electricity industry is undergoing significant change, driven largely by alternative technologies, customer demands for lower prices and greater control of how their electricity is consumed. While many of these changes are already embedded in Essential Energy's plans, others will be driven by the pace and types of innovation and the regulatory environment, making them difficult to plan for, particularly when decisions on network investment require a long-term outlook. Essential Energy has been commended by customers, stakeholder and consumer groups and the Australian Energy Regulator for its engagement with customers, retailers, energy service providers and policy-makers to help shape the best possible future network business for our communities. As a business engaged in direct and ongoing dialogue with our customers, our focus remains on continuously improving safety culture and performance, operating at industry best practice for efficiency to deliver best value for customers, delivering real reductions in distribution network charges and, finally, delivering a satisfactory return on capital employed.

The CHAIR: I apologise for the issue with the microphone. The room has been upgraded, so some things still need to be put in place, such as a splitter box. Thank you for allowing the microphone to be put in front of you.

The Hon. ADAM SEARLE: Thank you for the presentation. A fair reading of an internal briefing prepared by Essential Energy regarding the 2014-19 revenue determination is that although you joined in with the other then State-owned energy companies to challenge the AER original determination, you did not need to, that you were able to live within the original determination's revenue envelope. Can you tell us how you came to continue with the challenge to the AER determination and whether you took steps to inform the regulator and the courts and tribunals when you knew you could live within the original determination?

Mr HILLIER: In April 2015, the regulator handed down its determination for the 2014-19 regulatory period. As part of that, it required immediate significant cuts to operating costs in the order of 30 per cent capital costs in the order of 7 per cent. Essential Energy, at that point in time, could not see a way forward where it could immediately meet those reductions and expenditures so it went about the merits review through the Australian Competition Tribunal. The Australian Competition Tribunal set aside the AER's determination and requested that it remake the determination, primarily on the grounds of operating costs, cost-to-debt allowances and also imputation credits.

The Australian Energy Regulator appealed that decision through to the Federal Court. The Federal Court handed down its decision in May 2017 and found in favour of the network companies on operating costs and cost-to-debt allowances. The quantum of the findings in the Federal Court for operating costs was in the order of $737 million above the initial determination by the regulator and cost to debt was in the order of $277 million above the AER's initial determination in 2015. Together, those two amounts were over $1 billion of potential revenue that Essential Energy could have pursued through the remade determination.

If we go back to April 2015 and address your question, what happened at the time was that the AER's initial determination was put in place and the revenue allowances within that are what customers met for the initial year of that period. Subsequent to that, Essential Energy entered into undertakings with the regulator so that revenue would not increase any higher than the consumer price index [CPI]. CPI increases were put on top of that initial determination. Customers had certainty around pricing and they were not charged any more than the initial determination. What the business did—and it has been doing this since 2012—was to undertake significant reform. Since 2012 we have reduced operating costs by 35 per cent, we have reduced capital expenditure by 41 per cent and network charges have come down by 40 per cent.

The Hon. ADAM SEARLE: You mentioned that in your opening statement. The internal briefing note is dated 17 May 2017. So your company knew then that it did not need to proceed with challenging the original AER determination and at that time the matter was live before the Federal Court. Did you tell the regulator or the court that you did not any longer need to proceed with challenging the original determination? If you did not—and I suspect you did not—why did you not?

Mr HILLIER: We had fundamental issues around certain components of the initial determination handed down by the AER. On the operating costs side, they applied a benchmarking framework that we did not agree with, and still do not agree with today, based on a customer density basis. The Essential Energy network has very low customer density—again, referring back to the opening statement—and going forward as the AER works through future determinations and continues to adopt and apply this benchmarking, that is something that we did want to pursue through the Federal Court.

The second part of it was that the AER did not allow for any transition process in order for Essential Energy to reduce its cost base down to the levels that the AER had put in place. So the actual quantum of operating costs Essential Energy did not fundamental disagree with; it was the glide path to get there. Over the course of time Essential Energy continued to reform the business and come 2017, when the full Federal Court handed down its decision, it was in a position to consult with customers and stakeholder groups around an outcome that could meet the driver of affordability, and as part of that process we did not pursue any of the potential $1billion upside that was on offer.

The Hon. ADAM SEARLE: You did not pursue it after you had been outed. However you would choose to dress it up, you knew that you could live within the original determination revenue envelope and you persevered with the challenge. This briefing note was written before the full Federal Court handed down its decision. Being a government-owned company, why did you not tell the court and the regulator that you could live within the original determination, even notwithstanding your differences about how you reached the different points of revenue?

Mr HILLIER: At the time the determination was made, as I said, the business could not be confident in order to get there.

The Hon. ADAM SEARLE: I am talking about the time the briefing note was written by your company. As at May 2017 the Federal Court had not made a decision, you knew you did not need the challenge or the additional revenue but you persevered. Can you come clean and tell the Committee why you did that?

Mr HILLIER: The reason we pursued with the Federal Court outcome was around the debt methodology that we fundamentally disagreed with. We fundamentally disagreed with the allowances given on the operating costs. At the time that the Federal Court decision was handed down we consulted with customers and we did receive overwhelming support from customers, stakeholder groups, Energy Consumers Australia, Energy Users' Association of Australia, the Public Interest Advocacy Centre [PIAC]—the AER's own consumer challenge panel—and the AER itself. Because we did consult in an open and transparent manner, we did not pursue the $1 billion. What put us in a position to work through that was that we had made significant reform as a business to get there and it is an outcome that has received overwhelming from customers.

The Hon. ADAM SEARLE: We have established that you did not need the extra $1 billion. In your capital expenditure budget for each of the years 2014 to now, have you spent more or less than your proposed capital expenditure budget?

Mr HILLIER: In the period that is being referred to—1 July 2014 through to 30 June 2012, the five-year regulatory period that we work through—based on forecasts to date we hope to underspend the allowance for this regulatory period on capital expenditure.

The Hon. ADAM SEARLE: By how much?

Mr HILLIER: Current projections at this point in time probably suggest it is going to be in the order of $200 million to $300 million below the initial amount.

The Hon. ADAM SEARLE: Is that just for one year or is that for the five years?

Mr HILLIER: For the five years.

The Hon. ADAM SEARLE: What sort of things have you underspent on?

Mr HILLIER: As a business we are trying to become more efficient. Since 2012 we have made significant progress on becoming more efficient. Going forward into 2019 to 2024, it is about doing things more productively, more efficiently, deploying technology such as lidars and drones. We need to do it because affordability is a key issue for our customers and as a business we are committed to becoming more efficient.

The Hon. ADAM SEARLE: You did not need the extra almost $1 billion from the AER challenge and you have underspent on your foreshadowed capital spending. Have your dividends to government increased by something like 16 per cent in the last year?

Mr HILLIER: No, they have not in recent years.

The Hon. ADAM SEARLE: So they are static, no growth at all in government dividends?

Mr HILLIER: The dividends that Essential Energy pay to government have reduced over the past 10 years.

The Hon. ADAM SEARLE: What have they been since 2014?

Mr HILLIER: I do not have the numbers in front of me. I can take the question on notice.

The Hon. ADAM SEARLE: That would be very useful. There was some controversy about the warehouse at Dubbo either closing or changing its functions. Can you tell the Committee what your plans are presently?

Mr HILLIER: I do not have the information to hand but what I can say is that there will be no loss of jobs on any restructure of our warehouses or anything else in Dubbo.

The Hon. ADAM SEARLE: So there will be no loss of jobs in Dubbo at all?

Mr HILLIER: Not in the warehouse, no.

The Hon. ADAM SEARLE: Where is Essential Energy up to in the Tathra bushfire inquiry? What have you learnt from that?

Mr HILLIER: There are ongoing investigations so it is not appropriate for me to comment too much on what the cause or the outcome is from those investigations. Preliminary investigations suggest that the maintenance and asset inspection work was up-to-date in the area, the system did operate as designed. It is worth pointing out here the Tathra community, we need to acknowledge the impact on them—69 houses were lost and more than 100 properties damaged. There were some great work undertaken by the Essential Energy crews on the ground to get power back and re-established within three days. Local emergency services worked day and night and there were no lives lost, there were no injuries. I would like to acknowledge the great work by everybody involved there.

The Hon. ADAM SEARLE: In what condition was the Essential Energy infrastructure in that area prior to the bushfires?

Mr HILLIER: As I said, there are ongoing investigations taking place so I will wait for the findings to come out. It is not appropriate to make any further comments.

The Hon. ADAM SEARLE: My next question concerns the network cost decreases that you have given evidence about. I do not think it is in Essential Energy's submission but rather in the submissions of the other distribution companies that a lot of those reductions have essentially been, as it were, pocketed by the retail companies who have increased their charges over the same period of time. What is Essential Energy's view on those matters.

Mr HILLIER: What we can say is that, as I mentioned earlier, network charges have come down 40 per cent since 2012.

The Hon. ADAM SEARLE: But electricity prices have not gone down in the same period, have they?

Mr HILLIER: We comprise 37 per cent of the bill and, as we all know, the final electricity bill to customers has not come down.

The Hon. ADAM SEARLE: Should network costs be separately identified on people's bills so they have a proper understanding?

Mr HILLIER: That is a good question. We consulted heavily during the preparation of the 2019 to 2024 submission. The feedback we did get from customers was once they understood the service Essential Energy provided, that they were very surprised we were only 37 per cent of the bill. Whether that should be cut out or separately identified in the invoices to customers is a good question but they have said that they want simplicity. Potentially, that would complicate things but I think it needs to be considered.

The Hon. JOHN GRAHAM: In fact, your submission is very strong on this point. One part of it says:

> Essential Energy has been advised by many customers that the price decreases it has achieved and passed through to retailers have not been evident in customers' retail bills.

You have talked about the job you have done to keep costs down, but that is a very strong statement about what is actually happening with bills. Do you want to add to that?

The Hon. BEN FRANKLIN: Can I just pick that question up and run with it?

The Hon. JOHN GRAHAM: Yes.

The Hon. BEN FRANKLIN: You say that your prices and the network prices are coming down, yet electricity bills are going up. Why?

Mr HILLIER: In recent years we have seen closure of some of the coal fired power stations at Hazelwood and Northern there has been 2,000 megawatts of base load come out of the system. We are seeing increasing penetration of renewables. There are ongoing programs and studies in place to understand why wholesale costs have gone up in recent years, but that seems to have offset any significant reductions Essential Energy in our territory have made to network charges.

The CHAIR: Can I clarify. Every time there is volatility in the market, wholesale prices seem to go up. So if the generators can give a perception that everything is a little bit unstable suddenly power is more expensive. Would that be a fair thing to say?

Mr HILLIER: I cannot comment too much on the wholesale market.

The CHAIR: It is a generic question. You have in your submission on page 4 of 10, under the topic of pricing trends:

> Current forecasts indicate increasing volatility in the wholesale market due to retirement of ageing coal-fired power stations and changes to the generation mix, with increasing adoption of renewable energy sources at national market, community and individual customer levels.

There you are basically suggesting that there is an impact of generation volatility. Is it correct that if you can cause generation volatility in the market the wholesale price is more likely to go up, because there is a perception that you might miss out on energy if you do not secure it? Would that be a fair comment?

Mr HILLIER: That would be a fair comment. From our perspective, we are a network company. There has been increased volatility, clearly, in the wholesale market.

The CHAIR: My point is that we are running this inquiry because as long as the generation situation is fragile, or is perceived as being vulnerable, the consumer will have increased prices, nearly falsely, because if you can keep the perception of volatility in the market place—the perception that everything is a little big shaky—people will pay a higher price to make sure that there is energy security.

Mr HILLIER: Price increases in the last two years would suggest that.

The CHAIR: Exactly. So would it be fair to say that the No. 1 thing this inquiry could do would be to come up with a plan that secures our energy from being vulnerable. The likely outcome would be, to some degree, that consumers would see a reduction in their power bills.

Mr HILLIER: We find that all of the contributors to the energy supply chain—whether it is generation, transmission or distribution—are looking for forward certainty in the regulatory environment so that we can invest with certainty and we can have a coordinated solution to this problem.

The CHAIR: Not just regulatory. I am not talking about regulation here. That is an undercurrent, but I am talking about infrastructure. New South Wales needs a solid infrastructure program that takes vulnerability out of the market so that consumers can have fair, affordable power prices. If the infrastructure is vulnerable or volatile we seem to pay higher prices for our energy.

Mr HILLIER: I think that relates to the wholesale market.

The CHAIR: Exactly.

Mr HILLIER: Clearly, Essential Energy is a distribution network service.

The CHAIR: I understand that.

Mr HILLIER: I am not an expert on that.

The CHAIR: I know you are not, but it is a fair comment, isn't it?

Mr HILLIER: It sounds like a reasonable comment.

The Hon. BEN FRANKLIN: I want to go onto an entirely different topic and talk briefly about one of the trials that you are supporting for industry components in—let's just pick a place at random—Byron Bay.

The Hon. ADAM SEARLE: Who could have picked it! You are not asking about the micro grid, are you?

The Hon. BEN FRANKLIN: Both the micro grids and the energy storage projects that you are supporting there. Could you tell us a little bit about them? Are there any impediments to them proceeding? Are you providing all the support that you can, for them?

Mr HILLIER: We certainly see a whole lot of opportunities going forward in terms of the emerging and innovative technologies that are coming into the market. Clearly, they are going to play a key role, hopefully, in bringing prices down for the end consumer going forward. Essential Energy is fully committed to understanding these in more detail, and understanding how they can be deployed onto our network to improve overall efficiency for customers. What are we doing in that space? We are undertaking trials such as the one in Byron Bay with micro grids to understand the technology and the economics of it.

As we speak we are undertaking a stand-alone power system trial in Bulahdelah, as well. Particularly, the Essential Energy grid—given how diverse it is and that the network charges on our grid are higher than other distributors due to the size of the network and the low customer density—will become more susceptible earlier, because the economics of our network will mean that emergency technologies will stack up. Really, as a company we need to continue doing the research and the trials and understanding how it could be deployed. You asked about the regulatory impediments. We certainly support the Energy Networks Australia [ENA] 2017 roadmap, which addresses how the networks' role could change, going forward. Specifically, regulations need to change to allow this to happen effectively and economically.

The Hon. BEN FRANKLIN: What regulations?

Ms LINDSAY: The National Electricity Rules is a regulation that we have to comply with. Recently a change was introduced around power of choice, which also introduced ring-fencing obligations for our business. The combination of those things are complex and we are still working through the issues. In terms of the stand-alone power system trial in Bulahdelah that Mr Hillier mentioned, we have had to keep that connected to the network to make sure that we are not breaching the rules. If that was disconnected from the network and became a true standalone power system, we would be in breach of the National Electricity Rules, and also our ring-fencing obligations. So there is much work to be done in terms of the National Electricity Rules. Western Power, two years ago, submitted a rule change to deal with that issue. It is on the reform agenda for some time in the future, but it is not something that can be resolved quickly.

The Hon. BEN FRANKLIN: I will take you back to the Byron Bay issues. In full disclosure, I am a local resident up there. The community is strongly behind both the micro grid and the energy storage projects. There is some cynicism within the community about whether Essential Energy is actually properly and fully committed to supporting those happening. That is not a majority view. Nor is it the view of the proponents. Nor is it my view. I guess I am looking for some assurance that I can take back to that community that you are absolutely committed and 100 per cent behind both of those projects.

Mr HILLIER: I can assure you that we are.

Ms LINDSAY: We are absolutely committed to projects such as the project in Byron Bay. For a network like ours it really is the future. Our network is so long—nearly 200,000 kilometres—these are the technologies that will save money for customers in the long term. Rather than replacing feeders that are 1,000 kilometres long micro grids are the solution.

The Hon. BEN FRANKLIN: I could not agree with you more.

The Hon. TAYLOR MARTIN: We hear a lot about over investment that may have taken place in the network in years gone by. Could you give more of an insight, some examples perhaps of what impact over investment may have had on customers in today's day and age?

Mr HILLIER: If we go back to 2007, there were licence conditions imposed on the New South Wales networks to improve overall reliability in the networks, minimum reliability standards. It was also an N-1 obligation that was put into the licence conditions as well and on networks such as Essential Energy, which is largely radial and customers are only provided by one feeder. There is significant investment that needed to occur to meet the obligations in the licence conditions. This took place between 2007 and 2012.

The Hon. TAYLOR MARTIN: Mr Hillier, could you briefly explain the N-1 power requirement?

Mr HILLIER: That basically means if a customer's power supply comes from one segment or one feeder and that feeder goes down due to lightning strike or some other unplanned event, there needs to be an N-1, which would be an alternative source of supply.

The CHAIR: In your response to the inquiry, you talk about retail electricity bills. Sometimes for people trying to read these bills, they may as well be written in Chinese or some other language because it is very hard to break down the costs. You note here in your submission that it is not generally well understood by customers and generation and network components are not currently itemised in retail bills for small customers. You suggest that you could do better with the bills by clarifying exactly what people are paying for. Would you comment on that?

Ms LINDSAY: As part of the consultation we undertook for our 2019 to 2024 regulatory proposal, we held deliberative forums right across New South Wales and each forum was attended by about 70 to 80 customers. What we did at those forums is we took them through the supply chain so they understood exactly where their electricity comes from and how it gets to them. Following the process, customers were clearly more educated about the electricity supply chain and wanted to understand the cost structures of that. At the end of most forums, customers said: "I want to see these costs on my bill itemised". At the moment it is not like that. For a large customer that consumes say greater than 160 megawatt hours it is itemised. Whether that is the level of detail for a small customer—probably not. But there was definitely an appetite amongst customers to have greater visibility of those supply chain costs.

The CHAIR: Is there an intention to change the way that you set out your bill to meet that request?

Ms LINDSAY: Our bills go directly to retailers. The retailer has the full control over the bill. It is really up to them what information is displayed on that but our customers have clearly told us they would like more detailed information.

The CHAIR: At point four of your submission you talk about environmental policy costs and other government charges, an example of which is renewable energy target. What percentage of the bill is that and can you break down what those environmental policy costs look like in real terms?

Ms LINDSAY: In terms of the retail account, the environmental policy costs would cover New South Wales or Federal environmental policy initiatives such as the renewable energy target that you just mentioned. In addition to that, there is a small component that we recover for the climate change fund in New South Wales. It is approximately $60 million per annum and that is recovered through our network charges to customers. In total, our approximation is around 15 per cent of the retail bill is dedicated to environmental policy costs.

The CHAIR: That is not shown on the bill?

Ms LINDSAY: No, it is bundled up, just like everything else. For small customers, they normally see a cents per kilowatt hour charged and a fixed charge per day.

The CHAIR: There is such a big debate about climatic changes. There is also a debate about energy costs and what portion of the bill goes to these initiatives. Do you not think it would be fair to clearly explain on the bills what those costs are, given that they are quite a percentage of the bill?

Ms LINDSAY: Every customer will probably have a different preference, but I know the ones I have spoken to personally definitely indicated a preference for that more detailed information, that is following a couple of hours of discussion and education around the electricity supply chain. From my perspective, I think most customers would prefer that more detailed information to at least understand how much cost is going where.

The CHAIR: It would not be hard to put the five main components of the environmental policy costs separately, and if one of them is renewable energy costs, consumers expect to know what they are paying for and what they are getting, especially if it is 15 per cent of their bill.

Ms LINDSAY: As I said before, it is a matter for retailers. I think if we had some control over the process our preference probably would be to itemise those costs.

The CHAIR: I deeply encourage you to pursue those thoughts.

The Hon. JOHN GRAHAM: One of the things that people said at those deliberative forums is they strongly agree with your view that you put in your submission that network prices might be going down, but they cannot see it going through their retail bills. Is that the feedback that you got in your deliberative forum?

Ms LINDSAY: Yes, we did. There was quite a bit of concern from customers. The general view was "You can put your prices down, but what is the guarantee that I will actually receive that price reduction?"

The Hon. JOHN GRAHAM: There is no guarantee, is there?

Ms LINDSAY: That is right. A retailer has a cost pool to manage in its own right. There is not much visibility on what those costs are. As Mr Hillier pointed out before, our reduction of 30 per cent back in 2015, there is evidence that some of it was passed through and there is evidence that some of it was not passed through. I think it coincided with some quite high costs in the wholesale market. It is difficult to unpack those movements, which I think is where itemisation of those costs on a bill may provide more transparency on where the increases are coming from and where the decreases are coming from.

The Hon. JOHN GRAHAM: It is clearly quite complex, but in your deliberative forums that was the strong feedback from your customers?

Ms LINDSAY: It was very strong, yes.

The Hon. JOHN GRAHAM: Given your strong evidence, do you agree or disagree with this specific interim finding of the Australian Competition and Consumer Commission [ACCC]:

> We have found there is insufficient competition in the generation and retail markets, which both raises prices and increases barriers to entry.

Mr HILLIER: We are a network company. What we have seen is increases in wholesale prices over the last three years. Reductions have not been passed through. Whether that is due to a lack of competition or a changing mix of the generation capacity as we go through this transition to cleaner forms of generation. That is not something I have a view on.

The Hon. JOHN GRAHAM: You have given quite strong evidence in your submission. As a key player in the market, this is an important interim finding by the ACCC. They will do more work. Surely you have a view about whether that is relevant or not? I am interested in the perspective that you bring to the table.

Mr HILLIER: Certainly we will continue to strive for lower network changes through to the bill. I am sure that others are attempting to do the same. What we are seeing at the moment, and it needs to be recognised, is there is a change happening in the market around decentralisation, de-carbonisation in terms of the generation mix as we work through a national energy guarantee and we try and get a framework in place which clearly addresses affordability and reliability of supply. Until we have that clear framework, we cannot all work through to a common goal. What is happening at the moment, as I said, with the closures of significant coal capacity, the market has changed and no doubt it has become more volatile than what it once was.

The Hon. JOHN GRAHAM: I might paraphrase your answer by saying that you are describing it as being very complex. I accept that. Do you think the ACCC has got it wrong when they observe that there is insufficient competition in the generational retail markets?

Mr HILLIER: My response to that would be the more competition there is in that market the better for everybody.

The Hon. ADAM SEARLE: You have given evidence about the decrease in your network costs. Have network costs overall increased over the last 10 or twenty years or have they gone down as a proportion of people's electricity bills?

Ms LINDSAY: As a proportion?

Mr HILLIER: Network charges did go up in the earlier part of the last decade, as we discussed with the licence conditions around the N-1 reliability standards. They have come down significantly since 2012—in the order of 40 per cent. In terms of your question around what proportion of the bill—are they today versus 10 or 20 years ago?—I would have to take that on notice.

The Hon. ADAM SEARLE: I am just looking here—we have not got to them yet—at what Delta has provided: Two documents, one from the Australian Energy Market Commission [AEMC], the residential electricity price trends, and a prior Independent Pricing and Regulatory Tribunal [IPART] report. If those two documents are to be believed, if you go back to, say, '96, distribution and transmission together were about 38 per cent of people's electricity bills, but today network charges as a whole are nearly 53 per cent. How can we reconcile that information with your evidence and the evidence of other distribution businesses that have been given in writing to this inquiry?

Mr HILLIER: Essential Energy's charges today are 37 per cent of the overall final electricity bill.

The Hon. ADAM SEARLE: How do you work that out? How do you know what people's final electricity bills are?

Mr HILLIER: We base that on a residential five megawatt per hour per customer, which is what we refer to as our typical—

The Hon. ADAM SEARLE: So you have a model that determines this?

Mr HILLIER: We have a model.

The Hon. ADAM SEARLE: I am just suggesting that maybe the model might not be accurate. There is so much information in this system that we are trying to get to the bottom of.

Mr HILLIER: I think when we talk network charges we would need to bundle up transmission charges as well.

The Hon. ADAM SEARLE: Yes.

Mr HILLIER: That is on top of the 37 per cent, which I think, from Ms Lindsay, is 9 per cent—or in the order of—which would bring that to 46 per cent for a typical residential customer in our network today.

The CHAIR: Thank you very much for presenting and giving evidence today. You may get some further questions from the Committee in the light of your evidence. You will have 21 days in which to answer that. The secretariat will be happy to help you and assist you with that. The Committee really appreciates your coming forward today. Thank you.

(The witnesses withdrew)

(Short adjournment)

ROB AMPHLETT LEWIS, Executive General Manager, Strategy and Regulation, Ausgrid, sworn and examined

TREVOR ARMSTRONG, Chief Operating Officer, Ausgrid, sworn and examined

ROD HOWARD, Chief Operating Officer, Endeavour Energy, sworn and examined

ANDREW SCHILLE, General Manager, Regulation and Corporate Affairs, Endeavour Energy, affirmed and examined

The CHAIR: Would someone like to make an opening statement?

Mr AMPHLETT LEWIS: I would, on behalf of Ausgrid. First, thank you, Chair, and Committee members: Ausgrid is pleased to have the opportunity to participate in this hearing and update the Committee and those watching the proceedings on the actions we are taking in regards to delivery to customers of affordable, reliable and sustainable services. We have been listening to our customers and stakeholders to improve the decisions we are making, especially in regards to operating costs and infrastructure investments. We have a big responsibility: we connect 1.7 million households and businesses. We have a diverse range of customers ranging from large commercial and industrial to small businesses and households across Sydney, the Central Coast and the Hunter region.

It is a vital role for both New South Wales and Australia. We are committed to connecting communities and empowering lives. This is important because 20 per cent of Australia's gross domestic product [GDP] and almost 60 per cent of New South Wales' GDP is powered by our network. That includes 16 per cent of Australia's jobs, 105 hospitals, five universities, more than 1,200 schools and 15 per cent of Australia's population. They all rely on us every day for almost everything they do.

We have had comprehensive engagement with our customers and, regardless of their differing needs and situations, they have three common priorities: affordable, reliable and sustainable energy. We also know we need to listen to our customers. That is why we are here today—to share some of our experience. As you will be aware, we changed recently. Eighteen months ago the ownership changed. We went from being Government owned to being co-invested with IFM Investors and Australian Super, which means that seven million Australians have invested in our business through their superannuation funds.

Our transformation program, which we have been working on over the past five years, has delivered better health and safety outcomes for our people; greater operational and capital efficiency; a 20 per cent reduction in operational costs, which equates to a saving of $76 a year per customer and which represents $100 million in total; and we have introduced better capital prioritisation and planning outcomes. As a result of this, the network component of customers' bills has reduced by 30 per cent since July 2013.

There is a lot more for us to do, and we are committed to doing that. Our proposal locks in the efficiencies we have made ourselves as part of our transformation; but, more than that, if accepted by the regulator, it delivers a further 6 per cent reduction in network prices; stable capital expenditure to avoid the peaks and troughs of the past; and $900 million less revenue to our business than in the previous five years. We are no longer just looking at building network infrastructure. We are looking first at where technology, innovation and partnering with other companies and our customers will deliver at a lower cost. For example, we are investing $15 million in demand management to offset $60 million in terms of capital.

We are committed to maintaining reliable service to customers, notwithstanding the price reductions, and we continue to support growth with targeted infrastructure investment in, for example, the Rozelle area for transport and Macquarie Park for information technology. We are also committed to sustainability and investing in our advanced distribution management system to support a greater degree of renewable energy being able to be transported by the grid. We know that in the future more households and businesses will choose to generate their own power. Ausgrid will be at the centre of those exchanges. We want to be a leading energy solutions provider, recognised globally and locally, and we want to work with customers and partners to deliver on that outcome. Thank you.

The CHAIR: Thank you. Are there any other opening statements?

Mr HOWARD: On behalf of Endeavour Energy, I would like to make a statement. Let me start by saying that Endeavour Energy welcomes this opportunity to appear before the Committee. Endeavour operates and maintains an electricity network that provides an affordable, safe and reliable power supply to and from households and businesses across Sydney's greater west, the Blue Mountains, the Southern Highlands, the

Illawarra and the South Coast. Our network serves a diverse population of 2.4 million people, or almost one million customers. The population of Western Sydney is expected to grow by more than 900,000 people over the next 20 years with more 20,000 new customers connecting to our network each year. Our network area includes Sydney's north-west and south-west priority growth sectors, planned as new release areas to house communities similar in size to Wollongong. It will also be the home to significant development zones, such as Sydney's second airport and its surrounding aerotropolis.

In addition to facing significant population growth, we face the challenge of our existing customers having the third highest energy density and second highest demand density of the National Electricity Market. This means that our customers consume a relatively high amount of energy, which is particularly so during peak periods: 4.00 p.m. to 8.00 p.m. This is largely due to a combination of high summer temperatures, which are often up to 10 degrees higher than in the Sydney central business district and areas of energy-intensive economic activity.

In relation to the Committee's terms of reference, Endeavour's customers have paid the lowest network charges in New South Wales since 2012-13. Our charges currently make up about 30 per cent of the average residential customer's electricity bill and are now $75 less than they were in 2012-13. Under our five-year regulatory proposal for 2019-24, which has been submitted to the Australian Energy Regulator [AER], Endeavour's customers will continue to pay the lowest network prices in New South Wales. If the AER approves this plan and accepts our proposal to remake the 2014-19 plan, around one million electricity customers will see a decade of declining network charges as a result of our long-term efficiency program and our commitment to passing on these savings to our customers.

As a network business, Endeavour believes our focus should be to run our business as efficiently as possible in order to keep downward pressure on our portion of a customer's final electricity bill, but without compromising safety or reliability. This is despite the added cost pressures of needing to extend our network to meet the growth in new connections, manage an ageing asset base and meeting increased compliance to vegetation management standards. Our benchmark performance is now the best in New South Wales but only the eighth in Australia.

Under the direction of our new private owners, we have set our sights on becoming the best performing network in Australia in the next five years. This means we still have a lot more work to do. Never before has the community been so focused on the affordability, reliability and security of electricity services as our industry undergoes a dramatic transformation. Regulatory change and technological advancements are equipping customers with much greater choice and control of their energy usage. Increased customer focus and engagement with our business is also shaping better outcomes for both customers and communities.

Over the next five years, we will continue to put downward pressure on electricity bills while maintaining a safe and reliable network, servicing population growth and facilitating customer choice and control. We plan to do this in four key ways. First, by containing investment. This means focusing only on the investment required to ensure safe and reliable electricity for our rapidly growing region. Secondly, by becoming more efficient. We will offset the cost of this necessary investment as far as possible so we can pass savings on to customers. We will adopt the AER's 2013 rate of return guideline which will lower prices. We will delay expensive capital investment with demand management programs and continue to reduce cost.

Thirdly, by giving customers choice and control. We will develop new ways for customers to control their own electricity cost by preparing the network to connect solar, batteries, microgrids and smart meters and offer customers a greater variety of tariff options. Finally, by planning for the future. We will maintain our long-term planning approach by developing contingency plans for future developments such as the Western Sydney Airport. This means customers will not pay for the new infrastructure until it is needed. Endeavour Energy accepts that our future is linked to meeting the needs of our customers and enabling their energy choices and has therefore committed to placing their needs at the heart of our decision-making. Thank you.

The CHAIR: I will ask a question to Ausgrid. On page 1 of your submission, you have mentioned some percentages of how some of your customers rate these issues. How many customers did you survey for these results? What is the sample size?

Mr AMPHLETT LEWIS: I do not have those numbers.

The CHAIR: Could you get them so that the Committee knows the equivalent amount of people that were surveyed?

The Hon. ADAM SEARLE: My first question is to Ausgrid about the 6 per cent reduction for customers. How much money does that amount to?

Mr AMPHLETT LEWIS: That is $30, on average.

The Hon. ADAM SEARLE: Globally, in total?

Mr AMPHLETT LEWIS: Yes.

The Hon. ADAM SEARLE: No, what are the total savings to consumers in an aggregate sense?

Mr AMPHLETT LEWIS: It is $900 million less than we recovered from customers in the previous period.

The Hon. ADAM SEARLE: How much have you underspent on your capital spending over the regulated period to date?

Mr AMPHLETT LEWIS: It is approximately 10 per cent under the allowance.

The Hon. ADAM SEARLE: Can you tell us the figure?

Mr ARMSTRONG: I think the answer is $400 million and 11 per cent.

The Hon. ADAM SEARLE: You say that you are returning $900 million, but there is a $400 million underspend on your capital spending.

Mr ARMSTRONG: Yes.

The Hon. ADAM SEARLE: You should have a letter from the Australian Energy Regulator to myself dated 22 May—

The Hon. BEN FRANKLIN: Cc'ed to the Minister.

The Hon. ADAM SEARLE: —cc'ed to the New South Wales energy Minister. I direct your attention to the bottom of page 2 and the penultimate paragraph, which states that Ausgrid has over the regulatory period, due to the various uncertainties, over-recovered $806.6 million from your customers. How much of that are you proposing to return to customers?

Mr AMPHLETT LEWIS: We have not yet tabled the proposal with the Australian Energy Regulator. We are working with them and customers currently.

The Hon. ADAM SEARLE: When will you table that with the regulator?

Mr AMPHLETT LEWIS: We do not have a specific date but we certainly expect to do it over the next month or so.

The Hon. ADAM SEARLE: What is the delay? You have done an advance leak to the media. You have got some glossy documents for us about all the great things about the next regulatory proposal and you presumably have a detailed understanding of what is in it. Why have you not provided it to the regulator like Endeavour or Essential have?

Mr AMPHLETT LEWIS: The plans that we have shared with you today and shared with the media relate to our plans for customer outcomes over the next five years. The question of the 2014-19 period is a different one. Anything that comes out of that decision will be separate to what we proposed in these proposals. These proposals are well developed. The remittal issue is a complicated one and we are still working through it.

The Hon. ADAM SEARLE: Essential and Endeavour—at least from Endeavour's perspective, leaving aside the AER's acceptance of that—are well on their way to resolving those. Why have you not?

Mr AMPHLETT LEWIS: Each of the three disputes were different. I think especially in regards to the operational expenditure dispute Ausgrid's was a very different case. We have overspent significantly more than Endeavour or Essential so we are working hard to come to a resolution with the AER on that.

The Hon. ADAM SEARLE: Overspent in what sense?

Mr ARMSTRONG: Thanks for that question. Overspent, the decision that was subject to the court action has been set aside. So, in that regard comparing to the set-aside decision we have recovered from our customers more than that set-aside. The real question is what is the right determination following that.

The Hon. ADAM SEARLE: Correct.

Mr ARMSTRONG: So, overspent is probably not necessarily the right characterisation.

The Hon. BEN FRANKLIN: What would be the right characterisation then?

Mr AMPHLETT LEWIS: I might clarify. The AER set an allowance for our operating expenditure between 2014 and 2019. That operating expenditure allowance was significantly lower than the operating expenditure that we were incurring at the time. Since then we have worked very hard to get that operating expenditure down to the allowance that the AER gave us. That required significant investment in downsizing. There were costs associated with reducing the operating expenditure. In that regard the amount Ausgrid spent on operating its business over the period was significantly higher than that which was allowed for by the AER. That is what I meant by "overspent".

The Hon. ADAM SEARLE: Endeavour, in its remittal proposal, is proposing to pay back over time $227 million, which is a fair proportion of the $337 million over recovery from the 2015 base plus CPI. Is it likely that you will be seeking to return to your customers the same sort of proportion?

Mr AMPHLETT LEWIS: The disputes are not the same, so the proportions will not be the same.

The Hon. BEN FRANKLIN: You will be returning a significant proportion to your customers?

Mr AMPHLETT LEWIS: We will have to wait and see what the AER's determination is and we are not yet ready to make a proposal to the AER.

The Hon. BEN FRANKLIN: You just said the proportions will not be the same, that implies that there will still be a substantial proportion which will be returned.

The Hon. ADAM SEARLE: Maybe not.

The Hon. BEN FRANKLIN: That implies there will be a proportion that will be returned.

Mr AMPHLETT LEWIS: My intention was to highlight that because the cases are different, that any proportion is inevitably going to be different. It was not to suggest that the proportion we would be returning would be specifically anything.

The Hon. ADAM SEARLE: When might we get some visibility of this being resolved from Ausgrid's perspective? When will we know what it is you are proposing to return?

Mr AMPHLETT LEWIS: Over the next month or so we expect to be making a proposal to the AER and the AER will then have time to consider that proposal. We are working with customers and the AER to ensure that we can deliver a proposal that works for all parties.

The Hon. ADAM SEARLE: To the extent you have money to return to customers, returning it over a five year period is like having an interest free loan. Why should you not be required to pay it back much sooner, given you have had the benefit of the extra money for a period of time?

Mr AMPHLETT LEWIS: The framework foreshadows these events and there is what is called an over or under account. It is not an interest free loan. Anything that Ausgrid recovers above a determination is returned with interest. The time value of money is accounted for at the regulated weighted average cost of capital [WACC]. If we hold funds for a year, it is approximately 7 per cent cost of funds that we will incur.

The Hon. ADAM SEARLE: To Endeavour; is that how you determined your $227 million repayment, using the weighted average cost of capital?

Mr SCHILLE: It includes that, yes.

The Hon. BEN FRANKLIN: To TransGrid first, I want to ask about future proofing the grid in terms of transition. What are your current plans and what are you currently doing to ensure that?

Mr AMPHLETT LEWIS: Within our regulatory proposal we have 11 trial projects that we are implementing new technologies on the grid. This will help us better plan the grid for its future use. We have incorporated an advanced distribution management system. That distribution management system will allow us to better manage the grid at a much lower level and that will allow us to accommodate greater degrees of distributed energy resources and renewable energy.

The Hon. BEN FRANKLIN: Do you think that will be enough?

Mr AMPHLETT LEWIS: The sector is going through a huge amount of change at the moment. We are making sure that we are staying abreast of that. Who knows where the future will take us, but we certainly feel that we have the plans in place to address the changes that we see today. I do not think many people in the industry 20 years ago would have seen the changes that have come in the last 20. We will update the plans on a yearly basis.

Mr ARMSTRONG: Can I add to that. One of the things we are doing is our capital program going forward is largely characterised by replacement capital. One of the things we are doing is a first in some respects, it is looking for ways to avoid replacement. We have demand management that is absolutely focused at looking at avoiding the need for replacement. We might have some capacity in a location that needs replacement and instead of taking that capacity out and reinstalling new capacity we are looking at ways that demand management can buy us an option in terms of not having to replace the capacity. That is a substantial move for us as a business going forward.

The Hon. BEN FRANKLIN: To Delta, I enjoyed your comment that you want to become the best performing network in the country, can you define what that means?

Mr HOWARD: For Endeavour Energy?

The Hon. BEN FRANKLIN: Yes, I apologise, for Endeavour.

Mr HOWARD: The AER, as part of its annual benchmarking, does, in fact, rank the 13 distributors across the national electricity market. That is done on a number of factors. At the moment across the 13 we are eighth, but the first in New South Wales. We have set ourselves an objective to get up into the top three within the next five years. The measures the AER uses are more economic efficiency measures but we think it is important to be reflective of reliability, customer service and safety as a basket of measures. We see ourselves as aspiring to a basket of measures with a focus on safe performance, reliability, customer service, as well as economic efficiency.

The Hon. TAYLOR MARTIN: I would like to ask about the over investment that has taken place in the past, can you give examples and elaborate on the impact that over investment and gold plating may have had for consumers today?

Mr AMPHLETT LEWIS: We have spent quite a lot of time looking into this since privatisation to make sure that we understand the lessons of the past. The investment that we are talking about happened in 2005 onwards to 2013. There was significant rollout of infrastructure in the forties, fifties and sixties and that naturally came to a reinvestment cycle in that period. There was also extremely high growth in peak demand leading up to that period. That was expected universally by regulators, businesses and generators alike to continue, it did not. We saw considerable asset performance deterioration in terms of reliability and safety at the time. There was also a lot of media at the time about those issues and so it was natural for that concern to drive a period of reinvestment across the network.

However, when the peak demand did an outturn that investment was reduced significantly. These assets will not be wasted, they will be used and utilised. In some ways it prepares us very well for the transformations occurring: the likely uptake in EVs and implementing greater degrees of distributed energy resources on our network. "Gold plating" is a term that has been used, but I would not agree with it. There was some investment for events that did not arise, but those investments will deliver for customers in the longer term.

The Hon. TAYLOR MARTIN: In your glossy brochure distributed this morning it says, "The network component of power bills doubled during this period"—the period being 2009 to 2014—"and affordability became a major concern for our customers". That is largely what we hear. What is the outlook for the network component?

Mr AMPHLETT LEWIS: The network component has come down by 30 per cent since then. Ausgrid is extremely cognisant of its responsibility in delivering better for customers. Our proposal to the Australian Energy Regulator sets that out. We have worked hard to get the prices down. We will have to work hard to deliver the 6 per cent proposal that we tabled with the energy regulator earlier this year.

The Hon. ADAM SEARLE: Both Endeavour and Ausgrid have made submissions that invites us to form the view that your charges are decreasing each year, network costs are going down and customers should be making savings, yet overall electricity costs are significantly increasing. Looking at the Australian Energy Market Commission financial report *2017 Residential Electricity Price Trends*, network costs as a whole—I accept it includes transmission—is around 53 per cent of people's bills, which is a significant increase on 20 years ago when it was around 38 per cent. The proportion taken up appears to have significantly increased. How do you reconcile that with your downward trend for your two companies? Your two companies together are the lion share of the distribution business in this State.

Mr AMPHLETT LEWIS: That number is a national number. We are looking specifically at our customers, that is where our major concern is. We have worked hard and now Ausgrid's network prices are approximately 33 per cent of a customer's bill. We want that to continue to get lower and we want to continue to deliver better outcomes for customers, but I am not quite sure how I can reconcile our number with that national number.

The Hon. ADAM SEARLE: I would be happy if you could work with the market commission or even yourself to give us a snapshot of what has been happening in New South Wales.

Mr ARMSTRONG: We can take that on notice and come back with some further information. Absolutely.

The Hon. ADAM SEARLE: Does Endeavour have anything to add to that?

Mr SCHILLE: I concur with the comments made by Ausgrid. Our share of the bill has previously been around 45 per cent. We would agree with that. Currently it is closer to 30 per cent. Yes, that would be our statement to that comment.

The Hon. ADAM SEARLE: On page 3 of Ausgrid's submission states that there is not a lot of transparency for ultimate customers on the components that make up the bill. It is the retailers that have all the information about the different components. We have asked a number of participants: should customers not have a simple breakdown of what the network costs are on their final bill as opposed to what they are paying the retailers? Would that not be a fair and simple thing for all participants in the process?

Mr AMPHLETT LEWIS: We would certainly agree with that comment.

Mr HOWARD: In respect of Endeavour, it would be great to show customers that our charges are about 30 per cent of the bill. At the end of the day, it is a customer preference. When we have spoken to customers as part of deliberative forums, and we have gone through the detail of the break-up of the bill, they have been surprised at that component. At the same time, they have said to us that bills need to be a lot simpler than what they are. We are guided by customer preferences.

The Hon. JOHN GRAHAM: In that part of Ausgrid's submission an observation is made and you invite the Committee to examine the market power of gentailers. You say you are not in a position to make a judgement about competition. Since your submission, the ACCC has investigated and has made a finding. It says that it has found there is insufficient competition in the generation of retail markets which both raises prices and increases barriers to entry. Do you have any observations about that ACCC finding and whether it concurs with your view of what might be driving this?

Mr AMPHLETT LEWIS: Most specific observations would support or contradict that finding.

Mr HOWARD: From a generic point of view, competition is great and that is a matter for the ACCC. As a principle, competition is always great.

The Hon. JOHN GRAHAM: The Ausgrid submission talks about the complexity in pricing, which is causing issues for retail customers. Could you give us anymore detail about what your feedback has been?

Mr AMPHLETT LEWIS: Customers universally find the energy industry quite a difficult thing to understand. It is complex. There are a number of different tiers or participants in the market. When you look at the retail offers, it is very hard to compare them. That is the feedback we have heard. My own experience would support that view.

The Hon. JOHN GRAHAM: That is a significant restriction on the competition you are talking about, is it not, the lack of market information for customers struggling to understand their bills?

Mr AMPHLETT LEWIS: That is our experience: customers often struggle to understand their bills.

The Hon. JOHN GRAHAM: Does Endeavour have a view?

Mr SCHILLE: It is quite universal in respect of customers and the complexity of bills. It is universal.

The Hon. ADAM SEARLE: Gentailers control something like 90 per cent of the retail market in this State and something like 70 per cent of the generation assets. That is a lot of market concentration. Maybe there is something wrong with the gentailer model. Do you think there should be restrictions on how much market share any company or group of companies should have in the electricity market who are serious about competition, or is it something you do not have a view about?

Mr SCHILLE: I do not have a view on it.

Mr HOWARD: We are network professionals and, as I said, competition is always great, but I think that is a matter for the ACCC to form a view on.

The Hon. ADAM SEARLE: Sure, but the bottom line is you are telling us the story how your costs are going down. You do not have to be a genius to work out that over the same period of time total electricity bills for households and businesses have significantly increased. At one point in the cycle we were told it was due to gold-plating. Now we are being told it is because of wholesale prices, which have gone up. At the same time, we are also being told by the Government that wholesale prices are going down, which is why solar feed-in tariffs should be cut. There is so much contradictory information here for us as policy-makers to sort through and for customers. Customers are no doubt paying more. Something has to give, does it not? Do you not think there needs to be a lot more transparency and openness in the market?

Mr AMPHLETT LEWIS: We would certainly support greater transparency in the market.

Mr HOWARD: As I have said earlier, when we spoke to customers as part of our focus group deliberative forums and have gone through the education about what makes up the bill, customers have been surprised at those components. At the same time, they have expressed, "Don't make it more complex than it is." It is a bit like being between a rock and a hard place. As I said earlier, we take guidance from what customers would like to see.

The Hon. JOHN GRAHAM: To press the point, it is confusing for the Committee and for the public. We have had a lot of people talking about downwards pressure, a lot of people saying that their part of the price puzzle is going down, but the public is finding that prices are going up.

The Hon. ADAM SEARLE: You cannot all be right.

The Hon. JOHN GRAHAM: You are saying to the Committee today that in your section of the market prices are falling dramatically.

Mr HOWARD: That is correct.

The Hon. JOHN GRAHAM: We should look elsewhere for who is driving up customer prices?

Mr SCHILLE: Absolutely.

Mr ARMSTRONG: That is right. Our component of the bill has gone down over the same period. There is a review of retail prices that the Independent Pricing and Regulatory Tribunal has—it is a draft report. You will find in that that our prices have gone down but overall prices for customers have gone up or remain stable. The difference is retail and wholesale.

The CHAIR: There is no doubt that people can smell a rat because it does not make sense that you can get nearly $100 to $150 off your bill by paying on the due date. We smell a rat and we are going to find it.

Mr ARMSTRONG: Transparency in the bill and understanding the components of the bill in respect of what the customer pays is certainly part and parcel of that.

The CHAIR: My next question is to Endeavour. On page 5 of your submission the third dot point states:

> … environmental costs mandated through instruments—

I note the word "mandated"—

> such as the Commonwealth Renewable Energy Target and the NSW Climate Change Fund.

Can you break down what those environmental costs are specifically that consumers are paying for and if it is relevant to both parties, I am happy to receive a contribution from both parties.

Mr HOWARD: In terms of Endeavour Energy's average residential bill—a five megawatt hours per annum customer is a typical residential customer for us—about 9 per cent of that bill is associated with what we call green schemes, or essentially the Climate Change Fund.

The CHAIR: Can you break the components of the bill down in those particular areas? Are customers paying around 15 per cent?

Mr HOWARD: In Endeavour Energy's case it is 9 per cent.

The CHAIR: What are people paying for in that 9 per cent?

Mr HOWARD: That 9 per cent is associated with the Climate Change Fund, which was introduced by the New South Wales Government many years ago. Every year the amount of money that we need to collect under the Climate Change Fund is advised to us by the Government. There are some rules associated with the Climate Change Fund and we apply those rules. In the case of the average residential customer, the five megawatt hour per annum customer, that has been 9 per cent.

The CHAIR: You are paying that full 9 per cent to the Climate Change Fund?

Mr HOWARD: We are collecting that as part of our network charge, in addition to our normal charges, and that has basically funded the Climate Chage Fund.

The CHAIR: You are paying that full 9 per cent to the Climate Change Fund?

Mr HOWARD: That is correct, on average.

The Hon. JOHN GRAHAM: My question is directed to Ausgrid. In October last year you advised that you were considering, as part of your regulatory proposal, introducing a safeguard tariff for low-income earners. Have you proceeded with that proposal? If so, can you tell the Committee a bit more about it?

Mr AMPHLETT LEWIS: We have proposed to introduce that tariff. As we move to more cost-reflective tariffs, which are not only mandated under the national electricity rules but also, as far as we are concerned, are key to ensuring that we do not invest in more assets in a network sense or a generation sense than we should, there are like to be some vulnerable customers who would be adversely affected, and our safeguard tariff is specifically designed to ensure that does not happen.

The Hon. JOHN GRAHAM: How would it work?

Mr AMPHLETT LEWIS: It is a much slower transition to the more cost-reflective tariffs.

The Hon. JOHN GRAHAM: So you are flagging potentially some bad news on the way for people who are struggling with their power bills as that change works its way through the system. This is one of the ways that you might use to ease that pressure?

Mr AMPHLETT LEWIS: No, not necessarily bad news.

The Hon. JOHN GRAHAM: It sounded like bad news.

Mr AMPHLETT LEWIS: We are making this transition during a period where our charges are coming down, which means that very few customers will be adversely affected, and only by a very small amount, but for those vulnerable customers even a small amount can be damaging. We want to make sure that we mitigate that for them and ensure that we are looking after their best interests as we transition to a more future-focused approach to collecting revenue.

The Hon. JOHN GRAHAM: Is Endeavour Energy considering something similar?

Mr SCHILLE: Likewise for Endeavour Energy, for all our new connections we also have a transition tariff and that will transition over 10 years. For those customers who want to be early adopters and manage their consumption, they can take the full demand tariff straight away.

The CHAIR: On page two of Endeavour Energy's submission it states:

> The consortium has identified five priorities that will shape the future direction of Endeavour Energy's business:

It then lists five dot points. Can you please update the Committee on what you mean by the last three dot points in particular:

> . investing to improve network resilience and customer outcomes
>
> . Over time, reducing customers' bills
>
> . supporting future growth in Western Sydney and across the network

Mr HOWARD: I might do those in reverse order. As I said in my opening statement, over the next 20 years more than 900,000 people will be moving to the Western Sydney area. We have got 20,000-plus new connections each year. We are effectively the growth centre of Sydney. Lots of rural area is being converted into residential subdivisions and our challenge is to keep up with that significant development—it is not just residential, it is also industrial lands, commercial customers as well as the new Western Sydney Airport. We see it as a real priority of our organisation to be able to respond to that growth, to the development industry and to local councils that are looking towards us to help support the growth in Western Sydney.

In terms of reducing customer bills, as I said in my opening statement, subject to the AER supporting our regulatory proposal for 2019 to 2024, under that process we would have had 10 years of declining electricity charges for the network component and we see that as the fundamental tenor of what we do. We want to continue that tenor over time in reducing customers' bills and taking the pressure off customers' bills. The third one is about investing to improve network resilience and customer outcomes. At the end of the day customers have said to us, "We do not want to pay for better reliability but, at the same time, we do not want a discount for poorer reliability."

Our challenge is to continue to maintain reliability, to improve those parts of our network where we do not meet licence conditions for reliability but because of the temperature profile, particularly in Western Sydney with 10 degrees Centigrade greater than Sydney's central business district, on those very hot days like we had earlier this year—47 degrees Centigrade at Penrith—when our customers turn a light switch on or the power supply for their air conditioning units they expect it to come on. Our challenge is to respond to those demands from our customers from a reliability and security point of view. We have a basket of challenges—reliability, affordability and keeping downward pressure on electricity prices but also meeting the grade for Western Sydney in particular.

The CHAIR: I dare say consumers want the Jetstar Airways or Tigerair Australia model for their electricity bills. They just want to go from point A to point B. They do not want the drinks, dips and biscuits. They want the bottom rate but they want to get there safely and for it to be affordable. Thank you for appearing before the Committee today. We may have some further questions for you. You will have 21 days to respond to any questions taken on notice.

(The witnesses withdrew)

TIM NELSON, Chief Economist, AGL, affirmed and examined

RICHARD WRIGHTSON, Executive General Manager, Wholesale Markets, AGL, affirmed and examined

ANTHONY CALLAN, Executive Manager Marketing, Delta Electricity, affirmed and examined

GREG EVERETT, Managing Director, Delta Electricity, affirmed and examined

The CHAIR: Would you like to make a brief opening statement?

Mr EVERETT: Thank you very much for the opportunity to appear today. Delta Electricity operates the Vales Point Power Station on the Central Coast, with a capacity of 1,320 megawatts. It was purchased from the New South Wales Government in December 2015. Our comments today come from the perspective of having been part of the original Electricity Commission of New South Wales, through to operating the largest capacity generation portfolio in the NEM as a State-owned corporation, and today operating under private ownership. The comments pertain mainly to terms A and F of the Committee's terms of reference. Delta has provided three documents. The purpose of this information is to identify that the significant influencing factor in retail prices remains network charges.

In 1996, network charges represented 38 per cent of costs; whereas in 2017 they represented 52.7 per cent, and that is for New South Wales. Generation, however, has dropped from 57 per cent of costs to 34½ per cent. It is not difficult to conclude from this 20-year perspective that competition has delivered better results for consumers in the wholesale electricity market then regulation has for network assets. The wholesale price increase from 2016 has attracted a lot of attention, but forward prices are moderating materially. It is Delta's view that policymakers and regulators should fix their attention on where future long-term increases are likely to come for consumers. Given the 20-year price perspective that Delta has provided and the current level of public discussion around building a future grid in the integrated system plan of the Australian Energy Market Operator [AMEO], this should be focusing attention back on network proposals.

There is currently a slew of proposals for network development, headed up by upgrades to the Snowy 2.0 project, the connection of renewable energy zones and South Australia's New South Wales interconnection. In each of these cases, the primary question needs to be: Who is the beneficiary? The market design is clear that a generator that wants a network upgrade for a new asset should pay for that connection itself. If the claim is the consumers will be the main beneficiary then the network expansion proposal is subject to the regulated investment test for transmission or distribution. This test is designed to protect consumer interests for very good reason; if the network proposal is approved and proceeds then consumers will pay for that investment, and they pay for it over a period of decades. If, in hindsight, the benefits anticipated do not eventuate then consumers still pay—that is, the network investments are ultimately at the risk of consumers.

In considering the future of energy supply in New South Wales, policymakers obviously need to give consideration to what the future of generation looks like. There is a widespread assumption that existing coal-fired assets will retire at the end of their 50-year depreciable lives. Delta's view is that New South Wales generators from Vales Point forward are of a much higher quality than those that preceded them, and life extension of some of these assets provide the lowest cost firming for renewables—far lower than building a new gas-fired plant, pumped hydro or battery storage. The specific reference we can make is Vales Point. Delta's estimate for a 20-year life extension is $520 million, which amortised over the production in this period could be as low as $3.50 per megawatt hour. These assets have already provided firming capacity, which has facilitated an increase in renewable penetration. Given the massive capacity replacement required if they were all to close and the generation capital expenditure that would ensue, serious consideration should be given to life extension of existing assets. Having said that, the expenditure is ultimately one for the asset owners who bear the risk of their decision, as opposed to the network investments.

From a New South Wales policy position, the issue that would best facilitate reliable generation is security over fuel supply. New South Wales is almost unique in the NEM in that generators do not control their fuel supplies and have relied on the State continuing to make available areas of coal resources for development as future fuel sources. With the termination of the Cobbora project and the limited approvals of new coal developments, availability of fuel looms as a serious long-term issue even within the lives of existing assets. It is Delta's view that the availability and price of coal will remain a critical issue for both electricity security and price, and warrants detailed consideration by this Committee.

Associate Professor NELSON: Thank you for the opportunity to address the Committee today. AGL is Australia's oldest operating energy company, having been established in 1837 to light the streets of Sydney. We are Sydney-based and employ more than 3,500 Australians across New South Wales and Australia. We supply gas and electricity to more than 3.6 million customers across Australia. Proudly Australian, with more than 180 years of experience, we believe we have responsibilities to provide sustainable, secure and affordable energy for our customers. One of our key objectives is to prosper in a carbon-constrained world. That is why we have committed to exiting our coal-fired generation by 2050, which is consistent with the New South Wales Government's policy of achieving net zero emissions by 2050. AGL is very cognisant of the concerns from our customers and from representations from the Government and the Opposition here today that energy prices have been a contributing factor to concerns over the cost of living for people across New South Wales.

An unpredicted rise in wholesale prices over the past few years, following the lack of notice given before closures of coal-fired power stations, rising gas and coal prices, increasing network charges and other green costs, have all contributed to this price increase. Alinta Energy closed the Northern and Playford power stations in South Australia and French-owned ENGIE closed the Hazelwood Power Station in Victoria with less than one year's notice. With such little notice of closure, there was no time for new generation to be built and for the market to be able to replace this capacity. Dramatic wholesale market impacts resulted, and these have impacted the New South Wales node of the National Electricity Market. This is one of the reasons that we supported the Finkel review recommendation requiring generators to provide at least three years forewarning before closure of a power station—in fact, we believe it could be longer. Earlier this month, the Victorian Government announced that it will require companies to provide five years notice, which will afford consumers with an extra protection in relation to energy security and provide communities with certainty about the future.

AGL is currently transforming its own generation business through our New South Wales generation plan, which features a strong focus on new investment in low-cost renewable generation thermed up with modern gas and energy storage technologies. One of the reasons investors in companies are rushing to build new renewable capacity is because of the material reduction in capital cost for new solar and wind technologies. Our new investment plan includes a number of new projects across the State, which will commence before the Liddell Power Station retires in 2022, after 51 years of service. As we have considered how to replace the energy and capacity provided by Liddell, our analysis demonstrated the most cost-effective way to do both was a mix of new technologies: new solar and wind plants, new gas power stations and an upgrade to the Bayswater coal-fired power station and potentially pumped hydro and battery storage. I would also note that AGL provided seven years notice of this closure.

As previously mentioned, we have had a few years of unstable price growth due to rising coal and gas prices and the exiting coal generation. I am pleased to report to the Committee that on 8 June AGL announced that prices for the next financial year for New South Wales customers will be going down, albeit very modestly. This is a welcome change from increases we have seen in recent years. We understand power prices have been high and that this has put pressure on many households and small-business budgets. These price increases are part of a downward trend that is emerging as more investment in new sources of supply comes into the market, particularly renewable energy. A record number of customers are seeking out better deals, and we welcome this clear sign of healthy competition in the retail market. Across Australia more than two million customer accounts have changed to a new deal with AGL since July last year, meaning many customers have already seen their bills come down.

For the coming year, while network costs and green schemes are either static or increasing, the decline in overall prices is mainly due to wholesale electricity price reductions driven by new investment in gas-fired and renewable energy projects. It is important to emphasise the price reductions we are now seeing. The Australian Energy Market Commission recently noted that there are 22 retail electricity businesses in New South Wales and that consumers who shop around can save around 21 per cent or $309 per annum on their electricity bills. The Australian Government's Energy Made Easy web site is a great way of comparing offers in the market. There are significant benefits available through a deregulated market. In AGL's view, deregulation of retail prices in 2014 has had a positive impact on competition in the New South Wales market.

The Independent Price and Regulatory Tribunal [IPART] review of the performance and competitiveness of the retail electricity market in New South Wales from 1 July 2016 to 30 June 2017 reinforced this view. In particular, the number of brands competing in the market has risen from 15 to 26, and the market share of smaller retailers has increased from 7 per cent to 13 per cent. The number of small customers on market offers has risen from 63 per cent to 77 per cent. These findings support the conclusion that competition has improved in the New South Wales electricity market, both for residential and small business customers.

I will just touch on some of the findings of this recent report. AGL has been leading in addressing many of these issues in recent years. As I mentioned previously, since July last year more than two million AGL customer accounts have switched to a better deal. We have written to all standing offer customers urging them to seek a better deal, and 89.2 per cent of all customers are on contracts and eligible for discounts and incentives. AGL is also delivering innovation to create new products like AGL Essentials—a no-frills, low-cost, digital-only product—to make it easier for customers to manage energy costs.

Prices will be lower if policy certainty encourages additional investment in new supply. AGL supports the policy certainty that would come with implementation of the National Energy Guarantee. With careful consideration given to the detailed design, we believe the guarantee can contribute to a more sustainable energy market for the long-term benefit of customers in Australia. For the benefit of customers, we believe that the design of any mechanism must principally address costs and competition. We understand the concerns expressed in the context of debate on the NEG about vertical integration. In our view this concern is misplaced. Vertical integration is not an anticompetitive aspect of the market. It is a tool used by retailers to reduce their risk and increase the available generation. Far from contributing to higher prices, significant analysis demonstrates that prices are lower than they would otherwise be, due to the ability of retailers to directly invest in generation. In terms of the reliability obligation in the NEG, it is critical that the incentive to invest is not inadvertently reduced by suboptimal design.

The Hon. ADAM SEARLE: Vales Point power station was sold for about $1 million. What is its current valuation?

Mr EVERETT: Its last value was around $720 million.

The Hon. ADAM SEARLE: It was a pretty good buy for you guys.

Mr EVERETT: For those that bought it, yes.

The Hon. ADAM SEARLE: As part of that arrangement, did the State have to guarantee that it would purchase a certain amount of the electricity generated?

Mr EVERETT: No.

The Hon. ADAM SEARLE: So you just sell it at large, to all customers.

Mr EVERETT: Yes.

The Hon. JOHN GRAHAM: How much did you make last year, selling electricity into the market?

Mr EVERETT: Last year it was in the order of $90 million profit.

The Hon. JOHN GRAHAM: What about the year before that?

Mr EVERETT: I will take that on notice.

The Hon. JOHN GRAHAM: Could it have been in the order of $380 million?

Mr EVERETT: No.

The Hon. JOHN GRAHAM: That was one of the reports, but please take that on notice.

Mr EVERETT: It sounds good.

The Hon. JOHN GRAHAM: One million dollars is a pretty remarkable price to get a power station for. You could not buy a house in Sydney for $1 million. The owners of this power station picked up an entire electricity generating asset for that amount of money. How do you explain that?

Mr EVERETT: In fact, $1 million was just the headline price. They picked up over $30 million worth of employee entitlement liabilities. There is also a closure—decommissioning—liability of about $8 million on top of that. Then they have to provide the working capital for the business, which was $20 million to $30 million. So, $1 million sounds great but—

The Hon. JOHN GRAHAM: What you have described there is in the order of $60 million extra costs that were not included in the headline figure. So that makes $1 million plus $60 million, which is now revalued in excess of $700 million.

Mr EVERETT: Last year; that is right.

The Hon. JOHN GRAHAM: That is a pretty big difference isn't it? The New South Wales public got a pretty poor deal from this sale, didn't they?

Mr EVERETT: I would not say that. I would say that the New South Wales Government had a number of reasons for selling. Firstly, Vales Point was the last of the assets, so it was a completion of a broader policy. Secondly, the prices that were prevailing in the wholesale market at the time these assets were sold, we were talking about thirties and forties—

The Hon. JOHN GRAHAM: But you have already cleared that sale price. You have already cleared all the prices you have factored in, in the first year—$90 million coming in through the front door.

Mr EVERETT: I did not disagree that it was a good buy. I think your subsequent question was about whether New South Wales—

The Hon. JOHN GRAHAM: If it is a good buy for you it is a pretty bad sale for the New South Wales public. That is the position I put to you.

Mr EVERETT: It is best described that the view of the New South Wales Government on forward prices was those that were obtaining at the time of sale. Obviously, that has not been correct. Prices have been a lot higher.

The Hon. JOHN GRAHAM: It was not only incorrect; it turned out to be hopelessly wrong based on the figures you have just put in front of the committee.

Mr EVERETT: I would say that the whole market did not predict that.

The Hon. JOHN GRAHAM: How much money has been taken out of this company in a share buy-back for the owners?

Mr EVERETT: Can I take that one on notice, please.

The Hon. JOHN GRAHAM: Would it be in the order of about $40 million?

Mr EVERETT: I will take it on notice.

The Hon. JOHN GRAHAM: I make the point that that is money that has come out of this company already—value realised—above the $1 million. Is one of the reasons you are able to dramatically revalue this project that the Government's view was that the closure date for this asset would be 2021?

Mr EVERETT: My recollection is that the Government had revised its life to 2022. That was the extent of the coal contracts at the time.

The Hon. JOHN GRAHAM: So in 2021 or 2022. Will you close this asset in 2022?

Mr EVERETT: No.

The Hon. BEN FRANKLIN: They have pitched for a 20-year extension.

The Hon. JOHN GRAHAM: So you will not close it in 2022. You will actually operate it dramatically past that date. That is one of the reasons you have picked this asset up for a very small amount but you will make a significant amount of money over that time.

The Hon. BEN FRANKLIN: If you invest a significant amount of money, to do so.

Mr EVERETT: Exactly.

The Hon. BEN FRANKLIN: I am just saying it has to be fair.

The Hon. JOHN GRAHAM: Yes, although already you have made a significant amount of money out of this without that investment.

Mr EVERETT: Yes, although I would make the point that the existing owners continue the capital contributions throughout the life of this plant.

The Hon. ADAM SEARLE: Is the electricity being generated by Vales Point being sold for a higher price today that it was when it was sold by the State Government?

Mr EVERETT: Yes.

The Hon. ADAM SEARLE: What is the price difference?

Mr EVERETT: The price under government ownership was reflecting the market at around $40 per megawatt hour and average price now would be about $60 per megawatt hour across the whole period of time.

The Hon. ADAM SEARLE: That is a 50 per cent increase in the value of the product being sold.

Mr EVERETT: Reflecting where the market has gone in that period of time.

The Hon. ADAM SEARLE: Sure. But when you look at the profit the station was making when it was sold compared to now, again it is a lot more valuable today than when it was sold by the State Government. When you adjust for those parameters like closure date, which may be moved, it looks to us like a very poor deal for the New South Wales taxpayers, who owned the asset. In terms of what it got for the sale, even allowing for the extra liabilities that were not in the headline price, they have lost out on the revenue stream and increase in the capital value that you have described. It is a very poor transaction.

Mr EVERETT: I am not here to be an apologist for the New South Wales Government, but I will make the point that they had a view on the value of Vales Point Power Station, which reflected the market prices at the time. And no-one was forecasting the prices that we have seen over the last two years.

The CHAIR: Was the purchase of the station contested by any other competitors?

Mr EVERETT: Yes, it was.

The CHAIR: Did they give up the contestation of the $1 million?

Mr EVERETT: Again, that is an issue for the New South Wales Government to comment on who the bidders were and what they offered.

The CHAIR: Do you know how many competitors there were?

Mr EVERETT: Again, I am bound by confidentiality obligations here, so it is better to come from the New South Wales Government.

The Hon. JOHN GRAHAM: At the time the New South Wales public was told that $1 million was above the retention value for this. Looking back now, that was clearly wrong.

Mr EVERETT: No, I do not think it was necessarily wrong.

The Hon. JOHN GRAHAM: You told us that you have made $90 million selling electricity in the last year. Surely that was wrong.

Mr EVERETT: No, it just means that the market has moved for a set of reasons that could not have been known at the time when the asset was sold.

The Hon. ADAM SEARLE: The issue of privatisation of the generators was hotly contested both publicly and politically. It was not as if everybody in New South Wales thought this was a fabulous idea. Now, the passage of time has shown that taxpayers would have been better off holding onto this asset in terms of its financial value. That is the case, is it not?

Mr EVERETT: We can argue that from this point in time, looking backwards. But at the point in time when the assets were sold—

The Hon. ADAM SEARLE: They were sold for an ideological reason. The Government wanted to get out of that line of business.

The Hon. JOHN GRAHAM: It was argued at the time, and the public is now tens of millions or hundreds of millions of dollars worse off.

Mr EVERETT: I probably should add the perspective that even those who purchased assets at the time subsequently made decisions about those assets that were similar to the New South Wales Government. For example, EnergyAustralia purchased Wallerawang and Mount Piper; it subsequently closed Wallerawang. So I think the view of the New South Wales Government at the time was not necessarily different to those of anybody else looking at the forward price of electricity or the value of the assets.

The Hon. ADAM SEARLE: It means the New South Wales Government might have got it wrong.

The Hon. BEN FRANKLIN: No, it means the New South Wales Government did not have a crystal ball, Mr Searle.

The Hon. ADAM SEARLE: You have had your question time, Mr Franklin.

The Hon. BEN FRANKLIN: I have not had equal time for the entire day, Mr Searle. If you want to go down that line, I am happy to do so.

The CHAIR: Order!

The Hon. ADAM SEARLE: AGL is a gentailer: it owns generation assets as well as a retail book. How much of the electricity that AGL sells to retailers does it sell to itself? What is the percentage by kilowatt hour?

Mr WRIGHTSON: If you look at our total book, our gigawatt hours produced roughly equals the gigawatt hours consumed by our customers. There is always some mismatch, but the art of it is the different States. For example, we have a retail book in Queensland. We have next to no generation up in Queensland, so we are a buyer of contracts and markets to support that book. In New South Wales, we are a net seller of volume into New South Wales markets. In New South Wales we produce more than we sell to our customers and that usually gets sold on to other players in the market. We have an obligation through the acquisition process to provide liquidity to the New South Wales market, which we have fulfilled and will continue to fulfil. Victoria—again, we have got more generation than we require so we are a net seller into that market to other participants. South Australia—we are not going to have enough generation capacity in South Australia to meet our customer requirements, so we are a net buyer on that marketplace. So it is hit and miss, but the average across the whole portfolio is volume produced roughly equals the volume sold.

The Hon. ADAM SEARLE: In New South Wales, what is the split between generation and sale and consumption? If you do not know, I am happy to take it on notice.

Mr WRIGHTSON: I can take it on notice. I do not know the split off the top of my head.

The Hon. ADAM SEARLE: Obviously, we are very interested to know how that is broken down.

Mr WRIGHTSON: To help in that without giving the percentages, when we did the acquisition that was a reason for the 500 megawatts of liquidity volume, which represented roughly what was remaining left to be sold beyond our natural hedge to our customers; so about 500 megawatts of the total portfolio.

The Hon. JOHN GRAHAM: The distribution companies have given evidence before you have had the opportunity to present in front of the committee. They have put a compelling case that they are driving their prices down; it is not their fault if, at the other end, consumers' power bills are going up. They have pointed the finger elsewhere. What do you have to say about your piece in that puzzle?

Mr WRIGHTSON: In terms of the wholesale prices or retail?

The Hon. ADAM SEARLE: People's power prices are going up. These two companies have said they are not to blame.

The Hon. BEN FRANKLIN: More than that, they have said that network prices are going down, so therefore why have costs not come down? In fact, why have they gone up?

Mr WRIGHTSON: I think everyone recognises the increase in wholesale prices we have seen over the past year that are beginning to moderate and have come down significantly this year. That was driven by very short notice of a closure of a major power station. That is why we are a very strong supporter of the Finkel review giving adequate notice for the closure of power stations, because people cannot reset their energy portfolios with such short notice.

The Hon. ADAM SEARLE: Across the whole of your portfolio, you are essentially in balance; you are generating enough to meet all of your obligations to your customers. So the unexpected retirement of that power station did not affect your generation assets. You mentioned wholesale prices going up: that means you, as a generator, have marked up your prices because you can capitalise on the general uncertainty—or the perceived general uncertainty—about supply.

Mr WRIGHTSON: We price to the market, so we price along with the market. We have got a very deep liquid market. All our pricings are related to that wholesale price, as you can see on the Australian Stock Exchange when we mirror that. We also mirror—and I make this point from a competition point of view: we look very closely at those wholesale prices when we price to our retail group. AGL, being a large vertical and integrated player, wants to price at market to allow competition. So, yes, on the wholesale side, prices have risen and they have begun to decline. As we see further investment, we will see further declines in prices as we move forward.

The Hon. JOHN GRAHAM: I want to come to that competition point. In the AGL submission, you put that case that these price changes reflected the change in cost of supply and did not reflect price-gouging or collusion. You go on to say:

> The ACCC report reinforced this view.

That is not my reading of what the Australian Competition and Consumer Commission [ACCC] has found. In fact, this is what the ACCC went on to say:

> We have found there is insufficient competition in the generation and retail markets, which both raises prices and increases barriers to entry.

What do you say about the level of competition in the markets in which you operate?

Mr WRIGHTSON: I think we covered it in the opening statement.

Associate Professor NELSON: Yes, I think we covered it in the opening statement. But I think the ACCC report did acknowledge the impact of rising coal and gas prices as inputs into the power station economics. At a very high level, though, yes, the price reductions we have seen announced by entities like AGL are very modest and we, as a sector, have got a lot more to do. But we are doing that. As an entity that was advocating for advanced notice of closure, if that notice had been provided by some of the other participants—and I am not being critical of them as entities—

The Hon. JOHN GRAHAM: I asked you, though, about the ACCC view. There is plenty of complexity in this issue and always someone else to point to. But the ACCC has said there is insufficient competition in the generation and retail markets. Do you agree or disagree with that position?

Associate Professor NELSON: We contend that there is very significant competition in both the retail and competition markets.

The Hon. JOHN GRAHAM: So you disagree with the ACCC's view? Is that a fair characterisation?

Associate Professor NELSON: I think that there is always elements of agreement and disagreement in any very complicated area of public policy, like this is. I keep coming back to, though, there are several gigawatts of new investment coming into the market as we speak, both being constructed and at financial close. What is very interesting to me is that most of that investment is coming from entities other than what you would think of as traditional entities like AGL. So it is things like the Powering Australia Renewables Fund and other types of financial structures that are coming into the market to innovate.

The Hon. JOHN GRAHAM: I accept that there is plenty going on. But the ACCC is essentially pointing the finger at business such as yours in the generation and retail sector and saying that there is not enough competition. Do you disagree with that view?

Associate Professor NELSON: We contend that there is significant competition in both the retail and wholesale markets.

The Hon. ADAM SEARLE: The three so-called gentailers, one of which is your firm, have 90 per cent of the retail market in this State and own about 70 per cent of the generation assets. That is not a very competitive split. There might be a number of players but not a lot of real competition, which is reflected by the fact that despite not being affected, your generators marked up their price because they could, because there was perceived uncertainty in the market. That would not have been able to happen if there had been a lot more competition.

Associate Professor NELSON: I think that statement, though, does not take into account the rising input costs that have affected all generators.

The Hon. ADAM SEARLE: What are those rising input costs then that you say have legitimately increased the wholesalers' costs?

Mr WRIGHTSON: Our gas price goes into our gas-fired power stations prior to those closures, roughly about $4 a gigajoule. Having $10 a gigajoule last year, hopefully coming down a little bit this year, seeing sub $8 a gigajoule. If you actually look at the bidding of our gas assets, you have gone from a short run marginal cost on those at about $35, $40 a megawatt hour to $80 to $90 a megawatt hour. On the coal assets, yes, we have an existing contract with the Wilpinjong coalmine. That price has actually been increasing quite substantially based on escalation of their coal costs and expanding of that mine. But, in light of the Hazelwood closure, AGL has been trying to source additional coal.

Most coal that we acquire now is linked to the Newcastle spot price. The spot price of coal has risen dramatically. That is driving up our prices at Macquarie and I suspect it is also driving up the prices of other power stations also linked to Newcastle spot prices. For example at Delta and probably also at Eraring Power Station with Origin. With the closure of Hazelwood in particular but also Northern, it can put a huge amount of pressure on those marginal power stations, particularly on the gas stations that do set the price a lot of the time.

I would say AGL is not a major price setter when it comes to gas. We probably are in South Australia, but not in Victoria or in New South Wales. I would suspect their gas costs have gone up similarly and that is where we have been seeing prices. We are seeing that ease though, as people sought out their portfolios for fuel after such short notice of closure. That is leading to prices coming down. We are also seeing investment leading to prices coming down. We have made very strong statements about the thing that will keep prices coming down is policy certainty. I keep reiterating, advance notice of closure so others can invest without that representing a barrier to entry.

The CHAIR: Policy certainty or infrastructure certainty. We come to the perspective of Liddell closing and that perception makes a very volatile market which has an impact on wholesale prices, which filters down to every residential person that is paying a power bill. Would that be correct?

Mr WRIGHTSON: I made the comment on that that the reason we gave notice would drive certain investment. We invested in Silverton, Coopers Gap in Queensland after that. We have invested in 100 megawatts in the Bayswater upgrade. Origin announced 250 megawatts at Shoalhaven. We have since announced another 250 megawatts. I imagine a lot of the renewables investment will be relying on that certainty. Definitely discussions about the Liddell closure is adding to uncertainty and adding to the cost of investing in new assets. That will probably come anyway, but the costs will go up because uncertainty means you need a high rate of return.

The Hon. ADAM SEARLE: But Mr Wrightson, your company gave seven years' notice of the closure of Liddell.

Mr WRIGHTSON: Yes.

The Hon. ADAM SEARLE: That is not a bolt from the blue.

Mr WRIGHTSON: I would not say that closure announcement is creating uncertainty. I think the current discussions are probably what is creating the uncertainty around that asset.

The Hon. ADAM SEARLE: You mean the decision to try to prolong the life beyond 2022?

Mr WRIGHTSON: Yes.

The Hon. BEN FRANKLIN: Picking up on that, people have said that your closure of the Liddell Power Station is anti-competitive and that keeping it open would keep prices lower. How do you respond to that?

Mr WRIGHTSON: I think the reverse is true. If you actually look at the economics of keeping Liddell open, it no longer has its cheap coal, coupled with the capital costs, I see we need a price well in excess of what we are currently seeing in the forward markets. I think that signal of keeping that price open will stop others investing in our market, will act as a barrier to entry. Unfortunately, as the reliability of that asset declines from where it is now, which it is one of the least reliable power stations in New South Wales, having that power station sat there randomly failing throughout the year, forcing extra costs on customers, will actually have completely the opposite effect.

The Hon. ADAM SEARLE: But the same would be true of Bayswater over time.

Mr WRIGHTSON: That is true of every power station over time. As they get to end of life, they get less reliable and they need to be replaced and are more expensive to run. They need reinvestment. You get to the point when you look at the cost of reinvesting versus the price of building something new, and you prefer to build something new because that is a cheaper option.

The CHAIR: That is not so with Vales Point, it was quite the contrary. It was cheaper to pour $60 million into that power station.

Mr WRIGHTSON: And it was cheaper at Bayswater as well, which we did the upgrade for 100 megawatts at Bayswater as well. For certain plants, it is true. For other plants that have had such a long life, that have not had a good maintenance regime over their lives, they get to end of life.

The CHAIR: It is a horses for courses thing.

Mr WRIGHTSON: It is horses for courses. I am not a power station engineer, so I will not get into engineering, but if you operate any power station—and I have been around a number of them—it depends on the power station you are operating on.

The Hon. ADAM SEARLE: That is the point, any machine for a while you can re-engineer it, re-tool it, invest, repair, but at some point, whatever that point is, it has to be replaced. The issue is, what is the cost of the new replacement?

Mr WRIGHTSON: Versus keeping that car on the road. Imagine your car being run 24/7 for 50 years. No matter how much love it gets, it eventually comes off the road.

The Hon. BEN FRANKLIN: A nice analogy. Can we get to the Liddell replacement pipeline, particularly stages two and three? Can you provide some assurances about what the actual plan is to replace the power that will be lost?

The Hon. ADAM SEARLE: The 1,000 megawatts assessed by the Australian Energy Market Operator [AEMO].

Mr WRIGHTSON: Which has now been reduced to 850 by AEMO, and I am sure when they do the review it will come down again. First of all, there are two components of it, there is dispatchable power and there is energy coming in. A lot of the energy will be pushed through renewables. We have discussed about competition and the Australian Competition and Consumer Commission's concern about competition in our market place. By giving advanced notice, we were expecting the market to replace Liddell, not necessarily AGL. AGL will do its share.

Bear in mind, when we acquired Liddell we did not actually want to acquire Liddell. We worked very closely with the New South Wales Government to try and get it removed from the sale process. We do not need it for our portfolio. I have already said it is surplus to our requirements. We have already announced the 150 megawatt and we have already announced renewables projects to start replacing the energy. We will hopefully see others invest. We saw the Origin announcement for Shoalhaven, that will reduce that requirement. It is a market and it is open for the market to build, but we have put a plan in place in case the market does not build. We will not progress that plan further till later on in the piece, until we see what others have responded to it.

The Hon. BEN FRANKLIN: You mean closer to the closure date?

Mr WRIGHTSON: Closer to the closure date. I see no reason, given that the announcements are under the National Energy Guarantee [NEG] and the push for reliability, why more capacity does not come into the market. I would just pass one comment about the gap. The gap that has been forecast by AEMO is actually a different gap than the reliability standards set by the AEMC and the market rules. I am not saying AEMO's gap is wrong; all I am saying is, from a market perspective, it would be nice if we had consistency to actually what the requirements of the market were, which we do not have right now.

The Hon. TAYLOR MARTIN: It is said that gas sets the cost of electricity. Mr Wrightson, you almost alluded to that earlier in a similar statement. Would you be able to give the Committee more of an insight into that idea?

Mr WRIGHTSON: Most power stations set price at some point of time depending on demand levels. With demand fluctuation you need more generators and how they stack it up is they go cheaper generator first, keep on adding generators until you get to the last power station you need to supply demand. That sets price. When we look at the portfolio, and my team do all the bidding for AGL, that is the similar approach to how we look to how we run our plant. We bid it in based on its costs and then market dynamics at the various points in time. Gas plant is probably the plant that is the highest short-run marginal cost before you start using emergency diesel peakers, where it sort of jumps to $300 a megawatt hour.

If your gases are limited in supply or the gas is expensive, you start hoarding that gas or rationing that gas through your portfolio. That puts the cost of where you put it into the marketplace. Once AEMO has been through all the coal stations, all the renewable stations and it still needs more, it will dispatch gas. Gas is getting dispatched definitely during the peaks of the day and now sometimes during the middle of the day as it goes through. I would also say a lot of the coal plants are playing a marginal role as well, particularly in New South Wales, because New South Wales' plant is buying market-based coal. If you go to somewhere like Loy Yang in Victoria, we have mine-mouthed coal that we own the mine, very, very low marginal cost. That basically is free coal. We paid for the coal when we bought the asset. It is very limited marginal cost. We bid the Loy Yangs to run, but coal in New South Wales is marginal. I think you see that across most of the portfolios, where gas is just that bit more expensive and it is the next stage to come through.

The Hon. TAYLOR MARTIN: Going back to a point made earlier about the sale price of Vales Point, it is fair to say that there was a significant risk attached to Vales Point which was reflected in the sale price to reflect the substantial liabilities which came with the purchase of Vales Point. Would you be able to elaborate on the risks that are borne by any buyer of any ageing generation asset? A profit was made. That was by no means a certainty at that point in time.

Mr CALLAN: At the time of the sale electricity prices selling into the market were, as Mr Everett said, in the high $30 per megawatt hour to $40 per megawatt hour. The business was loss making at that time. Our projections of the forward market and prices at that time indicated that prices could go up or could go down; no-one anticipated the substantial increase in prices. There is a significant risk for any owner—particularly of a merchant generator like Delta—where we do not have a retail book to match. Delta does have a retail licence, primarily to support one large industrial customer. The risk associated with owning a generator like Vales Point is that prices may fluctuate up or down and it may be a profitable business or an unprofitable business. The market is competitive. We believe it is highly competitive, so there were no guarantees whatsoever at that time that that business was going to be a profitable business going forward.

The Hon. TAYLOR MARTIN: Is it fair to say at that point in time we did not know that Hazelwood power station was going to close?

Mr CALLAN: We did not.

The Hon. TAYLOR MARTIN: If Hazelwood did not close we would be in a different landscape than we are today, would we not?

Mr CALLAN: I believe we would. Hazelwood, being a base load, coal-fired generator with a fairly low, very low marginal cost, pumped out an awful lot of energy into Victoria. The replacement cost of that energy is a higher cost.

The Hon. TAYLOR MARTIN: And New South Wales exports out of Victoria.

Mr CALLAN: And New South Wales is connected to the Victorian market. We saw through that interconnection that those higher prices reflected across most States.

The Hon. TAYLOR MARTIN: If I can jump back to gas for the moment, would you be able to give the Committee an insight into what AGL's view on the future of gas in New South Wales is?

The CHAIR: Particularly in terms of a gas reservation policy?

Mr WRIGHTSON: In terms of gas reservation, there is not that much domestic gas being produced in New South Wales for the New South Wales government to reserve, and that is one of the fundamental problems. New South Wales is going to be heavily reliant on gas from other States. If you look forward into the 2020s and you see the latest projections of decline of gas from Bass Strait, physically there is not enough gas available for New South Wales, Victoria and South Australia. It will get particularly tight during the winter periods.

I do not think the pipeline is capable of meeting winter demand in the southern States, given the decline in gas. That is one of the reasons you are seeing a push for import facilities, both from ourselves, the Andrew Forrest project, and I believe this morning ExxonMobil also said they are looking at building one as well. It is basically if you move into the 2020s you look at the gas reserves in the southern States, there is not physically enough gas in those southern States to meet those States' requirements unless demand changes significantly for the usage of gas, and I do not think anyone particularly wants that.

The CHAIR: The capability of those pipelines is size?

Mr WRIGHTSON: It is size, just compression bringing gas reserves. It is also a cost factor as well. The gas in Queensland is very much priced at international netback pricing. What we saw over the last year, or AGL saw, was everyone saying it is international link, but the international link appeared to be a flaw, not a cap on prices. Producers were happy to take the international price if domestic prices looked like they were lowering, but if domestic prices were higher, they preferred that one as well. I think by building import facilities all the markets will then be linked to international netback pricing and that will drive through all the States plus various transportation costs in different States from Victoria and New South Wales, if it has an import facility.

The Hon. TAYLOR MARTIN: Some entities are searching for gas off the New South Wales coastline. Would AGL be able to give the Committee an insight on their view on that?

Mr WRIGHTSON: AGL is not an upstream producer. AGL is very much a buyer than a seller, so we have to make margin through. Where AGL is pushing the gas market is very strongly focused on driving competition. We are very pleased that joint marketing did it in Bass Strait because we think that will help competition. We have helped develop some of the fields by doing underwriting contracts. The import jetty that we built was all about driving competition. We would also welcome other import jetties to be built as well. It is driving competition. To the extent there is gas offshore and that is brought in, we would look to try and contract that if we can do that at a competitive price.

Gas developed now is not cheap. Gas historically has been subsidised by oil. If you look at Longford, basically gas was a waste product and that is how we ended up in a gas market in the southern States because the gas was a waste product from bringing out oil. Now, you are exploring for gas in its own right and I have to cover the whole of the cost. The halcyon days of $3 a gigajoule to $4 a gigajoule of gas have gone for the southern States. It is just making sure they do not go too far, which is what happened last year.

The Hon. TAYLOR MARTIN: Do you believe it is being searched for offshore rather than in, say, western parts of the State because of the different regulations between the Commonwealth and New South Wales?

Mr WRIGHTSON: I could not comment on that; it is not my area of expertise.

The Hon. JOHN GRAHAM: Picking up from where the Hon. Taylor Martin's questioning was going on the Vales Point power station, accepting that you might operate this for another 20 years, what is your current market estimate for the close down liabilities for this site?

Mr EVERETT: The estimate to decommission the power station is about $8 million.

The Hon. JOHN GRAHAM: You have put a case that no-one could have foreseen what was going on with power prices and that is one of the factors why this asset was sold for $1 million and currently valued at $720 million or $730 million. The second factor we have talked about is that closure date. The technical closure date for the power station was 2029. You may choose to operate it far longer. It was reduced to 2021. What was the write down associated with that change in the closure date? Are you aware of that figure?

Mr CALLAN: No, I am not aware of that figure. The life of Vales Point nominally is 50 years, which was 2028-29, but that depends very much on whether we maintain the plant accordingly to last for that sort of period of time. The aspects of the sale relating to the date of 2022 as being its life were very much linked to the fact that we had coal contracts in place at that time, so there was a good matching, you had your input, you had your fuel sourced, and of course you could sell electricity off the back of that.

The Hon. JOHN GRAHAM: The power station had to keep running but had to find the fuel if it wanted to go beyond 2022?

Mr CALLAN: That is definitely the case.

The Hon. JOHN GRAHAM: As many other power stations might?

Mr CALLAN: Correct.

The Hon. JOHN GRAHAM: But you cannot tell us how much that decision to bring this closure forward might have cost? The decision by the New South Wales Government to say it is going to shut up shop early and sell on that basis is reported to have cost $371 million. Do you think that is accurate?

Mr CALLAN: Personally I was not privy or particularly aware of the fact that that closure date was brought back. In relation to that figure, we will have to take that on notice.

The Hon. JOHN GRAHAM: Because if that is true, accepting what you say that power prices are difficult to project, that might explain half of the $730 million you are talking about, but more than half might come from a unilateral decision of the New South Wales Government to say it is going to close up this power station early and sell on that basis. That is possible, is it not?

The Hon. BEN FRANKLIN: Mr Callan is taking the question on notice.

Mr EVERETT: We will take that on notice to make sure that we give you the absolute accurate figures.

The Hon. JOHN GRAHAM: I appreciate that.

Mr EVERETT: Vales Point was valued around $370 million but that was a number of years beforehand. As the market was falling, Vales Point was depreciated, its value was impaired on an annual basis year by year, so it was not just a one-year reduction. As Mr Callan said, at the point of sale Vales Point had not been profitable in the year before and so notionally looking forward if the prices were not going to improve that brought it down towards zero value.

The Hon. JOHN GRAHAM: Well, yes. Although what has been reported is that that figure was the write down by the Government. You may be correct in your observation that this was the write down value. That is the view that is being communicated.

Mr EVERETT: We will provide the actual figures, but my view is that that was spread over a period of time, not just one.

The Hon. JOHN GRAHAM: But it was not bought by the Government; is that your view?

Mr EVERETT: We will take that on notice. We will come back to you with a full account.

The Hon. BEN FRANKLIN: Feel free to reply in any context that you wish during that phase of answers to questions.

The CHAIR: There are no further questions; time is up. Gentlemen, I thank you for your contribution today. Given some of the comments—and I note you have taken some questions on notice—you will have 21 days in which to respond. The secretariat will assist you in getting those answers back to the Committee. I bid you good day. The Committee will adjourn for lunch.

(The witnesses withdrew)

(Luncheon adjournment)

BRUCE MOUNTAIN, Director, Victoria Energy Policy Centre, before the Committee via teleconference, affirmed and examined

The CHAIR: Would you have an opening statement you would like to read?

Associate Professor MOUNTAIN: I do not, thank you. I am happy to leave the time to answering your questions.

The Hon. ADAM SEARLE: You authored a report in August 2016 with Carbon and Energy Markets [CME] Consultancy entitled "Australia's retail electricity markets: who is serving whom?", which I think was prepared for GetUp! Your essential thesis was that the big three retailers, after deregulation of the retail energy market particularly here in New South Wales, were charging two to three times more to sell electricity in New South Wales than, for example, the regulated retailer in the Australian Capital Territory was charging and essentially that deregulation was being gamed by the big retailers. Have you made any further inquiry into this area since the publication of that report? What conclusions have you drawn?

Associate Professor MOUNTAIN: Yes, I have been working extensively in this area since that time. I have undertaken two large pieces of work for the energy commission in Victoria and also for John Thwaites, who led a price review. I stand by my findings in that 2016 report, although I think I would not identify the big retailers per se as the problem. I think the issue is the nature of the industry and the implications of that for retailers. I think the largest retailers gained the largest profits from it. But that actually comes about as a consequence of a competitive retail market and the way the market operates. Perhaps I will stop there. Perhaps if you have further questions on that, I would be happy to work in that in more detail. It is a very, very complex area.

The Hon. ADAM SEARLE: Certainly, and I will certainly follow that up. So it is a fault of the way in which the market is designed rather than the fault of any particular player. I think that is what you are saying.

Associate Professor MOUNTAIN: Yes. This whole notion of allowing retail markets for the very smallest customers is still a pretty unusual idea by international standards. Most States in the United States do not have retail markets. Of the 14 that do, 13 have retail markets but there is extensive government involvement in the oversight of that industry. The same issues that we have in our retail markets in Australia we see in other retail markets in the world, although perhaps not to the same degree. The underlying issue is electricity sold at a retail level is a very complex contract. It has a standing charge, a daily charge, and a time of use, solar is now commonplace and there are off-peak tariffs, and so on. That complexity leads to what is known in the field I work in as very high search costs. It is very hard for customers to find a suitable deal for themselves. As a consequence, they make errors.

That high search cost translates into a very large marketing cost for retailers intent on entering the industry and winning customers. It also provides pathway incentives for them to disguise the true nature of the product that they are selling. This then affects the profitability and the entry of new entrant retailers and the rate at which they can attract customers and the nature of the product they sell. But it also means that those retailers that have customers, either because they have grown through acquisition or they bought the customers bagged when it was actually sold, end up owning the custom. They are able to take advantage of the inertia in the markets borne of the high search costs. That translates into much higher profitability for the retailers that have customers, which are the large retailers, and a much tougher life for the smaller retailers. It is an industry that on average does not work in favour of the small customer or the new entrant retailer, but it does work in favour of the incumbent large retailers.

The Hon. ADAM SEARLE: I know the Australian Competition and Consumer Commission is doing some work on the retail market. In your work have you gained a sense of what the profit margin is for the retail companies, particularly the big retail companies?

Associate Professor MOUNTAIN: I did look at this at length in the work we did for John Thwaites in Victoria, which was published in August last year. We had worked out that for the median residential customer in the market the retailer's charge for service was the largest element of the bill, the second largest was the network, then the electricity production costs, the metring, the taxes, and the green charges. Of that largest element—the retailers' charge—the breakdown between the costs they incur and the profit they gain will vary drastically.

If you are seeking to acquire a customer, those profits will be much lower because the price the retailer needs to offer will be much lower. When most regulators look at the very large retailers they assess the ongoing costs of business at about $100 per customer per year. We assessed the retailer's charge to be $420. Therefore, the gap between the two is an estimate of the profit margin of the large retailers which have the customers and which are not making discounted offers or incurring expenditure to win new customers. In short, the retail business for the incumbent large retailers is very profitable.

The Hon. ADAM SEARLE: The big three companies in New South Wales have 90 per cent of the retail market. What percentage of the bill would the retail component be? Can you provide even a rough estimate of the gap between their costs and their profit?

Associate Professor MOUNTAIN: I should stress that it varies across the population of users. Those who are able to find an offer that is suitable for them and who seek the cheapest can pay a lot less. Having said that, a large swathe of customers are sold by the large retailers. Of those, the margins and the prices they are getting are pretty homogeneous. Bringing that together, my estimate would be that the median retailer charge for services—that is, the total element of the bill rather than the production or distribution cost—would be around 25 per cent to 30 per cent of the bill. My estimate of the costs that they incur in servicing those customers on an ongoing basis would be in the range of 5 per cent to 10 per cent of the bill. The gap between that 5 per cent to 10 per cent and the 25 per cent to 30 per cent constitutes a margin imposed by the large retailers on the sale of electricity to small customers.

The Hon. BEN FRANKLIN: That makes absolute sense when you look at figure 6 on page 22. There is an extraordinary difference between the average of the big three market offers and the average of the best offers. We are talking about a fivefold quantum. The excess being pulled out by these retailers is clear in that graph alone.

Associate Professor MOUNTAIN: Yes. The cheapest retailers—that is, the ones seeking to obtained a place in the market——must discount very heavily to attract customers. They must loss lead and offer such deeply discounted products because of the high search costs. Because customers are not able to engage effectively and because they incur very high search costs, to win them over you have to work triply hard. That means it is a very tough business to break into, but it is very profitable if you already have customers because you can use their inertia to get much higher yields.

The Hon. BEN FRANKLIN: That is understood, and it makes sense of the disparity between the average of the big three market offers and the average of the three best offers of all retailers in New South Wales, Victoria and South Australia. Interestingly, the gap between those two is much smaller in Queensland, implying that there does not seem to be the same motivation. Why is that the case?

Associate Professor MOUNTAIN: The picture in Queensland is changing rapidly. They deregulated their markets fully about a year ago, and the same trends we have seen in Victoria and subsequently in Sydney and elsewhere have moved to the south and the east of the State since the market was opened. The same underlying pressures occur on opening of these retail markets to the small customer. It is pleasing to see this is not just Australian, although I think it is worse here than elsewhere. We have very, very complex tariffs. But the same underlying pressures exert themselves and this has been studied at length in Britain, for example, and is a reason why in many countries of the world they have not opened up the market for small customers.

The Hon. ADAM SEARLE: Putting all of what you said together, for the large retailers that obviously have an existing and large client base, is their profit margin something like 15 to 20 per cent of the bill? Is that what you are saying?

Associate Professor MOUNTAIN: I think that is a reasonable estimate for the margins on sales to residential customers.

The Hon. ADAM SEARLE: Yes.

Associate Professor MOUNTAIN: It is a very profitable business if you own the customer.

The Hon. ADAM SEARLE: The big three own 90 per cent of the customers in the State.

The Hon. BEN FRANKLIN: This is also because people do not tend to change their energy provider once they are locked in.

Associate Professor MOUNTAIN: Yes, indeed. The underlying market model in our retail market is that if you wish to succeed in the market to buy well, you need to be actively engaged and able to take on the complexity of the retail products and the retail offers and so on. That is a very large knowledge and time commitment for any user. Most of the resale offers are incredibly complex. They vary by tariff structure, by discount structure, by solar existence, and they change frequently. To obtain that effective discount to buy well, the market puts the burden on to the consumer to be actively engaged. For most consumers it is simply quite reasonably not worth their while. It is too much time; they have other things to do with that time. It is quite reasonable that even though they can make large net annual savings, they do not seek to achieve those because time has a value and that is not actually worthwhile for them.

The Hon. ADAM SEARLE: Over and above time having a value, the ability of consumers to engage with that complexity would vary markedly and many consumers would lack the skills to be able to work their way through the maze. Would that be a fair observation?

Associate Professor MOUNTAIN: Yes, indeed. It is just too complex. I often draw a contrast between a typical household looking at their car insurance. They have a copy of their current car insurance and they can phone around quite quickly a couple of insurers or do couple of market tests. They have a couple of different products of cars either going to be covered either fully or partially and there are a couple of different ways of seeing it, whereas with electricity it is much harder to establish what your annual payments have been for the last year, what your latest rates are before discount and after discount, and then to identify the retail product which matches your distribution region, your tariff structure and your household consumption amount. It is a difficult thing for most households to actually add up.

The Hon. ADAM SEARLE: What can we do in terms of regulatory design to make this easier, or to make the market work better so that consumers are not paying up to one-fifth of their bill to the pockets of the big retailers?

Associate Professor MOUNTAIN: This is a terribly difficult question. The tendency, so often, is to say, "Let us regulate to make it simpler." But you have to be mindful in doing that that you are often undermining the ability of some of the more innovative new entrant retailers to find a foothold in the market. Having said all that, I think the regulatory agency and the government applying its efforts over time can do a lot to make things more transparent and to make it clearer how the market is operating. But having said that too, it is not the commitment of a government or a regulator at a point in time. It has to be a concerted and sustained effort in order to apply the pressure to ensure that the market operates effectively to make it transparent. In Australia and internationally, regulators and governments have struggled with this. The retailers have always been one step ahead. For the same reason that households find it complex, that is true also for the governments who have to cope with the complexity across the whole industry and are lobbied very effectively by the retailers for whom it makes sense to dedicate a lot of money to spend time to try to get the regulators to take account of their interests.

The Hon. ADAM SEARLE: In terms of what might be useful in that process, retailers offer discounts which, at least in New South Wales, are discounts off standing offers rather than what consumers are actually paying. Would it be a step in the right direction to say that if you are offering an X per cent discount, it has to be a discount of what customers are actually paying rather than a standing offer, so at least the offers that are being made are more accurate?

Associate Professor MOUNTAIN: Yes, that is helpful. But even that statement is hard to implement because the price the customer is paying will vary considerably by the retailer across the portfolio of their customer base. Some retailers in a distribution—and there are three different areas where the wires charges vary and so there are three separate markets—have up to 50 or 60 different retail offers to those customers. So if they are to discount, what is the price they are to discount against? Then it is a question of a discount on the standing charge or a discount on the variable charge, or a discount before the concession payment or after the concession payment, or before the solar feedback amount or after the solar feedback amount, and does that vary if there is a premium solar payment or not, and so on and on and on.

The Hon. ADAM SEARLE: Associate Professor, the retail companies have all the information. If I have my records of the last year showing my energy consumption and my energy patterns of usage and take that to each retail company, they would be able to run that through all of their models and offers and work out which offers would result in me paying more or less. Even though I might not myself be able to get across the complexity, they would be able to run it through their computers very quickly and work out what would be the best offer for me, would they not?

Associate Professor MOUNTAIN: Yes. It is possible to introduce a regulation which says the obligation is on a retailer to put all of their customers on their cheapest available offers. The problem with that is that it takes away the incentive for them to make leading low offers to attract customers. Those customers who can engage in the market will pay more because they will take away that low price offer. It also does not address the issue of the effort that the new entrant retailer needs to make to engage in the market.

The Hon. JOHN GRAHAM: Is this not a slightly different point? I accept where you are heading on that point but there is a separate path here. In some other complex markets one of the ways in which this problem is being dealt with is to vest in the consumer the ownership of their data so that they can take it to, for example, a competitor, have the models run over and thereby drive competition, including with those retailers who are trying to break into the market. They can then innovate based on being able to better analyse the data and give a better offer. It is not forcing firms to go to their cheapest offer; it is adjuring that the data that is being talked about is available to allow that comparison. Is that a possible solution to this market problem?

Associate Professor MOUNTAIN: It is a partial answer. There has been a lot of focus on the volume that the customer uses and on the profile of their use—how much is in the peak period during the weekday and how much is in the off-peak period at night or on the weekend. Unfortunately, their bill is a composite of the volume and the price. So sharing their volume data of itself does not necessarily make the customers any more accessible to competing retailers or in a position to know whether they are better off. In order to ensure that that can happen, that information on volume and price needs to be available to the market.

The Hon. JOHN GRAHAM: What is a barrier to sharing both those variables? Why can we not regulate to require both of those to be shared?

Associate Professor MOUNTAIN: Now, there is nothing to stop a customer saying, "Here is my volume and price", and telling that to any competing retailers that they like and say, "Here is my volume and my price. Can you better my current deal?" Even telling the retailer what those volumes and prices are is a difficult thing for the reasons that I have mentioned. Putting that information in the public domain is problematic. It is like saying, "I want public disclosure of the price paid for car insurance." Both the buyer and the seller will say, "I have concerns about my information being made publicly available." But were that information to be publicly available I think that would be a giant leap forward.

The Hon. JOHN GRAHAM: It does not need to be publicly available though, does it? Is there not another option, which is to allow the consumer to have a right to that information—that is, they own it rather than the company—and they can take that to a competitor who might analyse it? Is that not one step back from saying it is publicly available?

Associate Professor MOUNTAIN: Yes, but that right exists now, so there is nothing stopping customers making that available.

The Hon. JOHN GRAHAM: My question then is: What are the barriers to that sort of comparison taking place?

Associate Professor MOUNTAIN: In the interests of openness I should speak about an interest that I personally have in this area. Over many years I have been frustrated at government's inability to get a grip on retail. I focused on building software which would allow the comparison of customer bills based on what they actually paid, not just the volumes. I teamed up with a customer group called Choice, who have now implemented the software in a service that they offer to customers. It is their business but we are the source of the software that makes it possible. That does exactly what you are actually suggesting. The customer uploads their bill. The innovation in the software is to extract the information from that bill, the volume and the price, and then we have all the offers in the market and find the best for that customer. Choice offers that as a service to the end customer. That is a personal interest I have. I do not own the business. It is owned and operated by Choice, but I share in the proceeds of the business by virtue of the software that we have built.

The Hon. BEN FRANKLIN: It sounds like that is something the Government should be promoting.

The Hon. ADAM SEARLE: It does.

Associate Professor MOUNTAIN: I will certainly not comment.

The Hon. ADAM SEARLE: No, leave that to the Hon. Ben Franklin and to me.

Associate Professor MOUNTAIN: It is now an idea that is resonating widely. We are seeing this not just in electricity but in other services where this arrangement is now becoming commonplace. There is talk in Britain and elsewhere on the regulatory designs for exactly a service like this: What might be the standards to which we hold the retail brokerage, as it is called, ensuring that it does its service? We saw this as a way to leverage the fact the customer can make the information open. It would be possible, I imagine, to pass a law to mandate all information to be in the public domain but I think there will be some concern about privacy and access to privacy and customer details—address and identifiers and so on.

The Hon. JOHN GRAHAM: To return to that question, having built that model, what are the barriers to it being more successful for customers? Are there hurdles you are facing with that Choice model?

Associate Professor MOUNTAIN: Choice is a not-for-profit organisation but it still charges a fee. For some, paying the fee might be an issue. Attracting customers in an industry with highly complex offers, even getting them to upload their bills, is a barrier to some degree. Finding the market and advertising and all of those factors that affect a business's scope for winning customers are issues. The actual complexity of the retail offer and the bill and the industry—we have managed to overcome all of those. It has been an enormous amount of software development effort, but I cannot see anything in the complexity of retail product or the available offers in the market that have stopped us. It is far more around the ability to engage with the market.

The Hon. BEN FRANKLIN: Apart from that product, which sounds intrinsically excellent, on a practical level and particularly in terms of your research from other countries as well, have you seen any other ideas or products that can be utilised to educate customers more about what choices they have that the Committee should be considering?

Associate Professor MOUNTAIN: Often the first port of call that many governments have done in energy retailing is to advertise to customers to make clear that the opportunity exists and to encourage them to engage. By and large that has been pretty unsuccessful, even with substantial advertising expenditure, and it is not hard to see why. Many customers will understand there is an opportunity but simply telling them that there is an opportunity to reduce their bills does not of itself reduce the cost they incur in engaging effectively.

Many regulators and governments have established websites themselves to compare prices. Both in Australia and internationally those have generally not been successful. To some degree that is affected by the complexity that governments and regulators face in putting a public basis to the information that they compare. They often get caught up in hurdles of trying to estimate the customer's use and being open and transparent. And again they are lobbied very heavily by the market players. Again this has a long history. For a long period of time many have argued that regulators and governments should do more to fix up their websites, but in practice it has not worked terribly well.

There is a still a fundamental threshold question as to whether competition in retail markets is worthwhile at all. It was innovative to open them up. There was no big theoretical or good knowledge base that retail markets could work well in energy. They pointed to retail markets in airlines, bread and what have you and said, "Look. They work perfectly well there. Why can't we have the same thing in power?" I think many States, countries and provinces have somewhat regretted their haste to introduce retail competition because it has proved to be problematic just about everywhere.

The question as to whether you have a market at all is still the threshold question. It is a very difficult thing to step back from—to march back from actually having created it—because there are issues of sovereign risk and many of the retailers have paid large sums to acquire the customer base. It is certainly true of at least two of the three large retailers in your State. And others have invested in it so there are vested interests all round. But in spite of all my work on this and in spite of my work in seeing to make the market work effectively and my interest in it, I have to say with my academic hat on it is a question I still ponder.

The Hon. BEN FRANKLIN: Understood. Mr Searle has a final question but I have a very quick follow-up on the issue of what we can do practically. In New South Wales we have something called Service NSW, which is the customer shopfront for basically all government services: if you are getting a driver licence or anything to do with State government services, people go in, so it attracts millions of people a year. Would it be a reasonable recommendation of this Committee, do you think, that every customer with whom they engage must automatically be told about availability of energy rebates and ways that they can compare their energy bills in order to find the best possible deal for them?

Associate Professor MOUNTAIN: This comes back to my previous comment. Telling customers that there are 26 retailers and for most customers at least a benchmark of 100 other offers in their particular segment, I do not know that that of itself will be effective. Many customers know that already. It needs to go a bit further and come up with a solution to that. Telling them that the option exists for them to scan the market will not mean terribly much. It needs to go a step further and offer them something by way of a tangible solution.

The Hon. BEN FRANKLIN: The point was that if that organisation, Service NSW, was forced to provide information to all customers about the rebates available when they are potentially suffering hardship or if they are socio-economically disadvantaged or potentially if there is one of those comparative websites where they would be able to with ease determine if they could potentially get a better deal, that would be a sensible way for the message to get out more broadly, would you not agree?

Associate Professor MOUNTAIN: Yes, on rebates I think the picture would be absolutely clear, they should market those. The many fascinating things about the energy policy is it is the lowest income households that are impacted the worst and have the least ability to engage in the market because of the information and skill and so on. Government focusing the policy effort most particularly on the least well-off is absolutely essential. If there are suitable opportunities for it to assess ways to engage and bring it to the customer's attention it can do no harm.

The Hon. ADAM SEARLE: Associate Professor, just a slight switch of topic, and I am happy for you to answer as best you can or to take it on notice. You have been critical of regulation of the distribution companies in the energy market by the Australian Energy Regulator [AER] and, in the past at least, have advocated that they should be regulated again at a State level on the basis that, for example in New South Wales, there are three distributers but they do not compete against each other and they do not compete interstate. Is that still a view you have about the deficiency of distribution regulation by the AER, and if so how could regulation at a State level be done any better?

Associate Professor MOUNTAIN: Yes, it is a view that I still have. I think here too the picture becomes quite complex. The question is to go one step further and say that if the AER has not done well why has it not done well? The origin of that is the institutional arrangement in which "towards the truly national" became the underlying policy mantra for the electricity industry, which led to the regulation of distribution, the lower voltage networks, by national entities, the AER, and above it the Australian Energy Market Commission [AEMC], that set the energy rules which the AER implements. This quasi-national regulation of a State-based entity is unusual by international standards.

In other countries, distribution regulation of the lower voltage poles and wires is typically either at a local authority level or at State level and that reflects the fact that the jurisdiction is bounded by the local authority or by the State depending whether it is local authority based or State based. These are local characteristics: the geography, the people, the technology, and the tariff structure is localised or, in the case of New South Wales, in three regions. In terms of understanding the technology and circumstances there is good reason for that to have been done at a regional level.

In addition, and even more important than that, is the accountability. I stress this most particularly where the government owns the networks. When it owns those networks it obtains an interest not just in the outcome for prices—which obviously impacts the prospects of the government or future governments winning office, its price outcomes—but they also profit from the service. I think one of the big errors that we made in Australia was to treat our government-owned firms as if they were privately owned and to regulate them as if they were privately owned by a national entity.

As a consequence when we saw network expenditure spiralling out of control from roughly 2004 to 2013 State energy Ministers blamed Federal authorities, but it was the State Government that profited enormously on the expansion in the regulator's asset base and sought to influence the regulator's treatment of the cost of capital on that regulated asset base. That introduced a disconnect between the way that the State was held accountable for outcomes for regulated networks that it owned and led to the bifurcation of regulation between two quasi-national authorities. It led to a weaker, less accountable, regulatory framework in which the truth of the matter was a casualty.

The overall way that the regulators were held to account was weakened. I think the game has changed slightly with the partial privatisation of two of three networks in New South Wales. The waters have been muddied a bit. The State still owns a significant interest. It owns one of the three outright and has a significant stake in the other two and the arguments are relevant for the State. I think a much sharper job—that recognised the State Government's interests in the networks—would be done if it was brought back to an entity answerable to the State Government.

The CHAIR: Associate Professor, thank you very much, that concludes the time available. The information has been helpful. The Committee may have further questions for you and you will have 21 days to answer. The secretariat will assist you if necessary.

(The witness withdrew)

KERRY SCHOTT, Independent Chair, Energy Security Board, affirmed and examined

The CHAIR: Dr Schott, do you have an opening statement?

Dr SCHOTT: Just a very brief one. First of all, thank you for inviting me to appear today. It is an honour to have been asked to do so. In regard to your terms of reference there are several matters that are largely State based and these are not matters that I am particularly equipped to comment upon. The terms of reference that are most relevant for me as chair of the Energy Security Board are 1 (a), (c), (d) and (f), which are: the recent large price increases, the alleged collusion and price gouging by energy retailers, the effectiveness of current regulatory standards and guidelines, and planning adequacy for future demand.

A lot of these matters were reported on in the Health of the National Electricity Market [NEM] report which we completed in December and I have tabled a copy of that in the form of a USB stick to save me carrying a lot of paper around. The inquiry may also be interested in the detailed design of the National Energy Guarantee [NEG] which went out for further public consultation on Friday and I have also tabled a copy of that paper on the USB stick. I would like to say a little about the four terms of reference that are particularly where I have something that may be useful for the inquiry.

On the matter of price increases: between 2007-08 and 2015-16 prices increased in real terms by 80 to 90 per cent and this impacted both households and business severely, as you know. Households have not had wage increases anywhere near that level and lower income households have been particularly affected. Business has had to deal with sudden and large increases in electricity prices well above their other costs and well above what they are able to pass on in their prices. Reasons for the increases are principally two fold. Early in the period, the network prices in New South Wales and Queensland increased significantly, largely driven by a State-based regulated increase in network standards. This increase in standards drove significant investment in the distribution networks and higher costs in both those States. This price rise was then added to by an increase in wholesale prices. This was largely caused by the retirement of Northern Power Station in South Australia and the unexpected retirement of Hazelwood Power Station in Victoria. This decline in supply tightened the market considerably and caused wholesale price increases.

The development of the National Energy Guarantee has already encouraged wholesale price reductions and we expect this to continue. No further network increases are expected. The matter of retail price gauging and collusion is a matter for the Australian Competition and Consumer Commission, which has a report due out shortly. Allegations of this kind are very serious and should not be made lightly. I do note though that there has been concern expressed to the Energy Security Board about the market power of vertically integrated power retailers, notably AGL Energy, Origin Energy and EnergyAustralia. In designing the National Energy Guarantee, some small retailers have expressed concern to us about the market power of these companies and the difficulties that may face small retailers in acquiring the contracts and power that they need.

In response, in the guarantee, we are proposing a market liquidity obligation on large, vertically integrated retailers to make sure that contracts are available, with bid-offer spreads made transparent to the market. In addition, further transparency is required around contracting as part of the guarantee as proposed. The matters of regulatory standards and guidelines are relevant for the Energy Security Board in a number of ways. In the last decade, we have seen that when standards are set too high, prices can rise substantially, perhaps more than the benefits offered by the greater standard, for example the network cost increases in New South Wales. For the system as a whole, the reliability standard is set at 0.002 per cent, which means there should not be total entire system outrages that exceed five to six minutes. That standard has not been changed for some time.

The transmission to a power system that uses newly available technology and lower emissions is also a challenge for the regulator. We have solar photovoltaics [PV] on homes with customers who wish to take power from the grid—as historically they have always done—and who now also wish to store that power in batteries and at times export it back to the grid. We have lower system strength in the transmission system as large-sized thermal generators retire and are partly replaced by large-scale wind and solar, which do not offer security properties to the system as a simple bi-product. All of these matters are setting a new world in which the regulator is operating.

On the matter of planning adequacy—and this is my final comment—the recommendations made by the Finkel review and adopted by all Australian governments basically set the path forward. In line with these recommendations, the Australian Energy Market Operator [AEMO] will issue an integrated system plan in July for consultation and discussion. At the same time, the Australian Energy Market Commission [AEMC]—which sets the rules—and the Australian Energy Regulator [AER] will work on regulatory and other changes that are needed to accommodate the types of transition in the system that is underway. This work will consider distributed resources, such as solar PV, demand response, such as that offered by some so-called "aggregators", as well as large scale customers, and the need for new technology products to provide frequency control and system strength. This work will be the focus of the Energy Security Board once AEMO's integrated system plan is released next month.

The Hon. ADAM SEARLE: You mentioned the National Energy Guarantee. Obviously, that is a nation-wide dialogue that has profound implications for each State and jurisdiction and its energy policy. Are you able to flesh out for us what the practical implications are of the regulatory design proposal and how they are likely to affect our approach to energy security in New South Wales? In particular, how and what will wereplace coal-fired power with as the ageing power stations come to the end of their working lives?

The Hon. BEN FRANKLIN: And noting your concerns about solar and wind not being able to provide reliable, ongoing power.

The Hon. ADAM SEARLE: By themselves.

The Hon. BEN FRANKLIN: Yes, by themselves.

Dr SCHOTT: What the National Energy Guarantee does is integrate a policy for emissions reduction with a policy that ensures we have a reliable power system, and does so in a way that happens at least cost to customers. It provides two obligations on retailers and large market customers. The first obligation is to meet an emissions intensity target, which will be set by the Commonwealth Government in line with its Paris agreements, which it has signed externally, as you know. That is a nation-wide target and it is to be applied to the National Electricity Market. Under that obligation, each retailer must ensure that the load that it sells does not exceed that particular target in any given year. The target will be set over the period of 2020 to 2030 and it will be a trajectory that is set in the legislation. It is to be reviewed from time to time, perhaps five yearly and perhaps 10 yearly. It is a matter for Commonwealth legislation at the moment in thinking about that. Alongside that obligation—and this is very important—the retailers also have to make sure that they always have a reliable load.

They have to make sure that they dispatchable power when they need it. As well as contracting with, for example, solar and wind plants, they must also contract with dispatchable power suppliers, which, in the system at present, are coal, gas, hydro, batteries or diesel. To make sure that they have dispatchable power when the weather makes wind and solar unavailable, they must be contracted either with coal, hydro, gas or batteries, effectively. That is the way that the guarantee works. Because it is being implemented within the market, it is being implemented in a world in which the retailers compete with each other. It will lead to additional contracting and to lower wholesale prices. We are already seeing the impact in the wholesale price market with the forward curve showing that prices are coming down and have been coming down.

In New South Wales, as in other jurisdictions, as the coal-fired generators reach the end of their technical lives, they will retire. They become very expensive to maintain, so their owners will, as a commercial decision, retire them. They will replace them with a mixture of generation, which, under the NEG, can be any sort of generation. They will replace them whatever is the cheapest form of generation that they can buy and whatever is the form of generation that will make the most money. For some of them, that will be a mixture of solar, wind, gas, hydro and coal, if the technology makes that a cheap, cost-competitive alternative. It is completely technology neutral.

The Hon. BEN FRANKLIN: The first thing I want to ask about is smart meters. In your annual report you talk about the need for them to be encouraged, particularly noting the 380,000 homes in New South Wales that have rooftop solar PV, which is one in six or seven households. It appears to me that it is not necessarily in the retailers' interests to encourage a swift and prompt rollout of smart meters. What can be done by government to ensure that those retailers are encouraged to do so?

Dr SCHOTT: It is a very good question. Smart meters are gaining more acceptance in the sense that their uptake is increasing. The reason for that is that people who now have sufficient solar on their roof wish to export it back into the NEM. To get paid for that power, they need a smart meter. The network also needs the smart meter, because it needs to know how much generation is coming in off rooftops as well as off the big generators that it is used to handling on the network. It is happening. There are firms called aggregators that are working with customers to aggregate the power that they are taking off the grid and putting back into the grid. Basically people are getting paid for the power they are putting back into the grid and again that needs smart meters. The need for them is there because of the benefit that you get and the cost of smart meters is coming down, so they are gradually getting put in. The other thing that will drive them being put in is that networks as well as retailers have an interest in them going in, so I would anticipate that their take-up will increase.

The Hon. BEN FRANKLIN: That is good news.

Dr SCHOTT: Yes.

The Hon. BEN FRANKLIN: In the Government's relatively recent submission to AEMO, it talked about the establishment of three renewable energy zones around New South Wales. Are you familiar with that?

Dr SCHOTT: I am familiar with it at a high level, yes.

The Hon. BEN FRANKLIN: What are your thoughts and do you think that is a sensible way forward in respect of an option for us to pursue?

Dr SCHOTT: It is a complicated question. We are all waiting, with some anticipation, to see the integrated system plan next month. What AEMO is trying to do with the integrated system plan is work out where, over coming decades—and we are talking long periods of time—where the transmission system needs to develop and go. We have a transmission system, which is now over 50 years old, which was put there to run from effectively the large coal-fire generators in the Latrobe Valley and in the Hunter and in places in Queensland where there were big coal-fired stations. We now need a transmission system that continues to go to those localities, but which also picks up where we have strong renewable resources and where it also makes sense to have hydros, both mini and maxi, and also where it is sensible to put in large-scale batteries and so on. That will all be covered in the integrated system plan.

I know that they have had CSIRO looking at where renewable energy zones might go. We are now looking for a system where we have flexibility, so while there are very strong wind resources in South Australia and Victoria, we also have wind resources in New South Wales in the northern New England area, which has a different wind climate and pattern to the wind resources in South Australia. It tends to be the case that when the wind is not blowing in South Australia, it is blowing in Glen Innes, so using these trade-offs can be valuable, as long as we have the connections in place.

The Hon. BEN FRANKLIN: The interconnector is a good idea between South Australia and New South Wales, and you would support that?

Dr SCHOTT: I know there have been concept plans drawn on maps. I do not want to say yes until I have looked at the whole integrated system plan. It is very important that we get the order in which we do things and the timing of it right, because the risk is that we will end up with a lot of costs back into the system, which we can ill-afford at this time.

The Hon. BEN FRANKLIN: Conceptually and theoretically, the creation and establishment of an interconnector between South Australia and New South Wales on the whole would be a positive, noting the logistical potential consequences that you talk about?

Dr SCHOTT: We need to finish doing the cost-benefit analysis and the like. We saw from the South Australian black experience that they were extraordinarily reliant on some relatively thin interconnections and more resilience in the system would certainly assist.

The Hon. BEN FRANKLIN: What do you think are the greatest risks to a successful implementation of the NEG?

Dr SCHOTT: The industry and the policy advisers and the nerds of this world in this industry have all been very heavily involved in it. While there is a lot of discussion still around certain details, I think that we are likely to get something together which everybody feels is a very workable NEG. The largest risk remains around the emissions and political side of things, as it has done for 15 years or so.

The CHAIR: Do you have a comment about the volatility in the market? Given the security of the major generators and their outputs, is that having upward pressure on pricing in respect of the consumer at the end of the day?

Dr SCHOTT: Are you referring to the recent events in New South Wales?

The CHAIR: Not just recently. Throughout the duration of this inquiry we have been hearing more and more that the volatility in the market is driving wholesale prices and that ends up at the dinner table.

Dr SCHOTT: It has. The good news is that the liquidity in the contract markets is improving and, as it does so, volatility is coming down and has been coming down. We would expect from the work that we have done on the NEG so far, and that continues, that that good news would continue. Yes, we are worried about it but we think that we are headed in the right direction.

The CHAIR: Regardless of the Liddell and AGL debate with the Federal Government?

Dr SCHOTT: Yes. There is no doubt that when Liddell leaves the system in 2022 that that capacity needs to be replaced, but I have faith that the market will come to the table on that replacement.

The Hon. JOHN GRAHAM: The Committee earlier today heard evidence about the development of that integrated plan, particularly as it relates to Snowy 2.0 and the way that the plans in New South Wales might interact with Snowy board decisions about how it might proceed with the next stage of that development. I am interested in whether you have any broad observations about the need for that transmission part of the Snowy 2.0 scheme to stack up or the timing of those and how those processes will interact?

Dr SCHOTT: It is a question that is a bit early for me. I think in three weeks time I might have a better answer. It is all related to the Integrated System Plan that is due out. There are two major sources of pumped hydro in the National Electricity Market—that is, basically Snowy and Snowy 2.0. The Tasmanians, if there are any in the room, would tell you that they want to be the pumped hydro and storage battery of the nation. It is essential for Snowy 2.0 that the transmissions lines that are needed for it go in. It will be very interesting to see what comes out of the Integrated System Plan. I should stress that when it comes out early in July there will then be a period of consultation and work done on it, for everybody to have a say and to have a good look at it. It is going to be a while I think.

The Hon. JOHN GRAHAM: What should we look for in the Integrated System Plan to have some confidence that the transmission upgrades, which will be required to make this work, are likely to proceed?

Dr SCHOTT: There will be analysis in that plan. It is a planning document so there will need to be more work done around the economics of it, which will sit in further detail behind what comes out. But from a New South Wales perspective, the Snowy transmission lines would lead to possibilities that include the connection to South Australia that has just been discussed, a deepening connection across into Victoria—that interconnection currently has power that flows both ways, as you know—and you would also expect to see a deepening of the Queensland interconnection because of the very heavy population growth in southern Queensland and northern New South Wales.

The Hon. JOHN GRAHAM: You have talked about those three major pumped hydro projects. Do you have a view about the future appropriate balance between those major pumped hydro projects and distributed pumped hydro, which is clearly starting to be part of the discussion?

Dr SCHOTT: No, I do not at the moment. I think some of the smaller pumped hydro schemes that are being mooted do have promise, depending on their locality. I noticed that Origin has recently begun some further work on the Shoalhaven scheme, which has been sitting there for sometime not fully utilised.

The Hon. JOHN GRAHAM: When you say "depending on their locality", you are referring to their locality in relation to transmission?

Dr SCHOTT: Yes.

The Hon. ADAM SEARLE: Transmission is the key.

Dr SCHOTT: Yes.

The Hon. JOHN GRAHAM: I noted your very careful wording in relation to the integrated retail and generation companies. The ACCC has been doing some important work in this area. In some ways they have had more access to information than many of the other agencies that have been able to look at this area, given that it has been well traversed.

Dr SCHOTT: Yes.

The Hon. JOHN GRAHAM: Do you have any broad observations about the work that the ACCC has been able to do or is expected to be able to do shortly in that area relating to competition?

Dr SCHOTT: No, I do not. It is due out soon and they do have very wide-sweeping powers as you know. We all await with bated breath.

The CHAIR: Thank you for appearing before the Committee today. You will have 21 days to respond to any questions taken on notice.

(The witness withdrew)

CAROLINE TAYLOR, Acting Executive Manager, Regulation, TransGrid, sworn and examined

PAUL ITALIANO, Chief Executive Officer, TransGrid, sworn and examined

GERARD REITER, Executive Manager, Network Planning and Operations, TransGrid, sworn and examined

The CHAIR: Would you like to make a brief opening statement?

Mr ITALIANO: Thank you for the opportunity to present to you this afternoon. We understand that being a transmission service provider in New South Wales and the Australian Capital Territory is a great privilege for TransGrid and also a great responsibility. We hold that on behalf of the energy consumers in New South Wales. As we all know, TransGrid was recently privatised, and I expect there may be some questions relating to this later in the session. However, I can assure you the shareholders, management and staff of TransGrid are acutely aware of the community's concerns regarding electricity, particularly in relation to pricing and our obligation to do everything we can to close the gap between customer experience and customer expectation. I am conscious of time, so I will be direct, and thank you for permitting me to use slides to help in this process. There are three key points I would like to leave you with from our introduction. The first is that network prices in New South Wales are falling and have been for some time. The second is that energy demand in New South Wales is rising and has been for some time. The third is one that is perhaps is not unfamiliar to you, and that is that traditional generation is withdrawing from our market and will need to be replaced, but this replacement will take some time.

I will now take you through the slide deck very quickly. The first side, slide 2, shows that TransGrid prices for the current regulatory period are 7.2 per cent lower than for the previous period, and we have projected that this will continue on and be 5.2 per cent lower for the next period. To achieve this, TransGrid proposed a reduction in its regulated asset base in its last regulatory proposal and lower capital servicing costs. The Australian Energy Regulator [AER], in its decision, which was only released earlier this month, found that the operational expenditure was efficient. On page 3, we have taken the opportunity to show TransGrid's transmission prices in New South Wales compared to the consumer price index [CPI]. TransGrid's prices are shown in green, and CPI is the dotted line. As you can see, New South Wales customers pay less in real terms for TransGrid's services now than they did in 1995-96. With projected prices to fall by 5.2 per cent over the next five years, this will remain the case for the next five years, which will result in over a quarter of a century of declining prices in real terms. The blue line on this chart shows the retail price index compared to CPI. We can understand consumer concerns about electricity prices.

Slide 4 shows network prices on the left-hand side in absolute terms for the last six years, and on the right-hand side as a proportion of the overall household electricity bill. TransGrid's component of this is the green bit at the bottom. As you can see, TransGrid accounts for approximately 1¢ per kilowatt hour and, in our estimation, around 3 per cent of the household electricity bill. Slide 5 shows the energy flowing through the New South Wales system over the last four years. As you can see, growth in energy demand over that period of time has exceeded GDP growth. Growth in energy demand is highly correlated with gross State product, and the economic success of New South Wales and also population growth are driving up demand for electricity. The last slide we have provided is one that you will not be unfamiliar with. It shows the projected reduction of coal-fired generation in the National Electricity Market until 2050. As you can see, a number of these are scheduled to be removed in the next 10 to 15 years, and many of them in New South Wales, most notably Liddell.

As the transmission service provider and the jurisdictional planner for New South Wales, it is TransGrid's responsibility to make adequate plans for the New South Wales energy system to accommodate the change in generation mix over the next decade and a half. The nature of transmission investment and infrastructure investment more generally means there is a long lead time between planning and execution. Approvals, design and funding all take time. If we are going to manage the transition from coal-fired generation to alternative styles of generation in the period that is being proposed here then we will need to take action soon.

The Hon. JOHN GRAHAM: I will start my questions with where we left off in the last session, and that is the integrated systems plan and your role as the jurisdictional planner. Please tell us about your role in pulling that together on behalf of New South Wales.

Mr ITALIANO: The integrated systems plan is a submission being pulled together by the Australian Energy Market Operator [AEMO]. It provides an overarching guideline as to how the transition in Australia's energy system might progress over the next decade or so. TransGrid has been integral in participating in the working party that AEMO has put together, along with jurisdictional planners in other States and Territories that are connected to the National Electricity Market [NEM]. As the jurisdictional planner for New South Wales, which is a very large proportion of the national economy and which has a very large proportion of the national population, we have had a very prominent role in assisting AEMO with its analysis and deliberations.

The Hon. JOHN GRAHAM: Dr Schott gave us an idea of some of the pressures on the process and some of the things that you hope to accommodate as the plan is being pulled together. First, I am interested in the discussion on the Snowy transmission upgrades. This morning we heard evidence from New South Wales government agencies that the timing of the Snowy board's decisions about Snowy 2.0 and the decisions around transmission may not exactly align. Do you have a perspective on the timing challenge?

Mr ITALIANO: We would agree with that observation. All transmission investment is subject to a regulatory investment test, and we would not have it any other way. Robust regulation is necessary.

The Hon. JOHN GRAHAM: That makes sense from a State point of view. These are big investments, and you do not want to jump the gun. I accept that, although this Committee has heard strong evidence from Snowy that for the 2.0 project it will soon make a board decision. How do these two things fit together?

Mr ITALIANO: The way the regulatory investment test is structured at the moment is it would take several years to get a final approval to proceed, if a regulatory investment test were to commence now. There are several legs to the test that need to be passed. One of them is establishing that there is a need for the generation and the transmission investment. The second is that transmission is a suitable investment to make and that there are not alternatives. The third is that it is the lowest economic cost. Once the test has been satisfied—and there is consultative process that has to be undertaken for each of those legs—and submitted to the Australian Economic Regulator, which deliberates on it, typically it goes through a consultative process. At the end of that process the regulator hands down a decision, and that decision is subject to appeal. It can be appealed on extremely broad grounds by any party that is interested, which can be any individual consumer in the NEM. Typically, in the past a project that approximates this value would result in an appeal, and then you go through the legal process. What I have just described is not a short process.

The Hon. JOHN GRAHAM: Please give us an idea of how long that process might have taken in the past for large-scale projects.

Mr ITALIANO: There was an example of one where New South Wales previously proposed an interconnection with South Australia. It was subject to an appeal process, and New South Wales withdrew from that after four years.

The Hon. JOHN GRAHAM: The Snowy 2.0 discussion in the public mind has been much more rapid than that, I think.

Mr ITALIANO: It has.

The Hon. JOHN GRAHAM: What you are suggesting as the ordinary regulatory path is on a much slower track than what has been proposed. In your view, how will that be resolved?

Mr ITALIANO: We have made a submission to the Council of Australian Governments [COAG] Energy Council, the regulators. We are proposing an amendment to the regulatory investment test for transmission to accommodate a fast-track approval process for what might colloquially be described as nation-building assets, or assets that have been the subject of further independent scrutiny such as those in the integrated system plan, with the support of the COAG Energy Council.

The Hon. JOHN GRAHAM: How fast is fast tracked, in your view? What might be possible here?

Mr ITALIANO: The integrated system plan process has been very, very thorough. There has been a lot of consultation. I cannot pass a judgement on that, but to my eye—through participating in it—it has been very comprehensive. If there was an opportunity for the COAG Energy Council to deliberate on some or a number of individual recommendations within the ISP—not that we have seen it, but we are assuming there will be individual projects proposed—and endorse projects that have qualified for some of the legs in the regulatory investment test, it could take quite a lot of time off that process. It could be done by the end of the year.

The Hon. JOHN GRAHAM: So are you suggesting that the actual test could be completed by the end of the year?

Mr ITALIANO: We are suggesting that it could be completed by the end of the year. If we were put into a position where we were presenting the financial information on what the costs were, and to demonstrate to the regulator that those costs were efficient, then that process is not the critical path of the regulatory investment test. The regulator works quite rapidly on clear submissions like that. But we would need to get started fairly quickly.

The Hon. JOHN GRAHAM: Understood. When is that coming for decision at the Energy Council?

Mr ITALIANO: It has not been proposed to the Energy Council.

The Hon. JOHN GRAHAM: Understood. I wanted to ask about the renewable zones that might be driven by this integrated systems plan. Obviously there is quite a lot of community interest in where these zones are. These big transmission decisions will drive a lot of economic development, often in New South Wales regions. How are you making decisions between those various bits of regional New South Wales when it comes to this transmission plan? What are the sorts of criteria you are applying?

Mr ITALIANO: It is important that you have asked the question because one of the key features of a renewable energy zone is that it is not the decision of the transmission provider to determine the locations. It broadens the range of consultative parties who have a say over it. The renewable energy zones are value added by AEMO and recommended through the ISP and, ultimately, endorsed by either a State Minister or the COAG Energy Council through a range of criteria that can include some of the existing regulatory criteria and also social and other economic criteria.

The Hon. JOHN GRAHAM: You are describing quite a few people around the table. Just go into some more detail about what other criteria might be applied. How does this call get made?

Mr ITALIANO: Certainly from our point of view the primary drivers are renewable energy prospectivity—so solar radiation and wind speeds and wind volume—and proximity to transmission lines. When we proximity to transmission lines we mean proximity to transmission lines that have the capacity to move energy to load centres, not just those that have the capacity to accept the connection.

The CHAIR: What is the droppage of such energy as it moves? If you have transmission lines that are so far away—

The Hon. JOHN GRAHAM: Over distance.

The CHAIR: I was just reflecting on this last night. We have not really asked much about the expanse of such infrastructure and what the loss is.

Mr ITALIANO: The simple answer to that is that there are line losses. It depends on the configuration of the system and the distance over which the energy travels. The energy travels follows the laws of physics, not the laws of economics. So it does not depend on who has bid and who has the load. It depends on who is closest to whom. So it is a little hard to estimate. Direct current lines, which are becoming much more prevalent, have almost negligible line losses. It is the existing infrastructure that incurs line losses. We can get back to you with more detail about line loss over distance.

The CHAIR: I would like that, because it is not something that we have looked at. We have heard that with Snowy Hydro 2 there are issues of transmission and capacity. It would be wise for us to be aware about what "line loss" means and its implications.

Mr ITALIANO: Sure. I am happy to come back to you with that.

The Hon. BEN FRANKLIN: I am delighted with your clearly very strong and overwhelming support for renewable energy zones. I think that is great. I am the Parliamentary Secretary for Renewable Energy, so good on you. You say that you are actively developing options for their development, including identifying potential geographic areas that meet the required criteria, including cost effective resources, suitable topography and market interest. My question is: when will that body of work be done, and will you be releasing it publicly?

Mr ITALIANO: We have done some of the work, which we have provided to the department here in New South Wales. We have mapped the renewable energy resource for the entire State, down to the square metre. We have also mapped what the current economic utilisation and the opportunity costs would be. That last bit is a relatively new criteria. What we are suggesting here is that putting a large volume of solar panels on prime arable land has an alternative economic cost to putting it on less arable or less usable land in other parts of the State.

The Hon. BEN FRANKLIN: Those areas are often more remote, which makes it a transmission issue.

Mr ITALIANO: What we are putting on the table are those criteria, so we are seeing the optimal economic outcome. We provided that information to the State Government. One of the important things that we would like to put on the table is that we do not want to be the transmission company proposing the location; we would like market forces to play a role. We would like the construction to take place at a sensible time. It is our role to build it once it is required, and in a location that has been determined. We are happy to provide information and advice on where the prospective places are, or where the lowest cost points of connection would be, but we do not want to be the ones making the decision.

The Hon. BEN FRANKLIN: No, indeed. But it will have to be done a little bit hand in hand because obviously the market will look at where you are looking at having the capacity to have the transmission.

Mr ITALIANO: Your other question about releasing the information to the market is a very good one. It is very sensitive information.

The Hon. BEN FRANKLIN: I understand that.

Mr ITALIANO: It has to be carefully managed, which is why we have not done that at the moment.

The Hon. BEN FRANKLIN: At the moment?

Mr ITALIANO: At the moment. At a suitable time obviously that information will need to be made available.

The Hon. JOHN GRAHAM: I might turn to prices and, I think, page 3 of your submission. That outlines a lot of the evidence that has been put in front of the committee over time. Your part of the graph stays under CPI, but you say, "We acknowledge prices are going up. It is not our fault." But it also clearly illustrates what the problem is. If you are a consumer you see that your bill has gone up very significantly. You are looking at CPI. I think the increase over the last seven or so years has been nearly 60 per cent on that bill. That graph really captures the dynamic. We have also had some of the key distribution companies giving evidence that it is not their fault that prices are going up. They have presented some reasonably strong evidence about their piece of the puzzle. What do you say is your contribution to the bill for an average New South Wales consumer?

Mr ITALIANO: Our price is approximately 1.1¢ per kilowatt hour.

The Hon. JOHN GRAHAM: As a proportion of the bill for a New South Wales consumer—

Mr ITALIANO: We think that that is around 3 per cent.

The Hon. JOHN GRAHAM: So your case is, "It's not our fault; we are keeping prices down. In any case we are a tiny part of the bill. It is not us when it comes to this very large increase in people's bills."

Mr ITALIANO: We are not trying to shift accountability. We have accountability for what we can control, which is transmission pricing. We are doing whatever we can to keep our prices down.

The Hon. JOHN GRAHAM: Where do you think the problem is? What are the drivers here, for people's bills?

Mr ITALIANO: Clearly, the supply chain includes generation, transmission, distribution and retail, but ahead of generation is primary fuel. Over the past 30 years Australia has done a lot to connect its primary fuel economy with the global energy market. We are the world's largest exporter of liquefied natural gas [LNG], the world's largest exporter of coal and we are the third largest exporter of uranium. We are a very strong exporter of energy and the primary fuel prices in Australia are as a result connected to global spot prices and energy prices. That is a part of the supply chain we do not have visibility of as a transmission provider. But no doubt that has played a role and no doubt we have seen a reduction in supply in the Australian energy system as traditional sources of generation are withdrawn, and any time you see a reduction in supply you see prices go up.

The Hon. JOHN GRAHAM: What you are really describing is a situation where we are an energy superpower but on this graph we are also an energy prices superpower. Both those things are setting at very high levels our primary fuel resources and also the increase in people's power bills.

Mr ITALIANO: There is no doubt Australia is blessed with energy supply. The vast majority of countries on earth grapple with energy security, both in the short- and long-term and it is a testimony to Australia's good fortune that we do not talk about energy security in those terms.

The Hon. JOHN GRAHAM: Do you wish to express a view about one of the issues that the Committee has had what I would describe as strongly competing views on, that is about the extent of competition in the energy sector and whether it is assisting or failing to assist in lowering people's power bills? Do you have any observations you wish to make about the state of competition in that sector?

Mr ITALIANO: I can say one thing that is related to transmission and competition in the sector is that the role of transmission is to connect supply with demand, and if there is an opportunity for us to bring new supply into the system, then that new supply will contribute to lowering prices by increasing competition. We use that as a critical criteria for proposing transmission investment.

The Hon. BEN FRANKLIN: Apart from the renewable energy zones that we have discussed, what else is being done by TransGrid to futureproof the grid for the energy transition that your final slide obviously highlights so well that we are clearly undergoing, and what else needs to be done?

Mr ITALIANO: TransGrid has undergone quite a significant change over the past few years as it prepared for privatisation and has gone through the change post privatisation. One of the things that is most notable is that the amount of money being spent by the business on augmentation, increasing the capacity of the system and accommodating growth is very low. It was $4 million last year and $5 million or thereabouts the year before. What we are doing is we are being far more circumspect and far more cautious about where we choose to make investments in growing the capacity of the power system, because we are in an environment that is uncertain and is undergoing quite a degree of change.

One of the changes that we have made is we have made sure that we look through the regulatory framework to understand where transmission investment can have a clear and enduring benefit to the consumer. In our part of the supply chain that is predominantly in helping to improve competition in the wholesale market by introducing new generators, or improving the reliability, the security of supply. There is nothing worse for a business than to see the supply going on and off regularly. It is very damaging to the efficiency of an industrial or manufacturing business. Those are the areas that we look for. We engage very strongly with our consumer base. We have a consumer representative panel and where we feel that we can make an investment that has a very clear and enduring customer benefit, we propose that as a discrete, standalone project.

That was a feature of our regulatory proposal in the last round. We had almost no augmentation in it. We had one project that we asked for immediate approval on, which was reinforcing the supply to the Sydney central business district, and we had nine projects that we said we would like to put them in as contingent subject to further scrutiny and further regulatory oversight. We see that as a prudent way of dealing with investment in the transmission system and linking it directly to customer outcomes. It is less of an engineering approach and more of a direct customer benefit approach to the way we are planning for the system. At the same time we are providing information around what we see as happening in the power system and the research that we have.

We are seeing energy demand growing. We are a little bullish on energy demand. We see it being more strongly correlated with the generalised system of preferences [GSP] than perhaps they have been talking about in the regulatory population over the last few years. We are providing that to regulators and making that contribution to the dialogue. We are also participating strongly in regulatory undertakings such as the integrated system plan and Dr Finkel's review. We have also taken the position in the transmission annual planning report, which we will be releasing on 30 June—it is a statutory obligation by TransGrid—to be a little more forthright in some of the observations and expectations we have of the power system.

The Hon. BEN FRANKLIN: On Dr Finkel's review and the uncertainty around the system at the moment, obviously it would be remiss of me not to ask if you had views you wanted to relate on the National Electricity Guarantee and particularly the consultation paper that came out on Friday. Is there anything that you wanted to share with the Committee about its implementation?

Mr ITALIANO: Our view is that the National Electricity Guarantee is a positive step in the right direction. We do not see it as being the endgame but we do see that it is valuable for all the participants along the whole of the supply chain to get behind a single framework or process for making decisions going forward. The National Electricity Guarantee provides us with a framework that is sensible and constructive and allows for clear decision-making to be based on empirical evidence. So we see it as a positive step.

The Hon. BEN FRANKLIN: I assumed so, I was just checking.

The Hon. TAYLOR MARTIN: We hear a lot about overinvestment, some refer to it as gold plating, that has taken place, say in the past 10 to 12 years. Would you be able to give the Committee an insight of TransGrid's experience with that period and some examples of how it has impacted on consumers?

Mr ITALIANO: Indeed, I can. If you look at slide three of the pack that we set before you, you can see there that by maintaining our price increases below consumer price index there is little evidence of overinvestment. It is true that during the period there is a bubble between 2010 and 2014-15. That bubble reflects the increased cost of capital as a result of the global financial crisis [GFC]. During the GFC and immediately post GFC the price for capital went up and during the regulatory period there was an increase cost of capital which was passed on. That was to ensure that TransGrid had the financial capacity to meet its debt obligations. As the cost of capital has come down post GFC, the prices have come down with it. It is not reflective of underlying costs in TransGrid. In fact, the underlying costs of TransGrid have remained relatively flat or declining relative to CPI adjustments over that period of time. It is and has been for some time now an efficient transmission company by comparison to the rest of the world, and something New South Wales should be proud of.

The Hon. BEN FRANKLIN: We are.

The Hon. TAYLOR MARTIN: One of the slides we looked at earlier illustrates the usage over a 12-month rolling period. There seems to be more than a 5 terawatt increase in usage in the past five or so years. What kind of wear and tear, if any, is that on? What is the marginal impact to TransGrid and the cost?

Mr ITALIANO: Utilisation of the system does pose some wear. However, the wear and tear that you might be referring to from an increment of that nature is not significant to the viability of the power system. It is reflected in our proposal—this most recent regulatory reset—where we put forward a repex, which is replacement and repair expenditure, that was lower than depreciation. That is what will see a reduction in the regulated asset base. We did not ask for a reduction in any customer service obligations so we are not anticipating that would have an adverse impact for consumers.

The CHAIR: Thank you very much for attending. Your silent partners did a great job. That support was immense when he drew on it. In the light of the evidence you have given, we may have some further questions. You will have 21 days in which to answer those. The secretariat will be pleased to assist. Will you table the slide show on paper that you gave? Are you happy to table that?

Mr ITALIANO: Yes.

The CHAIR: If there are no further comments, we thank you for presenting this afternoon.

Mr ITALIANO: Thank you very much.

(The witnesses withdrew)

(The Committee adjourned at 3.30 p.m.)