## 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

At Macquarie Room, Parliament House, Sydney, on Wednesday 10 October 2018

The Committee met at 10:58.

## **PRESENT**

The Hon. Paul Green (Chair)

The Hon. Lou Amato The Hon. Ben Franklin The Hon. John Graham The Hon. Adam Searle

The CHAIR: Welcome to the sixth hearing of the inquiry 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 respect to elders past and present of the Eora nation and extend that respect to other Aboriginals who may be present or listening online today. Today the Committee will hear evidence from the following government departments—the New South Wales Department of Planning and Environment, the New South Wales Office of Environment and Heritage, the Australian Competition and Consumer Commission, the Independent Pricing and Regulatory Tribunal and the New South Wales Minerals Council—and the following industry and energy expert groups—AGL Energy, Origin Energy and EnergyAustralia.

Before we commence I will make some brief comments about the procedures for today's hearing. Today's hearing is open to the public and is being broadcast live via the parliamentary website. A transcript of today's hearing, when it becomes available, will be placed on the Committee's website. 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 action for defamation. The guidelines for the broadcast of proceedings are available from the secretariat.

There may be some questions that a witness could answer only if they had more time or with certain documents to hand. In those circumstances witnesses are advised that they can take the question on notice and provide an answer within 14 days. Any messages from witnesses, advisers or members' staff seated in the public gallery should be delivered through the Chamber and support staff or the Committee clerks. To aid audibility of this hearing, I remind people that they can sit in the front seats, which are closer to the public address speakers. I ask everyone to turn off their phones or to switch them to silent for the duration of the hearing. I now welcome the Committee's first witnesses from the Department of Planning and Environment and the Office of Environment and Heritage.

KATHERINE HOLE, Executive Director, Energy Strategy, Department of Planning and Environment, on

MICHELLE DUMAZEL, Executive Director, Policy Division, Office of Environment and Heritage, affirmed and examined

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

**Ms HOLE:** I would just like to clarify the capacity in which I am appearing. I am here as the Executive Director, Energy Strategy. I am no longer the Acting Deputy Secretary.

The CHAIR: Thank you. If there are no opening statements, we will begin with questions from the Opposition.

The Hon. ADAM SEARLE: Since the last time we met, the State Government's policy has seemed to be focused on supporting the National Energy Guarantee [NEG] process being proposed by the then Commonwealth Government. Comparatively recent events seem to have overtaken that. While I understand from budget estimates that the National Energy Guarantee technically remains the position of the Council of Australian Governments [COAG] energy Ministers, my understanding is that at the next meeting of those Ministers the Commonwealth is expected to formally finish burying the NEG. That being the case, what is the policy framework that the New South Wales Government is pursuing, both as to energy security but also to bring forward new investment in energy generation?

Ms HOLE: Firstly on the National Energy Guarantee, there were two components: the emissions component and the reliability obligation. That was about making sure that retailers had the mix of supply that was going to support a reliable and secure energy supply over the medium term. My understanding—and it will be a matter for the Legislative Council, I understand, later this month—is that the reliability obligation component is still being examined. That is the important part of that package for securing supply and bringing forward the needed investment in dispatchable generation. That component is still being progressed.

Concurrently the New South Wales Government is also doing a lot of work on a transmission infrastructure strategy, which I know we have discussed previously. That work is progressing in conjunction with the Australian Energy Market Operator [AEMO] and there are a number of projects happening in that space. There is also, as we discussed previously, a lot of projects in the planning system coming down the pipeline to bring forward new generation. More recently, the Government announced a number of programs to support investment in new technologies. There is the \$55 million emerging energy fund program, which is being progressed at the moment as well.

**The Hon. ADAM SEARLE:** In terms of the transmission projects and the report, when will that work be likely to see the light of day? Later this year?

**Ms HOLE:** That is a matter for the Government as to when that will come forward.

The Hon. ADAM SEARLE: I am not trying to be difficult here, but is there any expectation that we will see it the side of Christmas, or is it just not known?

**Ms HOLE:** I think that is a matter for the Government as to timing.

The Hon. ADAM SEARLE: I suppose I should ask Ben.

The Hon. BEN FRANKLIN: I am looking at my papers and focusing very hard on this important piece of paper.

The Hon. ADAM SEARLE: Indeed, I understand. I am sorry to have interrupted. So we do not know, and that is fine. In relation to the projects that are working their way through the planning system, your submission said that 3,600 megawatts had development approval and around 6,600 megawatts was seeking approval through the planning system. Can you provide an update on those figures?

Ms HOLE: The latest figures I have from 1 September show there is a total pipeline of around 17,000 megawatts of planning approved or seeking planning approval. There are 15,500 megawatts of renewables—that includes 15,500 megawatts of renewables—and there is now a number of projects coming through with storage and renewables.

The Hon. ADAM SEARLE: I am happy for you to take this on notice. Can you give us a breakdown of how much already has been approved and break it down by renewables and others?

Ms HOLE: Yes.

**The Hon. ADAM SEARLE:** And could you break it down by how much is still seeking approval, again broken down between renewable and others.

**Ms HOLE:** I will take that on notice.

**The Hon. ADAM SEARLE:** Yes, of course. I think it was the case at budget estimates that 1,225 megawatts only were currently under construction here in New South Wales. Does that still more or less remain current? Again, I am happy for you to take that question on notice.

Ms HOLE: I will take that on notice.

**The Hon. ADAM SEARLE:** Cutting to the chase, if there are no emissions intensity target or no renewable energy target post 2020 agreed on at COAG, what mechanisms is the New South Wales Government considering or going to use to try to close the gap between the number of projects that have received approval or are seeking approval and what is actually being built on the ground? I ask the question because there is quite a big gap.

**Ms HOLE:** COAG was not going to agree on the emissions target.

**The Hon. ADAM SEARLE:** I know. That was going to be set by the Commonwealth. But it now seems that the Commonwealth is uncertain about that.

**Ms HOLE:** But COAG is looking at the reliability obligation, which is a core component of securing that investment. That is forward looking: in three years time, have we got the right generation mix? If not, we need to make sure the retailers are either contracting or investing to get that generation mix. As I have mentioned previously, the projects are in the system. It is about bringing forward the transmission to make sure those projects can be connected as and when they are needed.

**The Hon. ADAM SEARLE:** Transmission is not the only obstacle to these projects being brought forward, is it? There is also an investment problem.

**Ms HOLE:** Which the reliability obligation, should it be progressed, would help provide that investment certainty.

The Hon. ADAM SEARLE: It will help provide it but it will not necessarily fully provide unless there is some kind of other framework about driving emissions. The Commonwealth was always going to set the emissions target, but it is now not clear to me that that remains the position of the Commonwealth. Can you shed any light on that?

**Ms HOLE:** I am not able to comment on the Commonwealth's emissions target. As I have already mentioned, the Government is looking at an emerging energy fund and other initiatives, including initiatives on the demand side.

**The Hon. JOHN GRAHAM:** Can I ask about some of the progress on the new measures that the New South Wales Government had introduced. The first of those was the pilot being conducted by Service NSW with assistance to customers to switch retailers. Can you tell us where that pilot is up to?

**Ms HOLE:** I understand the Service NSW pilot is progressing, but it is being managed by the Department of Finance, Services and Innovation.

**The Hon. JOHN GRAHAM:** It is obviously an important trial for the Government. Are you keeping track of where it is up to? Can you tell us anything about it?

**Ms HOLE:** As I say, it is progressing. There have been a number of trials at Service NSW centres. I suggest that the Department of Finance, Services and Innovation is probably a better place to provide the update on that program.

**The Hon. JOHN GRAHAM:** Can you give us any information on the second aspect of that where retailers have been required to use all reasonable endeavours to inform and assist customers receiving a rebate to identify the most appropriate market offer?

**Ms HOLE:** Yes. That is with the Department of Planning and Environment because that was implemented through the code for social programs and we are working with the retailers at the moment to look at the impacts of that particular measure.

**The Hon. JOHN GRAHAM:** Retailers were required to report. Has that reporting already taken place since the program commenced from January 2018?

**Ms HOLE:** There is work in progress on that matter at the moment.

The Hon. JOHN GRAHAM: What does that mean?

Ms HOLE: There is further work. If you want further details about where that is up to, I will have to take it on notice.

The Hon. JOHN GRAHAM: Do you know whether retailers have been required to report?

Ms HOLE: Retailers are required to report regularly on the rebates program, including all those measures in the code for social programs.

The Hon. ADAM SEARLE: On that, they are required. By what mechanism are they required and where is the reporting and where can we see the contents of the reports?

**Ms HOLE:** The mechanism is through the code for social programs, which is a regulatory obligation.

The Hon. ADAM SEARLE: Is it legally binding on them?

**Ms HOLE:** It is legally binding on them.

The Hon. JOHN GRAHAM: Where is that information available?

Ms HOLE: I would have to take that on notice.

The Hon. JOHN GRAHAM: If you could let us know on notice what reporting has occurred, where that information is available and what the results of that reporting are in terms of the number of customers who changed offers, for example.

Ms HOLE: Yes.

The Hon. JOHN GRAHAM: I was interested in the report of the Australian Competition and Consumer Commission [ACCC] and we will talk to them shortly about that. One of the things that we will look to do today is try to understand some of the differences in the analysis of the Independent Pricing and Regulatory Tribunal [IPART] and the ACCC. There is a different view of the world, so we will be testing that. I wanted to ask about these things relating particularly to retail margins. You accept the fact that the retail margins in New South Wales are higher than is the case around most of the rest of the country, as the ACCC work now shows? That is an agreed

Ms HOLE: With retail margins there are a number of ways to calculate. The biggest issue for us—and that is what the IPART has looked at as well and they have flagged that they do not see any further work required in this space—is making sure that we monitor and watch them and that customers are on the best available deal.

The Hon. JOHN GRAHAM: Understood.

The Hon. ADAM SEARLE: It is all value neutral, though, is it not? It is process driven. It is not about driving prices down. The IPART seems to be putting the view that electricity prices have either remained static or indeed have fallen, which is completely contrary to the ACCC's work and it is certainly contrary to every householder and small business that I have spoken to. Does the department have a lot of faith in the IPART's work in this place?

Ms HOLE: You will be talking to both the IPART and ACCC later today. The IPART has been clear about its time frame since deregulation, but it has also acknowledged that over the past 10 years there have been substantial increases in price rises. Again, the focus has either been on the network component where there has been a lot of work undertaken to reduce the network component of bills or on the wholesale price, which is again why the Government has been looking at trying to bring forward new investment in generation.

The Hon. ADAM SEARLE: On that, I am not trying to be difficult, but you have not really given us any indication as to how the Government or what mechanisms the Government is looking to use to bring forward this new investment. It seems to me that 75 per cent of our energy today comes from coal-fired power stations. Over the next 15 years the vast majority of the power they provide New South Wales is likely to or will retire. We seem to have a difficulty bringing forward the new investment. Can you tell us what strategies and policies the New South Wales Government is pursuing or is considering to bring forward that new investment and, in particular, is it looking at what Victoria and the Australian Capital Territory, for example, have done through so-called reverse option approaches?

Ms HOLE: I would say there is new investment coming forward. There has been about 300 megawatts of new generation commissioned this year and my understanding is that there is another 1,200 megawatts currently under construction. That is in place. Then looking to the future, again, the focus is on the reliability obligation and transmission strategy and the Government's recent announcements about an emerging energy fund and support for other technologies at the small-scale end.

The Hon. ADAM SEARLE: Again, I am not trying to be difficult, but if we look at what is likely to exit the system over the next 10 to 15 years and we are looking at the rate at which new power generation in New South Wales is being commissioned, you do not have to be a mathematical genius to work out that we are likely to face a shortfall. What is the State Government doing to close the gap?

Ms HOLE: Again, the State Government is looking at bringing forward or working on the development of the transmission strategy to increase our resilience through interstate connections plus connect the generation intra State. It is investing in a range of technologies to help them come forward and nationally it is looking at the reliability obligation.

The Hon. ADAM SEARLE: When you say "investing", that is the \$55 million?

Ms HOLE: Yes.

The Hon. ADAM SEARLE: That is all?

Ms HOLE: There is a range of programs at the small-scale end for solar as well. As I have mentioned, there is also a range of demand management and energy efficiency programs which the Office of Environment and Heritage is managing.

The Hon. ADAM SEARLE: I am happy for you to take this on notice, but can you tell us what is the total figure of New South Wales government investment in new energy generation?

Ms HOLE: I would like to take that on notice.

The Hon. JOHN GRAHAM: Just continuing on those questions about the retail margins, I want to check that you accept that the New South Wales retail margins are the second highest in the country, based on ACCC work.

Ms HOLE: The ACCC has done its report and analysis on retail margins and that is their findings. As I have mentioned, there are a number of ways of calculating this. The importance is keeping those margins down.

The Hon. JOHN GRAHAM: I certainly agree with that. You accept that on the ACCC work on the international retail net margins that New South Wales compared to almost any other developed economy has some of the highest net retail margins in the world. You do not disagree with that finding of the ACCC?

Ms HOLE: The ACCC has done a lot of work. They had a lot of information-gathering powers that calculated the retail margin.

The Hon. JOHN GRAHAM: It is really unprecedented. That is the first time we have been able to get that level of scrutiny, is it not?

Ms HOLE: No. The Independent Pricing and Regulatory Tribunal [IPART] has done work previously in this space as well.

The Hon. ADAM SEARLE: Except IPART readily acknowledges they do not have the powers of the ACCC, and in their most recent draft report issued last week they say they see no value in looking at retail margins. It seems to be a matter of complete indifference to IPART.

**Ms HOLE:** Yes, and you might like to discuss that further with them.

The Hon. JOHN GRAHAM: We certainly will. But given the varying views of the world, I am just interested to give you the opportunity to give an agency view about that. I also wanted to turn to that question about separate to the net retail margin, just the actual international prices of power. You do not disagree with any of the ACCC's findings on that matter that show that again New South Wales is really the top of the league table when it comes to nominal international prices. There are three countries above us—that is, Denmark, Germany and Spain—then next on the league table would come New South Wales. You do not disagree with any of that?

**Ms HOLE:** The ACCC has done its analysis and on the approach they have taken that is their table.

The Hon. BEN FRANKLIN: If we could go back to the transmission strategy? You said at the beginning of your evidence that there are a number of projects under that that are being developed. Can you give us more information about the specifics of what is being done under the transmission strategy?

Ms HOLE: It is building on the work of the Australian Energy Market Operator. The Australian Energy Market Operator has put forward a number of projects, some of which can be implemented quite quicklycertainly ahead of Liddell's closure—such as upgrades to Queensland, upgrades to Victoria. As people may be well aware, the South Australian Government's priority is to develop the new South Australia-New South Wales interconnector, which will have benefits into the south-west of New South Wales in terms of supporting the energy

zone in that area. The South Australian Government has also provided money to TransGrid to undertake early planning works. Then there are a number of projects intrastate to connect the New England energy zone and the central west energy zone. They are all being explored.

The Hon. BEN FRANKLIN: Like what? What sort of projects?

**Ms HOLE:** Earlier this year the Government announced that in relation to AEMO's work it was looking at three energy zones—in the south-west, central west and northern areas of New South Wales. It is looking at how to increase connection capacity to those three areas. This would be in addition to anything that comes out of the Snowy 2.0 work as well.

**The Hon. BEN FRANKLIN:** Just to go back to your point in terms of connecting the New England one and the central west one, what specific plans are in place for that?

**Ms HOLE:** That is part of the strategy that is being developed, looking at what are the options and how to do that in a cost-effective manner, and timing.

**The Hon. BEN FRANKLIN:** Can we move to the Emergency Energy Fund? Can you give us some more details around that, particularly the timing but also the likely sorts of initiatives which are able to be funded under this new initiative?

**Ms HOLE:** The Emergency Energy Fund is looking at what dispatchable technologies could be brought forward—for example, pumped hydro and some of those more innovative-type projects such as floating solar—and further details on that will be released later this year.

The Hon. BEN FRANKLIN: So this year?

Ms HOLE: Yes.

The Hon. BEN FRANKLIN: Great. I will move to one other issue, and that is on our preparedness for summer. Can you give us some indication of the work that is being done both broadly, and I am happy for you to talk about what you mentioned earlier, demand management and energy efficiency as well. I am interested to know about that too within the summer context and more broadly. Obviously there is potential community concern about ensuring that all the lights stay on and the air conditioners stay on in summer. What work is being done to ensure that happens?

**Ms HOLE:** This is now the second year of the Government's project jointly with AEMO, the Australian Energy Market Operator, to support demand response. Over summer that will increase to 70 megawatts this year. The Government is again working closely with AEMO to make sure generators, transmission, are ready and available for summer and that work relating to maintenance does not take place during peak periods, and, again, the Government does a lot of work on its own government demand response during peak periods as well.

The Hon. BEN FRANKLIN: Just on energy efficiency, what work is being done there?

**Ms DUMAZEL:** There are quite a few programs that we have that are funded through the Climate Change Fund [CCF] for energy efficiency. Last year we had a package that was announced around energy affordability. Some key features for that one is there are discounts for concession holders in terms of if they are wanting to replace a fridge or a TV so they can get more energy-efficient products so they will get the bill savings, but also in terms of energy demand if they have got the energy-efficient appliances that is really helpful.

The Hon. BEN FRANKLIN: It is a great program. What sort of take-up have you had on that?

Ms DUMAZEL: We have had 36,000 appliances in almost 30,000 homes that have been delivered, that is with the appliance replacement program. In actual fact we are seeing \$4.7 million in energy bill savings each year as a result of that program and also, in terms of energy savings, that is over 20,000 megawatt hours. We also have some programs for social housing and public housing to try and make those houses more energy efficient, and that was part of that package last year as well. Recently, in August this year, there was also some support for low-income renters and that is around, say, energy-efficient products for air conditioners, heaters and lighting. So that is going to help as well.

The Hon. BEN FRANKLIN: What about energy efficiency on government property?

**Ms DUMAZEL:** Energy efficiency on government property, one of the aspects that was recently announced was in relation to solar and having rooftop solar on government buildings. We have this government resource efficiency policy which we are currently updating, and that includes a target for installing rooftop solar photovoltaic [PV] on government buildings, and that is expected to generate 25,000 megawatts a year by 2021.

**The Hon. LOU AMATO:** Thank you both for coming in today. You will have to excuse me, I am just filling in for another member. Can I ask a question in regard to renewable energy? In regard to solar and wind, what percentage on average per day do they generate? If you do not know the answer you are welcome to take it on notice.

Ms HOLE: I will take that question on notice.

**The Hon. LOU AMATO:** Would you say that investment in renewable energy outweighs and also significantly contributes to the high cost of electricity to consumers, and particularly working-class families, those from a low socioeconomic background and our Indigenous communities?

**Ms HOLE:** Renewable energy is now the lowest-cost new build generation coming forward. There have been a number of comments on past government policies in relation to the cost of renewables.

The Hon. LOU AMATO: Is that just solar?

The Hon. ADAM SEARLE: Wind energy is the cheapest, but solar is very close behind.

The Hon. LOU AMATO: Is it?
The Hon. ADAM SEARLE: Yes.

Ms HOLE: Yes.

The Hon. LOU AMATO: You mentioned 17,000 megawatts awaiting approval.

**Ms HOLE:** In the planning system or awaiting approval. We have been asked to provide a breakdown of what is approved versus what is still going through the planning system. I have agreed to come back on that.

The Hon. LOU AMATO: Do we know the locations?

Ms HOLE: Yes, we do. That is all projects—coal and gas as well.

The CHAIR: I refer to developing the transmission strategy. How long has that been going on?

**Ms HOLE:** I think the Minister announced it. I will have to confirm the exact date, but it would have been mid-year.

The CHAIR: That is pretty late.

Ms HOLE: It is building—

**The Hon. ADAM SEARLE:** Correct me if I am wrong, but I believe it was in the wake of the Integrated System Plan [ISP].

**Ms HOLE:** Yes. There has been a lot of work going on nationally for an extended period through the AEMO's ISP. The Minister has been progressing that work through the Council of Australian Governments Energy Council as well because it is tied up in the national framework both through the regulatory approvals and AEMO. This is the next step in how the New South Wales Government builds on that work.

**The CHAIR:** When is it anticipated that that will be delivered?

Ms HOLE: As I discussed—

The CHAIR: This year or next year?

Ms HOLE: —it is a matter for the Government.

**The CHAIR:** Before the election?

**Ms HOLE:** It is a matter for the Government.

**The CHAIR:** Beautiful answer. Is it appropriate for you to answer questions about the Climate Change Fund?

Ms HOLE: It depends on the question. Ms Dumazel may have to answer.

**The CHAIR:** How much has been collected by the fund in the past 12 months and how much has been used for hardship situations or grants? I would like a breakdown of where that money has gone, or if it has gone.

Ms DUMAZEL: I will have to take the first question on notice because I do not have that—

**The Hon. ADAM SEARLE:** I understand that \$280 million a year is collected but much less is spent.

Ms DUMAZEL: In terms of the average household, it is \$23. There are savings of around \$61 on average per household. We have some programs we are looking at to support low-income households. The program that supports energy efficiency for low-income renters was announced in August this year. That is expected to save about \$400 a year for those households. We also have the replacement appliances program. That has had some really solid outcomes for low-income households and concession card holders. It is a very targeted program. Overall we have the work that we do for social housing and public housing. That is targeted to support the tenants in those buildings.

**The CHAIR:** How do we define "low-income households"?

Ms DUMAZEL: Each program has criteria, but I do not have that information with me now.

**The CHAIR:** There is not a dollar figure?

Ms DUMAZEL: I do not know the answer.

The CHAIR: Can you provide the definition of a low-income household?

**Ms DUMAZEL:** I am happy to take that question on notice. Quite a lot of work occurs in the development of each of our programs to ensure they are targeted to those most in need and those who can benefit most.

The CHAIR: There are many asset-rich people who are cash poor, especially those raising kids.

**The Hon. JOHN GRAHAM:** I also want to ask some questions about the transmission strategy. You have answered questions about the timing. I want to ask about the process for that strategy. Is it correct that it is being led by TransGrid?

Ms HOLE: No, that is not correct.

**The Hon. JOHN GRAHAM:** How is the transmission strategy being developed and what is the process for the sign-off inside government? Can you describe that?

**Ms HOLE:** Obviously it is being developed in consultation with TransGrid because it is the transmission operator. In terms of the sign-off process, as I said, it is a government strategy and it is a matter for the Government.

**The Hon. JOHN GRAHAM:** I am asking about the process not the strategy. What is TransGrid's role in that process?

**Ms HOLE:** As with any stakeholder, it works on the Integrated System Plan. It is also the transmission planner for the State. We draw on expertise.

**The Hon. JOHN GRAHAM:** I am trying to understand how those two things interact. You are saying it is a government strategy, but that TransGrid is the transmission planner for the State. How do those two things interact?

**Ms HOLE:** TransGrid is the transmission planner for the State. It publishes its reports, so they are available to everyone with the detailed technical information.

**The Hon. JOHN GRAHAM:** When the Government sets its transmission strategy, it will look at those reports. What is the sign-off process for the Government's transmission strategy?

Ms HOLE: I do not have further information on that.

**The Hon. JOHN GRAHAM:** I am simply asking about the process. I do not think it is particularly complicated.

**Ms HOLE:** I appreciate that and I am happy to get back to you. I am not leading the work on the transmission strategy.

The CHAIR: Are you saying you do not know, or are you saying you do but it is someone else's portfolio?

**Ms HOLE:** No, it is the Minister's portfolio. Mr O'Reilly has appeared previously, but unfortunately he is away this week and could not attend today. He is better able to talk on that.

**The Hon. JOHN GRAHAM:** I am happy for you to take the question on notice. I am simply trying to understand the process and I will explain why. As you describe those transmission decisions, they have a very big impact, particularly across the south-west of the State. They have a huge impact on regional communities. I am interested in the government process for sign-off as those decisions are made.

**Ms HOLE:** I fully appreciate that. Any transmission project that is built must go through planning approvals and all the relevant obligations, information disclosure and oversight that comes with that process.

**The Hon. JOHN GRAHAM:** I would appreciate some information about exactly what is the usual government process.

The Hon. ADAM SEARLE: The ISP identifies how much saving in new investment in new generation could be yielded by certain strategic investments in upgraded transmission. Should we expect the work now being done in the agency to look specifically at where and how much investment should occur in the transmission system within New South Wales? Would that be one of the things we would expect from this work? Or will it simply provide us with an investment road map about what can be done in this area?

Ms HOLE: The strategy is still being developed to determine the final product.

**The CHAIR:** Thank you for appearing before the Committee today. In light of the reporting pressures, you will have 14 days in which to provide answers to questions on notice. The secretariat will assist with that.

(The witnesses withdrew)

BAETHAN MULLEN, General Manager, Economic Group, Australian Competition and Consumer Commission, affirmed and examined

SIMONE WARWICK, Acting Deputy General Counsel, Mergers and Authorisations Law, Australian Competition and Consumer Commission, sworn and examined

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

Mr MULLEN: By way of introduction, I thought it would give a brief overview of the Australian Competition and Consumer Commission's retail electricity pricing inquiry. I have a copy of the final report from the inquiry, which I would like to table.

**The CHAIR:** Awesome. That would be great.

The Hon. ADAM SEARLE: That has not been released publicly yet, has it?

Mr MULLEN: It has; it was released in July. Unfortunately, it is 400 pages so I was not able to bring copies for everyone, but I am happy to table that. The ACCC's inquiry was a 15-month long process. It commenced at the direction of the then Federal Treasurer in March 2017. We handed this report to government on 30 June 2018. The terms of reference for the inquiry were broad but essentially required us to establish what was driving retail electricity prices in the National Electricity Market.

Our task was to explore the entire supply chain and the contributions that each stage of that chain made in prices for electricity customers. In undertaking this task, we made extensive use of compulsory information gathering powers available to us under the Competition and Consumer Act. We issued over 100 notices throughout the inquiry, mainly to retailers but also to generators in the industry. This gave us access to nearly 50,000 internal documents from retailers and generators and extensive datasets, which we used in the inquiry. We held extensive public consultation as well, including receipt of over 150 submissions, attendance by around 250 people at public forums in Brisbane, Sydney, Melbourne and Adelaide, and many meetings with industry, government agencies, consumer groups and businesses.

One of our main tasks was to establish what had driven retail electricity price increases during the past 10 years. In New South Wales, prices rose 52 per cent in real terms over that period. Of this increase, 42 per cent was due to network increases, 29 per cent to retail margin increases, 22 per cent to wholesale cost increases, 5 per cent to environmental cost increases and 2 per cent to retail cost increases. As you can see, our findings were that each stage of the supply chain has contributed and there are many underlying causes. Retail and generation markets are concentrated and dominated by a few large firms in most regions. There has been overinvestment in networks due to increased reliability standards and a regulatory regime that made it difficult for the regulator to oppose network spending.

Environmental policies have sometimes been poorly designed—for example, granting solar photovoltaic [PV] customers excessive feed-in tariffs, the costs of which were borne by all other customers without solar PV. For consumers, the market is difficult to understand and navigate. Retailers have implemented pricing structures that do not allow for easy comparison of products and consumers have not been able to engage in the market. Some consumers have been left on excessively priced standing offers. Our report has made 56 recommendations, which we see as the blueprint for solving these problems. We are now working with governments and industry to implement a package of reforms. With that, I am happy to take any questions.

**The CHAIR:** My first question is about expensive feed-in tariffs. Were they about 60¢?

Mr MULLEN: Indeed, yes.

**The CHAIR:** That was a methodology mistake, from the sounds of it.

Mr MULLEN: Yes, what we would say is that those costs should be borne by the taxpayer, if that policy is to be implemented, rather than spread across electricity users. The customers getting the benefit of the tariff are obviously doing okay, but everyone else is paying for that benefit.

The Hon. ADAM SEARLE: But that scheme closed some years ago now.

Mr MULLEN: In New South Wales it has closed, that is correct.

The CHAIR: In what States is it alive?

Mr MULLEN: I believe it is still alive in Queensland, Victoria and South Australia. The schemes are closed to new entrants, but they remain paying out for a number of years.

**The CHAIR:** Were their feed-in tariffs around 60¢?

Mr MULLEN: In a similar region, I believe.

The Hon. ADAM SEARLE: In your recommendations you have costed saving on electricity bills for the average household of about 24 per cent. The report says that similar savings can be expected for small businesses. Can you step us through the mechanisms that would result in that? I know, for example, the centrepiece is the default offer set by the independent regulator, the Australian Energy Regulator [AER]. How would that work in practice?

Mr MULLEN: Sure. Do you want me to take the default question first?

The Hon. ADAM SEARLE: Yes, please.

Mr MULLEN: One of the key findings of the inquiry was that customers who were left on standing offers are paying excessive prices, essentially. That is a function of, over time in markets that have been deregulated, the dominant form of pricing by retailers being to advertise discounts. Those discounts are offered off their own standing offer.

The Hon. ADAM SEARLE: Not off what customers are actually really paying?

Mr MULLEN: Some customers are paying the standing offer, but certainly not all; in most regions now it is in the order of 10 per cent to 20 per cent of customers. Discounting off the standing offer is the main form of pricing.

The Hon. BEN FRANKLIN: Just to confirm, 10 to 20 per cent are paying the standing offer?

Mr MULLEN: Correct, yes. Those customers who are left paying the standing offer prices, which are very high, are obviously not doing well in the market. Our intention with the default offer concept is essentially to regulate that standing offer price down to a more reasonable level. That would mean for those customers who do not shop around, or perhaps cannot shop around, and find themselves left on the standing offer, they are not being unduly penalised for that. There would be a second objective with setting a regulated price, and that is to have a common reference point for discounts in the market, whereas at the moment you have retailers each setting they discounts with reference to their own standing offer. Under this model you would have reference to a common point, and that would have customers more easily able to compare between retailers and compare discounts between retailers and therefore know which is going to be better for them.

The Hon. ADAM SEARLE: You mentioned that customers had difficulty comparing offers made by different retail companies. Would there be benefit for the market in requiring retailers to have a basic way of comparing, like kilowatts cents per hour? If you go to the supermarket, you get butter in all different sizes, but there is a cents-per-gram measurement so you can compare the different offers. Why should energy retailers not be required to do the same?

Mr MULLEN: We certainly looked at that option as part of this inquiry and that was essentially the key alternative to what we have proposed. The challenge with that model is that a kind of reference price similar to what operates in the banking sector with comparison interest rates is what we looked at. The challenge there is because energy users are very diverse in the amount of energy they use there is no way to capture that in a single price. Typically the components of an energy price include a fixed component and a variable component, and those that use a lot of energy the fixed component is a small proportion and those that use a small amount of energy the fixed component is a large component of their bill. Trying to distil that down into a price that is meaningful for a large range of different energy users is essentially impossible.

The Hon. ADAM SEARLE: Perhaps we are talking at cross-purposes. Let us suppose I am shopping around for a good energy deal. I have all of my energy bills for the last 12 months. If I go to each of the different retailers and say, "You can see what I am using; you can see when I am using it". Each of the retailers should be able to give me a meaningful comparison. They should be able to say, "We can offer you a product that will have you not spending this much but that much"?

Mr MULLEN: Indeed.

**The Hon. ADAM SEARLE:** They have all the information and can run it through their system. Why should not that be a requirement on retailers?

Mr MULLEN: I do not disagree that should be something retailers are able to do. What I am talking about is trying to generalise that in a price that can be represented in advertising, for example. I agree that retailers should be able to tell a customer who approaches them and provides their own usage what they are going to end up paying, that is true. My understanding is that many retailers do offer that.

The Hon. ADAM SEARLE: Not as many as you would hope.

Mr MULLEN: Not as many as I would hope, of course. The challenge is trying to make that easy for consumers. There are tools out there. The AER has a comparison website called "Energy made easy", which seeks to bring all of that information together in one place so consumers can input their usage and get a list of various offers tailored to their own usage, and there are private sector services that attempt to do similar. I agree with the substance of what you are saying.

The Hon. ADAM SEARLE: Where are you up to in terms of talking to government about the implementation of the range of recommendations made in your report?

Mr MULLEN: I would say it is fairly preliminary. The report, as I said, came out in July and so we have held a number of discussions with relevant departments, both Commonwealth and State, mainly to talk about what our intention is with the recommendations and to explain in more detail why we landed in the place we did on various recommendations.

The Hon. BEN FRANKLIN: Can you give us specifics on what engagement you have had with the Federal Government and where that is likely to be heading?

Mr MULLEN: The Federal Government I would have to take on notice. The Commonwealth Department of Environment and Energy we are in regular dialogue with, on a weekly basis, to talk about progress on implementing the range of recommendations.

The Hon. BEN FRANKLIN: Could you take on notice getting us whatever information you can about the engagement you have had with the Federal Government about the implementation of these recommendations?

Mr MULLEN: Yes.

The Hon. ADAM SEARLE: In your report you talk about retail margins being quite high in the energy retail market. What are the energy retail margins roughly in New South Wales? Just so you are aware, we had evidence from Associate Professor Bruce Mountain who talked about retail margins generally being quite high, a lot higher than in many other lines of business. In evidence to this Committee he estimated something like up to 20 per cent of a household energy bill does represent the profit margins alone, not just the total cost for retailers but the profit margins. That seems to me to be very, very high and not sustainable if we are to have affordable energy.

Mr MULLEN: Our estimates from our report for gross retail margins, which is profits and costs, is 18 per cent in New South Wales and that includes 10 per cent for the retail margin and 8 per cent for retail costs.

The Hon. ADAM SEARLE: A 10 per cent retail margin, that is a lot higher than a lot of businesses are making in terms of return on investment. That is a very high margin, you cannot get that if you take your money to the bank, can you?

Mr MULLEN: It is certainly higher than we would like to see and that is a driver of our recommendations.

The Hon. JOHN GRAHAM: Thank you for the work you have done in the reports. We have taken evidence earlier on in the inquiry which directed us to the work you are going to do and it is tremendously useful to have this report in front of us when trying to weigh up these considerations. I want to put that on the record. One of the things we will turn to later in the day is the information that the Independent Pricing and Regulatory Tribunal [IPART] will put in front of us which seems to contradict, or seems to be pointing in a different direction to the ACCC findings in the direction of prices. They are measuring over different times and presumably some differences in methodology, but IPART will arrive later in the day and tell us that in fact real prices have fallen in New South Wales over the last five years or so. Obviously that is dramatically at odds with the numbers that are in your report showing bills up significantly in real terms, prices up even more significantly, more than 50 per cent in real terms. Could you give us a view about why those differences exist as we are looking at those two very different conclusions?

Mr MULLEN: I am not specifically familiar with the IPART numbers. I understand there was a report released not too long past, last week.

The Hon. JOHN GRAHAM: A recent draft report.

Mr MULLEN: I apologise, I am not familiar with the contents of that. I do expect that the time period is a significant factor there. We have looked at 10 years. If they have looked at a more recent period that will make a difference. In addition, our data ran to 2017-18 and so if they have more recent data that could be a factor as well. The source of the data, I am not familiar with IPART's methodology, but I can explain our methodology if that might help.

**The Hon. JOHN GRAHAM:** That would be helpful. Any observations you have about the methodology that has been used in the past by IPART or others to look at some of these issues and what you have been able to do. You have been able to go further behind the corporate veil than before.

Mr MULLEN: Yes.

**The Hon. JOHN GRAHAM:** That is the view that has been put to us by other witnesses. If you could talk us through your methodology and what you have been able to do that has not been done before?

Mr MULLEN: As I said in my opening remarks, we had access to compulsory information gathering powers under the Competition and Consumer Act and that is a key difference between the work we have done and the work of other agencies. Other agencies sometimes are able to compel information but other times have to rely on voluntary information. We were able to compel from retailers representing I believe it was over 90 per cent of the market data that went back to 2007-08 that essentially went to their revenues and a detailed breakdown of their costs that they incurred in each of the years we examined.

Putting that picture together enabled us to prepare the analysis we have in the report, which shows the average bill for a residential customer and a small to medium enterprise customer and also to create an average price faced by those customer groups as well. That respectively is done by dividing by the number of customers and by the amount of energy used. We think it is a pretty high quality data source. We did a lot of work with the retailers in understanding businesses and how they recorded this type of information across a large range of retailers. We did a lot of work in quality assurance in the data that they contributed because we were able to compare across a large number of retailers. That gave us a high level of confidence that what we were looking at is accurate.

**The Hon. JOHN GRAHAM:** I am cautious about the different time periods. If we were to ask you on notice to provide information about a shorter time period than the 10 years you have looked over, would you be able to provide us with that information?

Mr MULLEN: I am happy to take that on notice. As a general comment, there are some challenges in getting data outside of that presented in the report, due to the confidentiality arrangements, but I am very happy to take that on notice.

The Hon. JOHN GRAHAM: That would be very useful for the problems we are trying to drill down to. So that you understand on the face of it the difference, and the detail of this is very confusing, your report is telling us electricity prices in New South Wales have gone up in real terms 52 per cent over the decade, and we have got a draft report from IPART saying they found electricity prices on average since 2013-14 have fallen in real terms. There are always some differences in methodology and emphasis, but that is a massive gap. Frankly, I am struggling to understand how they could be so far apart, even taking into account there are two different time periods. That is really what the issue is here. I do not know if you have any other observations? I think you have answered that.

**Mr MULLEN:** I am happy to take further questions on it if you have them.

**The Hon. JOHN GRAHAM:** On the methodology question, do you have any perspectives from an ACCC point of view about the previous work that IPART has done, their methodology, that you can share with us, or is that not something you have looked at in detail?

Mr MULLEN: I think that is correct. In designing our requests and setting up how we would go about this task we did look at how the State regulators collected data, and also spoke to the Australian Energy Market Commission, who do a similar exercise as well, to get a feel for what was already being done and how we could improve on that. But I do not have specific comments on the IPART approach.

**The Hon. JOHN GRAHAM:** But you will happily sit here and say that you have looked at that information and you would defend your process as superior, to be fair though, based on the superior powers you have had to reach into these companies?

**Mr MULLEN:** Our view is that the powers we have had and the access to information we had put us in a very strong position to get an accurate picture.

The Hon. ADAM SEARLE: Those increases are across all customers, including the big energy users?

**Mr MULLEN:** We did collect data for three customer groups; residential, small and medium-sized enterprise, and large commercial and industrial [C&I] customers. That covered the whole market.

The Hon. ADAM SEARLE: A number of the medium to larger businesses that I have been talking to who use brokers to get their energy contracts, sometimes for two or three years, in the last couple of years have been coming to me saying the contract is up, the best their broker can do for them in terms of their energy needs is a 100 per cent increase, or in a couple of cases in terms of light and heavy manufacturing in the Hunter, 160 per cent increases. This has occurred over the last couple of tranches. They are well in excess of the 52 per cent real increases you are talking about.

**Mr MULLEN:** Yes. There are a couple of factors driving that. One is, as you say, they can be two-to three-year contracts. Some of these businesses fortuitously, or through good business practice, locked in a good price—

The Hon. ADAM SEARLE: Yes, so all a catch-up.

Mr MULLEN: —at a point in time, and when they rolled off those contracts they were facing a bit of a shock in the new environment. The very large customers tend to be more exposed to wholesale movements, and network costs make up a larger proportion of their bill. To the extent that they are going up, and they have significantly in recent times, they will wear that more significantly than smaller customers.

**The Hon. ADAM SEARLE:** With the potential cost savings for customers as a result of implementation of your recommendations, do you feel that 24 per cent is a robust figure? Do you feel confident about the methodology by which you have reached that figure?

**Mr MULLEN:** That is our best attempt at quantifying the effects. We recognise that this is a market where there are a lot of moving parts, but yes, we have certainly attempted, to the extent we can, to go through each area of the supply chain, each of our recommendations that can be quantified and tried to attach a number to that.

The Hon. ADAM SEARLE: If done carefully, sensibly, those savings should be able to be achieved?

Mr MULLEN: That is our view, correct.

The Hon. JOHN GRAHAM: Your market monitoring role will commence in March 2019. Is that correct?

**Mr MULLEN:** The direction was given to us in August of this year and was to commence the work immediately. Our first report is due to government by 31 March 2019.

The Hon. JOHN GRAHAM: Part of the reason why that has happened is based on this work you have done. The Government has looked at this and said it is of a high quality and has asked you to continue that. I note that in the IPART draft report it has conceded that point, and one of the recommendations of that review is that the State government close its own price reporting and monitoring process. What IPART points to in particular is your power to obtain compulsory information, including the full information that you were able to access for retail margins. Those two things are the key advantages you have had.

**Mr MULLEN:** We agree that the powers we have and the ability to get information in this market puts us in a strong position, that is right.

**The Hon. JOHN GRAHAM:** That role you have got is now an ongoing monitoring role?

Mr MULLEN: The direction we have been given is for seven years, running through to 2025.

The Hon. JOHN GRAHAM: How often will you report?

**Mr MULLEN:** Under the direction we are to report to government at least every six months.

The Hon. JOHN GRAHAM: Is that a public report?

**Mr MULLEN:** It is typically a public report. The way these inquiries typically work is there is a report to the Government, and the Government releases the report shortly thereafter.

**The Hon. JOHN GRAHAM:** I return to my earlier question about it being harder than you would like at the moment for consumers to take their details to a retailer and get information about what an alternate offer might be. One of the things your report flags as a medium-term way to tackle that is to strengthen consumer rights about that data through a consumer data right.

Mr MULLEN: Yes.

**The Hon. JOHN GRAHAM:** That is seen as a significant potential driver in this area—and on the face of it I would agree with that—but it is seen as being more a medium-term driver of impact because of the barriers

that are in place at the moment to that really taking effect. Can you talk us through: What are the hurdles? Why is that? Why can we not drive that agenda more rapidly right now?

Mr MULLEN: I think most of the reasons are technical in nature. The data that we think would be of significant use to consumers is that that comes from their smart meters, those that have them installed, and that is not the case across the country, across the National Energy Market [NEM]. There was a mandatory rollout in Victoria, which means most customers have smart meters, but in the other States it has generally been slower. That is a barrier in that the data does not actually exist in a lot of places. The other barrier is more technical in nature, in that essentially there is no uniformity in the way the data is collected and presented to consumers. There needs to be established a way of doing that.

**The Hon. JOHN GRAHAM:** That is a classic problem in this area, which is fundamental to giving consumers that data right. What is the plan to tackle that second part of the problem?

**Mr MULLEN:** There was a Productivity Commission recommendation to take action in this area. The Government announced earlier in the year, I believe, that the Australian Competition and Consumer Commission would be tasked with taking some of that work forward. My understanding is that the banking sector is the first one to be looked at under this policy, giving banking customers greater access to their banking data.

The Hon. JOHN GRAHAM: Yes, understood.

Mr MULLEN: The next industry to be looked at is then energy. What needs to happen is the ACCC, along with the Commonwealth and States, needs to work with industry to come up with a way of getting uniformity in the way that this data is presented so that it can be used in a meaningful way by retailers but also third parties who would be able to look at the consumer's usage pattern over a significant period and provide tailored advice to the consumer on what they can do about their energy choices.

**The Hon. JOHN GRAHAM:** Thank you for that. That is very helpful. I want to also ask about your comments about the regulated standing offer and your recommendations. Really that is returning in some ways to what the standing offers were intended to be but have ceased to become over time. Do you think that is a fair comment?

Mr MULLEN: In a sense, that is true. Our view is that standing offers were meant to be there as a bit of a safeguard or a fallback while competition developed and while the market increasingly moved to provide consumers with market offers that are more flexible in their pricing and conditions. What I do not think policymakers intended was for the price of standing offers to continue to rise significantly over time while the best offers in the market continue to fall over time.

**The Hon. JOHN GRAHAM:** So you are looking to find a way for that original intention to be driven back into the system.

Mr MULLEN: I think that is right. It is important to point out that, as I said earlier—although I do not know the exact number in New South Wales but I believe it is between 10 per cent and 20 per cent of customers—it is certainly not the majority of customers that face this price, but for those who do, they can often be vulnerable customers and we do not think that they should be penalised for that.

The Hon. ADAM SEARLE: But it is not just customers on standing offers. If you ring an energy retailer after you see your advertisements saying, "Save 20 per cent off if you switch to us or combine gas and electricity"—I have done this a number of times—you ring them and they do not make it clear that it is off a standing offer. There is no reference to what you are currently paying, even when you were their existing customer. I note what you say in your report about discounts should be referrable only to the cost saving for the retailer, but should there not be a more basic obligation on the retailer—just truth in advertising. If a retailer is saying to a customer that rings them, "You will save 20 per cent", it should be off what that customer is currently paying and it should be a real offer, not off some notional standing offer.

The Hon. LOU AMATO: And in plain English.

**Mr MULLEN:** I think we would agree that there is an obligation. Indeed, Australian Consumer Law protects consumers from misleading and deceptive conduct and we have from time to time taken action in this space to deal with retailers. What we think our recommendation will do is make it much easier for consumers to know what they are being told is referable to a common point and that they can compare that across retailers.

**The Hon. ADAM SEARLE:** The Thwaites review in Victoria talked about a basic service offer and having a basic comparator in the market. Your default offer seems to be a sort of a synthesis of those two notions.

Mr MULLEN: We have distinguished the default offer concept from the basic service offer concept in our report.

The Hon. ADAM SEARLE: Yes, Yours seems to have an allowance for retailers for attraction of new customers whereas the basic service offer idea in the Thwaites review was pretty much a no-frills basic cost guarantee, was it not?

Mr MULLEN: Correct. What we are trying to do in regulating the default price is to retain enough room, if you like, in pricing for discounting to occur. We think there is benefit to be found for consumers in allowing retailers to compete with one another on discounts. If that competition is vigorous, that will deliver good outcomes for consumers. We think that if the regulated price is too low, then you are not going to see that level of discounting. You are going to see some retailers exit the market. We think that is a suboptimal outcome.

The Hon. JOHN GRAHAM: Can I ask you to confirm those basic facts in your report that go to margins and prices in New South Wales? Firstly, your report has some information that just has not been available before about international comparisons for the retail net margin. They say two things for New South Wales: first, we have the second-highest retail net margin after Victoria in the country. That is correct?

Mr MULLEN: That is correct.

The Hon. JOHN GRAHAM: Secondly, when it comes to an international comparison, we are really higher almost than any other developed jurisdiction.

Mr MULLEN: In terms of net margin?

The Hon. JOHN GRAHAM: In terms of the international retail net margin.

Mr MULLEN: That is correct. Victoria and New South Wales sit at the top of the chart that we presented in our report.

The Hon. JOHN GRAHAM: The top of the chart, full stop. That information you discovered on nominal international prices—they are just the prices that people are paying cents per kilowatt hour—we are not at the top of the table, but we are not far off it. It is only Denmark, Germany and Spain who exceed the nominal prices that New South Wales is experiencing. That is correct?

Mr MULLEN: That is correct. That is what our report finds.

**The Hon. LOU AMATO:** Why is New South Wales more expensive than any of the other States?

Mr MULLEN: That is a long answer.

The Hon. LOU AMATO: That is good.

Mr MULLEN: Essentially, that is what our report is all about. There are many drivers of the end price that consumers face. The circumstances that are relevant to New South Wales include some that are common with other States and some that are different. But one of the more significant factors was the rising network costs over time that did not occur, for example, in Victoria but also did occur in Queensland. New South Wales is a concentrated market both in generation and in the retail market, so our recommendations put forward ideas to deal with that problem. As mentioned earlier, New South Wales had a very generous feed-in tariff scheme for solar photovoltaic [PV], which added costs as well. They would be the major factors.

The Hon. LOU AMATO: Has the ACCC identified any particular regions where the cost is higher than in other areas?

Mr MULLEN: Regions within New South Wales?

The Hon. LOU AMATO: Correct.

Mr MULLEN: No. We did not do that sort of analysis. It was generally State-by-State analysis.

The Hon. LOU AMATO: I would be interested to find out.

The Hon. BEN FRANKLIN: I have just a couple of questions. The first is a specific one to pick up on Mr Searle's question regarding taking one's power bill to a retailer and feeding it into their system, seeing all the variables, and having them say, "This is the plan you should be on." You said, "Yes, they should be able to do that." My question is: Should they be required to do that, if asked?

Mr MULLEN: If asked. I think consumers expect that level of service from retailers. As I said, my understanding is many of them do that sort of a service. Our view would be that if the market is working properly and we have a competitive market, then they will be under pressure to provide that sort of a service. We have not recommended anything like that in our report. That is the answer to your question.

The Hon. BEN FRANKLIN: I just want to talk broadly about your recommendations. I think you have provided a very good road map and wanted to give you this opportunity, if you wanted to take it, to talk about issues or any points you want to make about the implementation of the recommendations, particularly if there are any specific recommendations you wish to highlight to this Committee as being those of greater paramount significance for us to take into consideration.

Mr MULLEN: Sure. We did not place higher priority on particular recommendations in the report. I would not say we put any particularly ahead of others.

The Hon. BEN FRANKLIN: What is your response to the IPART's view, if you have one, that in its report it states that the default price would lead to less competition due to fewer incentives for consumers to shop around and that it is too soon to re-regulate as the competitive market is still developing?

Mr MULLEN: We were cognisant of that risk, if you like, which is why our firm view is that the default offer price should not be too low and there needs to remain enough room for competition to continue. If that is done well and done as we envisage it, we do not think that risk is high. Sorry, what was the second component of your question?

The Hon. BEN FRANKLIN: That it is too soon to re-regulate as the competitive market is developing.

Mr MULLEN: Our view is that we have a body of evidence now about the direction this market has been heading in for quite some time, and we have a good idea about where it will continue to head if we do not take some action. If we thought that just let it go and competition will resolve this, we would have said so, but our view is that that is not the right way forward and that some action is needed.

The Hon. BEN FRANKLIN: You were quite damning of the solar feed-in tariff. Bearing that in mind, what do you think of the IPART's benchmark concept for default pricing?

Mr MULLEN: Default pricing of feed-in tariffs?

The Hon. BEN FRANKLIN: Yes.

Mr MULLEN: I cannot say I have looked at its proposal on that.

The CHAIR: In respect of your report and the 52 recommendations—

Mr MULLEN: There were 56.

The CHAIR: Are there any succinct comments about the presentation of the bill so that consumers can understand their bill and what they are paying for?

Mr MULLEN: It was certainly something that came up in the inquiry when we spoke to individual consumers. We received quite a number of submissions from individual consumers on that topic and also consumer groups raised that as an issue. We certainly agree with the position that bills should be simple and understandable for consumers. Retailers should take steps in that direction to helping consumers understand what they are paying. Our recommendations were more targeted at price representation and advertising and those sorts of areas. We did not make any recommendations specifically about bills. I understand the Australian Energy Regulator, through its retail pricing guidelines and the like, looks at these issues and is looking to make improvements in this area.

**The CHAIR:** You talked about the different factors that put prices up and down. Were there any findings in respect of suspicion towards generators contributing to the public debate that to make pricing vulnerable would be advantageous? For example, if we hear that Liddell is shutting down and suddenly there is panic about what the reliability will be, especially if you are a business and need to secure long-term energy contracts. Was there any finding of manipulation of the market?

Mr MULLEN: I do not believe we did, but I might check with my colleague, Ms Warwick, if she is aware of anything in that area.

Ms WARWICK: Not specifically in relation to the point of plants shutting down, no.

The CHAIR: It seems to me that if you can send a message out which makes it more vulnerable than it is, it gives a reason to lift the cost.

Ms WARWICK: I suppose it is also an incentive for other people to invest in the market.

Mr MULLEN: What we were able to see through the documents that we obtained was that there was a real level of agitation, if you like, following the closure of Hazelwood in Victoria and the response to that.

**The CHAIR:** That is right.

**Mr MULLEN:** I cannot comment on the appropriateness of that response, but it was there and we could see it through the documents that we had.

**The CHAIR:** In your report you talk about the Ombudsman and programs about the Ombudsman. Are you finding that the Ombudsman is responding appropriately and proportionately to the hardship provisions of small business and price hardships? Are they effective?

**Mr MULLEN:** I do not think we received a lot of evidence around the effectiveness of the Ombudsman. I think the main area on that topic that we received information was that a lot of consumers were not aware that they had access to Ombudsman services and that improving that would help consumer outcomes.

**The Hon. JOHN GRAHAM:** I wanted to ask about your views on market concentration, which you make some observations about in your report. Could you essentially give us those views as they relate to New South Wales?

**Mr MULLEN:** Sure. I will start and I will ask Ms Warwick to chip in if there are any additional observations. We have made the observations that concentration is a problem in the NEM generally and in New South Wales. There are a number of factors driving that. One is the point at which this market started, if you like, was generally State Governments privatising assets, and we have an example in New South Wales where the Macquarie Generation assets were sold to AGL. The ACCC opposed that but that transaction went ahead.

The Hon. JOHN GRAHAM: And opposed it in quite strong terms?

Mr MULLEN: Indeed, as we do when we see some harm likely to occur. That is a specific example for New South Wales. The other factor I would mention is that we are seeing the exit from the market of large coal generators—Hazelwood being a notable example, Liddell being one that is anticipated now. What ideally would happen if the NEM is working well is that those closures would be anticipated. They would be well known to everyone in the market so that adequate investment could take place to replace that capacity. With the short notice that Hazelwood had of its closure, that was not able to occur. I think that certainly contributed to the concentration, in particular, in Victoria, but as the NEM is interconnected, that affects everyone.

**Ms WARWICK:** I can add on, perhaps on the retail side, that our report highlights that in New South Wales the three largest players—Origin, AGL and EnergyAustralia—have about 85 per cent of retail customers between them, which is higher than we see in Victoria, South Australia and South East Queensland.

The Hon. ADAM SEARLE: Last year I think it was 90 per cent. Has there been a decline?

Ms WARWICK: Not on our numbers. It may be based on different numbers.

**The Hon. ADAM SEARLE:** Those three same companies also have something like 70 per cent of the generators. While we have been focusing on the profiteering, if I can put it that way, by the retailers, having those same companies vertically integrated to such a large degree having such a lock on the market must also add inhibition on the full effects or benefits of competition?

**Ms WARWICK:** It does certainly impact. I do not have the numbers off the top of my head and depending whether you look at generation capacity and the dispatch of generation, they are quite different numbers. It is quite concentrated on dispatch of generation in New South Wales.

Mr MULLEN: Capacity looks like it is 60 per cent.

**The Hon. JOHN GRAHAM:** We will have the IPART coming here later today and they will tell us on the key indicators they measure in New South Wales they are increasing competition—there are more retailers, more customers shifting to the smaller retailers, which are all fair points. They are figures we should accept on the face of it, but what you are telling us is that market concentration in New South Wales is still of concern, even despite some of those figures, those trends from an ACCC point of view?

**Mr MULLEN:** I think what we would try to draw attention to is not just the indicators of competition, of which concentration is one, but the outcomes for consumers. We have stated that we think concentration is a problem and improving that situation will help consumers, but at the same time we have presented comprehensive data to show that the outcomes for consumers are not what we want to see and that needs to be dealt with.

The Hon. ADAM SEARLE: In your report you talk about a potential restriction on market share, at least going forward. Has the ACCC given any thought as to whether these three big companies should be allowed to remain vertically integrated to the degree they are, to have such a lock on the wholesale and retail market? Do they need to be broken up in some way, either by saying you have to choose between predominantly being a generator or retailer or you can only have a certain percentage of the market?

Mr MULLEN: We did look at this issue, but I will throw to Ms Warwick on this one.

**Ms WARWICK:** We did give it some consideration and probably more looking around ring fencing the wholesale and retail parts of the business. Our ultimate conclusion was that at this point we do not think it is appropriate. It is a very significant intervention in the market.

The Hon. ADAM SEARLE: It would be disruptive.

**Ms WARWICK:** Most retailers have moved vertically. Even some of the smaller retailers are vertically integrated in one sense or another.

The Hon. ADAM SEARLE: To manage risk.

**Ms WARWICK:** More and more are moving in that direction to manage risk clearly because there are efficiencies and that helps them compete in the market, so at this stage we were reluctant to suggest any intervention of that sort.

**The CHAIR:** Thank you very much for your time today. It has been very helpful and 56 recommendations is going to be fantastic reading regardless of the 400 pages.

The Hon. ADAM SEARLE: It is a page today.

The CHAIR: We really appreciate your time today.

Mr MULLEN: Thank you for having us.

**The CHAIR:** I only hope I can keep the lights on long enough to read the full report. You have taken some questions on notice. The secretariat will assist you with those. You will have only 14 days to returns those answers.

Mr MULLEN: Sure.

(The witnesses withdrew)
(Luncheon adjournment)

**HUGO HARMSTORF**, Chief Executive Officer, Independent Pricing and Regulatory Tribunal New South Wales, affirmed and examined

**ANNA BRAKEY**, Chief Operating Officer and Executive Director, Independent Pricing and Regulatory Tribunal New South Wales, affirmed and examined

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

Mr HARMSTORF: I do, just to provide some context. We have prepared a chart showing electricity price movements over time, which we have left with the Committee secretariat. To give you some context of what the Independent Pricing and Regulatory Tribunal [IPART] does, we are the independent pricing regulator for water, public transport and local government, the licence administrator of water, electricity and gas, and also the scheme administrator and regulator for the Energy Savings Scheme. We also do a number of reviews and investigations at the Government's request.

The New South Wales Government opened the electricity and gas retail markets to competition in 2002 and IPART's role at that time was regulating retail electricity prices for residential and small business customers that remained on the standard contract for the standard retailer. We had no role regulating prices for customers on market contracts, and network prices have been regulated by the Australian Energy Regulator [AER] since 2009. When the New South Wales Government decided to remove retail electricity price regulation from 1 July 2014, it gave IPART a new role to monitor and report annually on competition in the retail electricity market. The market monitoring role is set out in the National Energy Retail Law (NSW), and that Act specifies the indicators we must have regard to when assessing the performance of the market for small customers and the information that we are able to have regard to.

Specifically, in preparing our annual reports, IPART is to have regard only to the following: information that is provided by the Australian Energy Market Commission [AEMC] and the Australian Energy Regulator; any publicly available information; and information provided by a retailer on their market offers. We have forwarded our 2017 report to this inquiry and we are currently preparing our 2018 annual report, which will be our fourth, on the performance and competitiveness of the retail electricity market for residential and small business customers. We released our draft of that report last week and in our draft report we found that competition has continued to develop for residential and small business customers in the electricity retail market in 2017-18.

Looking into 2018-19, electricity prices have remained steady and continue to reflect the underlying costs of supply. Over the longer term, electricity prices are significantly higher than they were 10 years ago, but, as you can see from the chart, the bulk of this price increase occurred prior to 2013 when retail prices were still regulated, and those increases were largely due to increases in the network costs and in green costs. So compared to the final year that prices were regulated in 2013, since that time the average electricity bill has increased by less than the rate of inflation. In the Ausgrid and Endeavour network areas they have gone up by 9 per cent, which is about 1 per cent less than inflation—so a 1 per cent reduction in real terms. In the Essential network area the average bill has fallen by around 5 per cent since price deregulation—a reduction of 13 per cent in real terms. These price changes are a combination of increases in wholesale costs over the period and they have been either partially or fully offset by large reductions in network costs, especially in the Essential network.

**The CHAIR:** You just mentioned network costs and did you say "green costs"?

Mr HARMSTORF: Yes.

The CHAIR: Could you just explain what that is?

Mr HARMSTORF: They are the costs of the various green schemes. When we call them "green costs" it is a fairly generic coverall for things like the NSW Energy Savings Scheme, although that is the smallest one, and there is the Commonwealth Small-scale Renewable Energy Target and the Large-scale Renewable Energy Target.

**Ms BRAKEY:** And during the time there have been Federal schemes that have contributed to the costs as well.

**The CHAIR:** Is that what we equate to the climate change portion of the bill or is this overall—the Climate Change Fund component?

Ms BRAKEY: No, not the Climate Change Fund component; they are other schemes.

**The CHAIR:** I just wanted to make sure what the costs component is in the bill.

**The Hon. ADAM SEARLE:** I turn to chapter 8 of your draft report that was issued last week, page 67, and your recommendations 9 and 10. There are a couple of problems, as I see it, with this finding. First of all, you say it is an estimate in your report. You have drawn on the information that you said is your guidance and you have reached these estimates. Is that correct?

**Mr HARMSTORF:** The estimates drawn from the best available information, yes.

The Hon. ADAM SEARLE: You would be aware of the ACCC's final report on the retail market, which they released in July and you would be aware that they have found that in real terms electricity bills in New South Wales have increased by 52 per cent over the last decade. I have spoken to many householders and many businesses large and small and not one of them has shown me any reduction in their electricity bills over the last five or even 10 years. In fact, the constant refrain is "ongoing and significant increases". What I am really seeking to understand here is how does this report from you have any credibility given that it is in complete variance from the ACCC's fairly detailed report where they have been able to compulsorily get information from the energy companies and get a lot more information than is available to you or us? Do you accept that this is just an estimate by you; it is not necessarily what is actually happening?

Ms BRAKEY: If you have a look at the chart that we just handed out.

**The Hon. ADAM SEARLE:** I have looked at the chart, but I have to say that I cannot accept your proposition that electricity bills have fallen by about 5 per cent.

**Ms BRAKEY:** If we have a look at the chart and go back the decade that we are talking about you will see that the prices are higher now than what they were a decade ago. We are talking about different time frames. If you look back you will see that there was a fairly large and rapid increase in electricity prices, particularly from 2008-09 through until 2012-13. The majority of that increase related to increasing network charges and also the impact of some of the, in particular, Federal Government green schemes that came in.

The Hon. ADAM SEARLE: Just pausing there though, after deregulation in 2014, Associate Professor Bruce Mountain, as he now is, did a report which indicated that the three big retail energy companies lifted their prices by 10 to 15 per cent for customers within months of retail price deregulation here in New South Wales. That is consistent with the work done by the ACCC, that is consistent with the uniform evidence that I as a shadow Minister, as a member of Parliament, have received from large and small businesses right across this State. Noone has experienced any fall in their power bills of the kind that you are describing in this report. I have to say it is like you are on another planet; it is like you are describing a completely different marketplace. So how do you reconcile these findings with the ACCC's report?

**Ms BRAKEY:** Again I make the point that it is different time frames that we are talking about. If you are talking about 10 years, we agree that prices are now higher than what they were 10 years ago.

**The Hon. ADAM SEARLE:** Nevertheless, you still maintain this argument that somehow prices have gone down in the last four years. Am I understanding you correctly?

**Mr HARMSTORF:** They have gone up but they have gone up by less than the rate of inflation.

**Ms BRAKEY:** And over the last four years, if you refer to the chart you will see that they have increased over the past four years. So it depends when you are taking the starting point.

The Hon. ADAM SEARLE: The ABS statistics indicate that since 2011 average electricity prices in the Sydney metropolitan area have increased in nominal terms by 60 per cent over the eight years. That is consistent with the ACCC's report. Even if you are saying it is over eight years or 10 years, there is not that much difference. No-one is indicating any reductions in price at any point in time. I accept that prices might have gone up this year by less than they did last year; last year the three big companies increased their prices by up to 20 per cent. This year they obviously got the message and did not increase them very much at all. However, they did not fall as they did in other jurisdictions. I am struggling to understand how you reach your estimate on any basis.

**Mr HARMSTORF:** Are you questioning the data we have used?

**The Hon. ADAM SEARLE:** I am simply not understanding how you can say there has been any reduction in electricity bills.

**Mr HARMSTORF:** We take the average consumption, which is estimated at 5,100 kilowatt hours per annum, and look at the cost of that in the market. There are different ways of doing it.

The Hon. ADAM SEARLE: Please pause there. You actually have not spoken to businesses, large and small, and looked at the bills they are paying their energy companies? Is that not the test? It is not a question of

efficient markets or what an efficient retailer should be charging; we are talking about what real businesses and real households are paying. I have yet to meet someone who has experienced any reduction in their power bills.

Ms BRAKEY: We collect the tariffs they are on. We do not go to an end user and collect their bill.

**The Hon. ADAM SEARLE:** Is that not the ultimate test—what real people in a real market are actually paying?

**Ms BRAKEY:** I agree. We get the tariffs those real people are paying and we have used a standard amount of consumption to come up with this graph for illustrative purposes. We are estimating what a real customer using 5,100 kilowatt hours per annum would pay. We blended some of the tariffs together because some people will be on higher standing offers and some will be on quite discounted rates. We have blended them in order to come up with these numbers. However, we have done that in a consistent manner. What we have not done is obtain an end user's bill because it will be affected by, for example, how much they used last year versus how much they used this year. If you change that quantity, you will get a change in the bill as well. We have tried to take that out of this analysis. We have obtained the market information to form the basis of this analysis.

**Mr HARMSTORF:** It is clearly not practical for us to get a comprehensive view from every customer. If we make it voluntary, we will get the people who want to complain. People will not engage with the inquiry if they are happy.

The Hon. ADAM SEARLE: I am querying your end deduction.

**Mr HARMSTORF:** It sounds as though you are querying the data on which it is based.

The Hon. ADAM SEARLE: Your conclusion is that people have received a 4.7 per cent or \$91 reduction in price in real terms. I do not know anyone who has received that. Not one business has come to me with a power bill indicating that. They are talking to me about increases in power bills of 100 per cent or 160 per cent. The increases for households are much less, but they are still experiencing significant increases. No-one I have spoken to has presented anything like what you are putting to the Committee. I am simply expressing—in a fairly direct way—that I do not have any faith in the conclusions you have reached simply because they seem to be at such variance from the ACCC's work and the lived experience of people I have spoken to across New South Wales.

**Ms BRAKEY:** My question back to you in reconciling this is that when you hear that prices have gone up by more than 100 per cent, over what period is that?

The Hon. ADAM SEARLE: Two or three years. In the case of businesses, they might have a two- or three-year contract at a fixed price and then it comes up for renewal. Obviously that will be amortised over the next period. However, with a 160 per cent increase, which one manufacturing business experienced over two years, that is still a 75 per cent increase that must be absorbed over the following two years. I have spoken to many households and they have shown me their physical bills. Inflation is running at 2 per cent or 2.5 per cent at best. The bills which I have seen and which real people are paying are increasing by much more than that; they are increasing by 5 per cent, 10 per cent or 15 per cent every year.

Mr HARMSTORF: Is it possible their consumption has changed?

The Hon. ADAM SEARLE: It is possible. However, what is really interesting is that when you look at the consumption chart you see that in a number of cases their consumption has reduced. People are doing their best by buying more efficient appliances and being conscious about time-of-day usage. I have to flag with you my very significant scepticism about your estimate in terms of outcomes. I am sure you have used the data, but the conclusion you have reached that anyone is receiving reductions in their power bills, particularly in the order you say, is not consistent with anything anyone else is saying about the electricity market in this State or this country. You are really one out.

**Mr HARMSTORF:** As Ms Brakey said, we got our data from the retailers. I outlined our sources at the start. We have taken a standardised amount of consumption, which is kept steady through time, and calculated bills based on that.

**The Hon. JOHN GRAHAM:** I accept the point you are making that these are two different periods, although it is alarming that the ACCC figures presented this morning show a 52 per cent increase in real terms over that period—

**The Hon. BEN FRANKLIN:** With respect, their figures show that. They started at about \$1,200 if you look at the weighted average in 2007-08, which goes to about \$1,800 in 2018-19. That is a 50 per cent increase.

The Hon. JOHN GRAHAM: I would like that evidence. I want to ask about a period that is consistent with the period on which you are reporting; that is, the ABS figures over recent years. This is what the ABS index shows Sydney electricity prices were over recent years. They were 39 per cent above the base in September 2017, it then jumps to 60 per cent, 62 per cent, 58 per cent and 57 per cent. That is the period you are reporting on. You are saying that prices are falling and the ABS is showing they are increasing. How do you reconcile those two sets of figures within the same period?

**Ms BRAKEY:** From September 2017?

The Hon. JOHN GRAHAM: Yes.

Ms BRAKEY: Until when?

The Hon. JOHN GRAHAM: The large increase that flowed through the system in the middle of last year—

**Mr HARMSTORF:** Our figures are New South Wales based. Were the ABS figures and the ACCC figures—

The Hon. JOHN GRAHAM: These ABS figures are capital city figures; they are Sydney figures.

**Ms BRAKEY:** If you go back to the diagram we have circulated, you will see that prices have increased since then. So we would agree with that.

**The Hon. JOHN GRAHAM:** Are you saying they are in the order of those increases? Are you saying your figures are consistent with the ABS figures?

**Ms BRAKEY:** It is difficult to answer that question off the cuff. I would need to look at the ABS numbers and our numbers.

**The Hon. JOHN GRAHAM:** I would be comfortable for you to take that question on notice. However, to the point, on the net increase, the ACCC is saying prices are increasing, the AEMC is saying they are increasing and the ABS is saying they are increasing significantly. Anyone who has opened a power bill in New South Wales is saying they are increasing. That is why we are surprised that you are saying that power prices have fallen.

I want to ask about the methodology. Do you concede the point the ACCC made this morning that you have obtained information from companies and it has obtained information from companies, but the information obtained by the ACCC to inform its work is really the best information that has been obtained? That is no fault of IPART; it is simply that the ACCC has greater powers of compulsion and has been able to exercise them to obtain information and—according to information the Committee has received—for the first time it has been able to look behind what is going on in these companies.

**Ms BRAKEY:** IPART does a lot of reviews over a lot of different functions. In some functions, we have compulsory powers to gather information. It is not the case, in my experience, that you get better information necessarily when you exercise your compulsory powers. A lot of it does depend on the relationship with the business and the sort of business and the nature of the exercise that you are undertaking. But I would not agree that the existence of compulsory information gathering powers leads to better information.

**The Hon. JOHN GRAHAM:** So you reject the view that has been put to the Committee by a range of stakeholders and the ACCC that their report really did break new ground because of those powers and the use of those powers, the 50,000 documents that they used to inform their analysis. You reject that view.

Ms BRAKEY: I did not say that.

The Hon. JOHN GRAHAM: Do you accept that that ACCC work using those compulsory powers broke new ground?

**Mr HARMSTORF:** I think what the Committee seems to be implying is that the retailers have somehow given IPART information that has led us to make a conclusion that seems out of step with whatever other information they are giving to other bodies. That is something we will have to take up with the retailers.

**The Hon. JOHN GRAHAM:** It is a slightly different point, which is you have done the best to get the information you can get and it is producing a different outcome to, say, the ACCC evidence this morning.

**Mr HARMSTORF:** Yes, and if the retailers are giving us different information from what they are giving other people then that is something we need to take up with them.

**The Hon. JOHN GRAHAM:** Is this not one of the reasons why your own draft report recommends that State governments close their own price reporting and monitoring schemes, given the ACCC has taken over price monitoring and will report for the first time in March 2019?

**Ms BRAKEY:** I do not think it has anything to do with the data acquisition; it is about duplication of effort and therefore costs that are not efficient.

**The Hon. JOHN GRAHAM:** So you are really giving evidence that you think your methodology is on a par with or better than the ACCC's methodology.

**Ms BRAKEY:** I did not say that either.

The Hon. JOHN GRAHAM: Do you accept their methodology is superior? Are you saying that?

**Ms BRAKEY:** To be honest, I have not looked in sufficient detail through the ACCC's methodology and compared it to ours to be able to make any comment.

**The Hon. JOHN GRAHAM:** I want to ask some questions about that methodology. You are reasonably upfront—

Ms BRAKEY: Which methodology, ours or the ACCC's?

**The Hon. JOHN GRAHAM:** I am asking about the IPART methodology for the draft report that you have tabled. On page 48 you are reasonably upfront about the information that you do not have, saying: "However, we do not have information on the number of customers on every offer type". That is a key difficulty when measuring these price increases, is it not? Do you agree with that?

Mr HARMSTORF: For any individual customer, yes.

**The Hon. JOHN GRAHAM:** You are clear about the assumptions that you have to make. You estimate the average bill for a typical consumer by weighting the price on the number of consumers on standing and market offers by retailer, by the number of customers in each network area for each year. These are quite a few assumptions built on top of each other. Is that correct? That is just the nature of the work you are doing.

**Mr HARMSTORF:** It is the nature of any type of model that tries to describe an entire market. Yes, there are assumptions. For the purposes of the draft report, the tribunal believed that the conclusions allowed them to draw sufficiently robust findings and conclusions to put in the draft report. That is right.

The Hon. JOHN GRAHAM: You allocate customers to various sorts of offers. Some you allocate to standing offers, some to common offers, some to the retailers' lowest offer, and you allocate how many you put in each bucket depending on roughly how they are in the market. What does the draft report mean when it says, in relation to retailers' lowest office and also to the most common offer "and applying the full value of any unconditional and conditional discounts"?

Mr HARMSTORF: There are many discounts that you get if you behave in a certain way.

**The Hon. JOHN GRAHAM:** If I pay on time I get a discount. That is the most common.

**Mr HARMSTORF:** Exactly, that is right. There are other ones such as if you switch to a different retailer you might not have been getting a discount from your previous retailer. We assume that everyone gets all of those discounts.

The Hon. JOHN GRAHAM: So you are assuming everyone pays on time, for example

Mr HARMSTORF: In effect yes, in that example.

**The Hon. JOHN GRAHAM:** Which is clearly not the case in the real world. Would you agree with that?

Mr HARMSTORF: Not everyone pays on time, that is correct.

**The Hon. JOHN GRAHAM:** And people are paying penalties, their bills are higher for that reason, in real life. Would you agree with that?

Mr HARMSTORF: In this particular case, they would not qualify for the discount—that is right.

**The Hon. LOU AMATO:** But the very people who cannot pay those prices and who would like to pay their bills on time are the ones from disadvantaged backgrounds.

**Ms BRAKEY:** In some cases, yes.

**The CHAIR:** Do you have statistics on that?

**The Hon. LOU AMATO:** In most cases, it is those from the lowest socio-economic backgrounds that are suffering because of excessive bills.

**The CHAIR:** They are more likely to miss the deadline.

**The Hon. LOU AMATO:** Yes, that is right. If you have the money, you just pay your bills. They are the ones who are suffering.

Ms BRAKEY: There are some customers who can pay on time and some who do not.

**The Hon. LOU AMATO:** There are some, but the majority—the real people in the real world—are the ones who are suffering. As the Hon. Adam Searle said, we are hearing their stories. They come into our offices and say, "I cannot pay my electricity bill because I just do not have the money".

**Ms BRAKEY:** The retailers do have hardship programs. When a customer gets onto a hardship program, there are certain protections that they then obtain. Those arrangement can include late payment fees as well, but to the extent that they have missed their discount, that still stands.

**The Hon. LOU AMATO:** Hardship programs are very nice. In your draft report you state, "In 2009-10, the average residential bill in regional areas is around 16 per cent higher than in metropolitan areas, compared to 32 per cent in 2014." But it was 16 per cent higher than in metropolitan areas, and those in regional areas are the ones who are doing it so hard at the moment. Can you tell us why bills are higher in regional areas?

Ms BRAKEY: Yes, I can. The network charges in rural and regional areas are higher than the network charges in metropolitan areas. That reflects the density of customers—if you like, there are more assets in place, poles and wires, to serve a customer in rural and regional areas than in the city and therefore the network charges are overall higher. The wholesale energy charges, the green charges and those sorts of charges tend to be the same across the areas. The real driving force is the network charges and also electricity losses, the technical losses, on the system are higher in the regional areas where electricity is travelling greater distances over the wires and therefore more energy is lost in the transportation.

The Hon. JOHN GRAHAM: Back to your assumption, you are assuming everyone pays on time to calculate what is actually going on with prices, but the ACCC has very specific information about who is meeting these conditions and who is not. It is certainly not 100 per cent of customers and the ACCC runs through categories of customers. It found that for residential customers 73 per cent of people meet those conditions. You are telling us the assumption you are making, I think, is 100 per cent. But for payment plan customers it is only 56 per cent of people. For hardship customers it is only 42 per cent of people. How does that marry up with the assumption you are making that the full value of those unconditional and conditional discounts is applied?

**Mr HARMSTORF:** The key difference, the way it would drive a change would be if those figures you just quoted had changed significantly over time. Because our assumption is consistent for each year, it means if the numbers are relevantly constant then the finding from a year-to-year change is going to effectively abstract from those figures.

The Hon. JOHN GRAHAM: That is a pretty massive assumption that you are making, is it not?

**Ms BRAKEY:** As long as we make the same assumption this year and next year and we are just looking at the change in prices.

**The Hon. JOHN GRAHAM:** You are piling this on the list of assumptions you have made that we ran through before. You say this is just one more assumption?

Ms BRAKEY: Yes, and we have disclosed it in this.

**Mr HARMSTORF:** As you said, we have been fully transparent about all the assumptions we have made. This is our draft report and if there is new evidence then it will be taken into account in the final report.

The Hon. ADAM SEARLE: As part of your consultations, do you propose to talk to the ACCC?

Ms BRAKEY: We talk to the ACCC regularly.

**The Hon. ADAM SEARLE:** It would be good if your final report was informed by anything they might have to say to you.

Mr HARMSTORF: It will be.

**The Hon. BEN FRANKLIN:** Could I raise a number of other issues with regard to your report. First, you talk about the fact that you contend that competition is continuing to develop within the market. Could you elaborate on your views a little further on that, the state of competition in New South Wales? You obviously have

quite a lot of evidence about the concentration in the market and the increase in competition that we are welcoming.

**Mr HARMSTORF:** We use a number of indicators for how much competition there is and one of them is the market share of small retailers which has doubled since deregulation. We look at the number of small retailers, which is up to 24 now, including three in the last 18 months or so. And we look at the number of customers switching between retailers because that is really where the rubber hits the road where people have to act on the options available to them and that is up around 20 per cent of the number of customers who switched in the last year. All of those are indicators of a workably competitive market.

**The Hon. BEN FRANKLIN:** The 20 per cent figure, has that increased each year over the last couple of years?

**Ms BRAKEY:** It is a little bit higher than in previous years but it has been between the 15 to 20 per cent over the period since deregulation?

**Mr HARMSTORF:** If you look at how many people have switched in the last five years, it is up to 39 per cent. If you compare that with other markets such as car insurance that is around about a third. The level of switching over the last five years is higher suggesting a more competitive market, using that measure, than other markets that are recognised to be competitive.

**Ms BRAKEY:** There is one other factor that we considered in our assessment of the competition. That is, there is now around 17 per cent of customers on the more expensive standard offers compared to 22 per cent last year. So, we have seen a shift in the last year.

The Hon. BEN FRANKLIN: What do you put that down to?

**Ms BRAKEY:** There has been a range of additional measures put in place. I cannot tell you exactly why. The AEMC has made rule changes that affect the way the retail market operates. The AER has enhanced the "Energy Made Easy" website and I think there is general awareness in the community as well.

**The Hon. BEN FRANKLIN:** Could I move on to another issue at 1.5.2 about a benchmark tariff. We had discussion from the ACCC about a default tariff. You contend that a benchmark tariff would be preferable to a regulated default tariff. Could you elaborate on that?

Mr HARMSTORF: In order for competition to work effectively the customers have to be engaged and if you have a default tariff then effectively customers do not need to be engaged any more because the hard work is done for them. Whilst it might look nice in the short term, in the longer term it will be much harder for any new entrants or small retailers to be able to get a foothold in and to grow their business because the customers are not looking any more. That is why we do not support a default tariff. On the other hand, a benchmark tariff that just says this is generally accepted as a fair price gives people information which they can then use in order to engage effectively in the market.

**The Hon. BEN FRANKLIN:** The Minister wrote to you in May obviously about this review. One of the things he spoke of was delays in meter installation and poor customer communications. It is something that I hear a lot and I suspect the shadow Minister does as well. Could you talk to us about what work you have done and what work you intend to do on both smart meter and steps to improve installation times?

**Mr HARMSTORF:** Installation times were unacceptably high, it was taking something like 72 days from asking for a smart meter before having one installed.

Ms BRAKEY: On average.

**Mr HARMSTORF:** On average. From our investigations, looking at the work required it seems that there were work practices that were getting in the way of allowing a more speedy time.

**The Hon. BEN FRANKLIN:** What sort of things?

**Mr HARMSTORF:** For example, in your fuse box there is switch, a fuse that connects you to the grid, and that is only allowed to be operated by your network provider.

Ms BRAKEY: Or an accredited service provider.

Mr HARMSTORF: So what you were finding is that you had multiple people needing to make multiple visits to one site because no one person had sufficient accreditations to do all the work in one visit. Part of that is the way the accreditations are currently structured. We have recommended removing some of those barriers within the structures of the accreditation so that it is much easier for someone to get sufficient accreditation to install a

smart meter without having to get, as it is at the moment, a whole lot of unnecessary—to do that particular job—

The Hon. BEN FRANKLIN: Just explain that process: You have made that recommendation?

Mr HARMSTORF: In draft form. They are not finalised yet.

The Hon. BEN FRANKLIN: Assuming they get finalised, there is furious agreement around the table they should be.

**Mr HARMSTORF:** We will provide the report to the Minister.

**The Hon. BEN FRANKLIN:** And he will do what he does?

Mr HARMSTORF: That's right.

The Hon. BEN FRANKLIN: How would you respond to the contention that another reason why installation of smart meters have been substantially slow is because it is not in the retailers economic interest to be speedy on this matter.

Ms BRAKEY: I can speak from my own personal experience here. I wanted to change meters and it took me about a year to actually do it. I ended up changing retailers because I became so frustrated. As soon as I changed retailers my original retailer then came back and immediately fixed it. I think if retailers think this is not in their interest they are wrong. I am speaking here not as an IPART employee but as a customer, a consumer. I would not agree with that. I think that in addition to the requirements there was also a coordination issue that was leading to delays. I think that is something that can also be improved—coordination between the various parties.

The Hon. BEN FRANKLIN: You are quite definitive in your draft report about the period before deregulation and the period after. Can you give us some comments on what you think would be the impact of reregulation for the sector?

Mr HARMSTORF: Kind of like what I touched on before. You are going to get better outcomes from a competitive market than you get from any form of regulated market. It comes down to the question; is this market workably competitive? In order for it to be workably competitive, in order to make an assessment we look at indicators that, as I outlined, are all improving. If you start to re-regulate, then customers no longer need to be engaged and you are stepping away from a competitive market.

The Hon. ADAM SEARLE: Just on that, there are a lot of disengaged customers now. What you said about competition may or may not be true depending on how the market is designed. You cannot take a theological approach to this, we have to look at what is actually happening. There is no guarantee. Your claim about the results of a default offer would entirely depend on the level a default offer is set at and how the market and people respond to it. A default offer will not stop people shopping around. Whether or not it stifles competition depends on the level at which it is set. You have not taken those things into account in your comments.

Mr HARMSTORF: Sorry, I was not meaning to be theological, and of course we would take all of those things into account. I guess it was a statement of principles that a competitive market delivers better results, but it has to be workably competitive. There may be reasons why it is not workably competitive. What we are finding at the moment, as I said before, 39 per cent of people have switched in the past five years, including 20 per cent in the past year. That shows a level of engagement that is unlikely to be the case if it is regulated and the regulator is making the decisions for customers. Less people would be sufficiently motivated to engage in the market.

**The Hon. ADAM SEARLE:** I am not sure I agree with you there.

The Hon. JOHN GRAHAM: I want to ask about something I agree with you on and one thing I do not agree with you on. I ask about what I agree with you on first. On page 6 of your draft report you make, I think, a very powerful observation about what is going on with, essentially consumers on the highest prices on the standing offers, or on market offers that have expired. You point out that Ausgrid and Endeavour customers, the most expensive offers are around 15 per cent to 17 per cent higher than they were when prices were regulated. Is that correct? I am quoting from your report. Am I quoting correctly?

Mr HARMSTORF: Yes.

The Hon. JOHN GRAHAM: Then you make the equally important point that we should consider not just the 17 per cent on the standing offers, but also those 15 per cent of people on the market offers that have expired. That is correct, is it not? I am correctly characterising your report?

Mr HARMSTORF: That is right.

**The Hon. JOHN GRAHAM:** Which is a total of 32 per cent of the market. I am simply making the point I think you are making, which is this is a very significant number of consumers who are in this bucket. Regardless of what is going on with average prices or average bills across the State, that is a third of consumers who might be in these two groups.

**Mr HARMSTORF:** That number has been coming down over time. I would not try to characterise the electricity market as perfectly competitive, but the indicators of competition are improving and showing that it is more competitive, for example, this year than it was last year, than it was five years ago.

**The Hon. JOHN GRAHAM:** That is good. I am trying to agree with you here.

**Ms BRAKEY:** From February of this year there was a rule change that the AEMC made that now requires the retailers to notify the customers of when their discounts will end, and I think that will improve that situation.

The Hon. JOHN GRAHAM: I return briefly to the question of the assumptions you are applying. I want to put what I think are commonsense propositions to you, that less people would tend to pay on time, one might think, as prices were rising. On the face of it, I would think that is a commonsense proposition, as electricity prices are going up, more people are going to struggle to pay on time. Secondly, when prices are high—and we are debating here how much they are going up, but I think we all agree prices are high—more people will struggle to pay on time. Do you agree or disagree with what I think are two common sense propositions?

**Mr HARMSTORF:** If you look at our chart, given the trend of the last 10 years, prices are not particularly high compared to where they were five or six years ago.

**The Hon. JOHN GRAHAM:** I do not think that is the experience of consumers. I am not game to walk out of the building and tell anyone prices are not high. I think any of us would get run over in the street if we put that proposition out there. I am asking about something slightly different though.

**Mr HARMSTORF:** If you are abstracting from the prices that we are showing, then yes, if you hold everything else equal.

The Hon. JOHN GRAHAM: They are commonsense propositions.

**Ms BRAKEY:** They are, and given the qualification that I would make—even though I agree—is the magnitude of the bill as a proportion of household expenditure.

**The Hon. JOHN GRAHAM:** Sure, and I think that is a fair point. But I think it does go to whether your assumption that the number of people paying on time or meeting other conditional requirements does not shift around. Those are two factors, which on common sense you would assume impact that assumption you make.

**Mr HARMSTORF:** We do make some assumptions, which we are being quite transparent about. For example, another assumption that we have made that might work the other way is that consumption has been exactly the same.

**The Hon. JOHN GRAHAM:** Understood. I want to ask you about one final thing—I am conscious of the time and my colleagues. Do you agree with the ACCC finding about international retail margins that show that New South Wales has got a higher net margin than pretty much any developed country? Do you disagree with that finding about the international net retail margin?

**Mr HARMSTORF:** The evidence that we have looked at shows that retail energy margins in New South Wales—there is a bit of a difference there in the jurisdiction, our coverage is limited to New South Wales, whereas the ACCC will be looking nationally.

The Hon. JOHN GRAHAM: That is not correct, in fact. Their finding relates to New South Wales alone.

**Mr HARMSTORF:** Okay. The evidence that we looked at suggested that the retail margins in the electricity in New South Wales were not out of step with retail margins in a number of other retail markets generally, not just for electricity but all sorts of things in all sorts of countries.

**The Hon. JOHN GRAHAM:** Your evidence on retail margins when we look around the world is we would be somewhere in the middle?

Mr HARMSTORF: We are not at the extreme, no.

**The CHAIR:** To clarify where I started, on your graph you were saying that the increased costs were from network costs and green scheme costs. Is that correct?

**Ms BRAKEY:** In that period before deregulation where you see the prices going up quite a bit, that is a period where network prices were increasing rapidly, and there was also, for example, the introduction of the carbon pollution reduction scheme. That came in, and went out.

**The CHAIR:** Are there any further green scheme costs that are contributing to electricity bills at the current time?

**Ms BRAKEY:** At the current time, there are. There is the Federal Government's Renewable Energy Scheme, both large scale and small scale. There is the New South Wales Energy Savings Scheme. There is the Climate Change Fund, and that is it.

**The CHAIR:** Do you think it would be fair to at least show those parts of that component cost on bills so people know what they are contributing to in those costs?

Ms BRAKEY: I think that more disclosure is better than less, in general. The electricity bill is quite crowded.

The CHAIR: It is.

**Ms BRAKEY:** It would be a matter of what is the most important information to provide to customers. I personally think that you should probably test that with customers to see what information it is that is most valuable to them.

**The CHAIR:** Everywhere they go, if they go to Woolies they are told how much per 100 grams something costs, if they go to get petrol it is per litre. As soon as they get their electricity bill, they cannot surmise whether they are getting a good or bad bargain.

**Mr HARMSTORF:** Those costings outlined are generally unavoidable for consumers. You are going to be paying them with any retailer. What we would like to see is if there is going to be more information provided, it would be information that helps them compare with alternatives in the market.

The CHAIR: Apples for apples.

**Mr HARMSTORF:** That is it. But for those green schemes, there are not really alternatives; you pay them wherever you are.

Ms BRAKEY: In general, we are pro disclosing information, it is just in what format and what forum.

**The CHAIR:** So that people at grass roots know what they are paying for the product they are receiving. And, as you say, is that a competitive price.

Mr HARMSTORF: It will not help them in choosing between retailers but it might help them in—

Ms BRAKEY: General knowledge.

**Mr HARMSTORF:** —voting for a green policy, for example.

**The CHAIR:** It might help them there, but it will also help them to make different decisions about the product they are receiving.

**Mr HARMSTORF:** That is right. Our approach holds consumption constant, but people can vary their consumption for electricity, and they can vary the time of day.

The CHAIR: This is the problem. We have to go back, not just for the people that are good to go because they can afford it, but to the depression time, and there are a lot of elderly people who live with that mentality because they have seen tough times and they will not switch on the heater. That is the problem. They do use that common sense to say, "I can't afford it. I won't switch it on." And they are the people we are really concerned about. That principle of saying "use less" is good for everyone who can use less, but if you are elderly and watching your money and you have not got a lot coming through the pension you have no choice. We do not want them turning off the heater; we want them to turn the heater on when they need it.

**Mr HARMSTORF:** That is another assumption that we made that we have been consistent about, that people do not adjust their consumption for higher prices. Heaters is a pretty extreme example, but just turning the lights off to leave the room and having all your electronic devices on standby, all that sort of stuff.

**The CHAIR:** That is my point about people who have come through the Depression. They will leave the lights off and read in the dark, which is not a very good thing to do to your eyesight. But they will do that because that is what they have always done and because they appreciate every dollar and every other coin. That is the way they run their budget.

**Ms BRAKEY:** When Mr Harmstorf says that we assume consumption is the same, that is just for illustrative purposes so that we can show what is happening through time without varying consumption. What we have observed over the last decade is that consumption, on average, is reducing for households.

**The CHAIR:** And you would expect that from the massive education programs that have come through and changes in lights with light-emitting diode [LED] lights replacing other sorts of heating lights.

Ms BRAKEY: And the price effects as well.

**The CHAIR:** You would expect that the consumption would go down because a lot of people are making the changes, which is good.

Ms BRAKEY: And there is a price response as well.

The CHAIR: That is right. Thank you.

**The Hon. BEN FRANKLIN:** My question picks up a point made by the Chair. You spoke of the green components on the bill, the green schemes. What percentage would that green scheme be for a normal bill?

Mr HARMSTORF: I can quote some figures but I do not have—

Ms BRAKEY: It is 5.5 per cent.

The CHAIR: Not on every bill, though.

The Hon. BEN FRANKLIN: But the average is around 5 per cent. I think we heard 4 per cent.

**Mr HARMSTORF:** On a standard consumption of 5,100 kilowatt hours per year, it would be 5 per cent—5.5 per cent.

The Hon. BEN FRANKLIN: Thank you.

**The CHAIR:** I think we have talked about 9 per cent on some bills and 15 per cent on other bills, so it actually can add up. Thank you for your evidence. The Committee is trying to get the report together. If you have taken some questions on notice or you are going to give us some further evidence or information, you have 14 days in which to provide a response. The secretariat will assist you with that. We really appreciate you presenting today. I realise it takes up a fair bit of your valuable time, but this is a very valuable inquiry.

The Hon. LOU AMATO: Yes. Thank you for your time. We appreciate it.

Ms BRAKEY: Thank you.

Mr HARMSTORF: Thank you.

(The witnesses withdrew)

**DAVID FRITH**, Policy Director, Industry and Environment, New South Wales Minerals Council, affirmed and

STEPHEN WILSON, Independent Energy Economist and Energy Expert, and Professor, Energy Futures Centre, University of Queensland, sworn and examined

The CHAIR: I apologise for our lateness but it was pretty important to take the opportunity when we had the Independent Pricing and Regulatory Tribunal [IPART] before the Committee. Would either of you have an opening statement you would like to make?

Mr FRITH: Yes, we do have an opening statement. My statement will be brief and Professor Wilson has one to follow.

The CHAIR: Great. Go for it.

Mr FRITH: I have asked Stephen Wilson to appear with me today because he is an independent expert who from time to time has advised the New South Wales Minerals Council on energy policy issues.

The CHAIR: Yes.

Mr FRITH: By way of background, the New South Wales Minerals Council represents approximately 95 member companies ranging from junior exploration companies to multinational mining companies and associated service providers. Our members, particularly the large metalliferous operations, are large energy users and rely on a secure and affordable electricity supply to operate. Some of our members have experienced increases of 70 per cent to 80 per cent in their contract prices over the past few years, which at one operation has led to an increase in operating costs of approximately \$35 per ounce of gold produced—a significant impact.

Our members also supply the coal for the State's coal-fired power generators, produced the inputs used in solar panels, wind turbines and batteries and are themselves involved in the development of renewable energy projects, such as solar farms. Our members have significant concerns about electricity supply and cost in New South Wales. As well as having gone from some of the cheapest to the most expensive electricity in the world, they are concerned about tightening supply and reductions in grid security and reliability, which could be exacerbated by the upcoming closure of Liddell and other coal-fired power generators in the National Electricity Market [NEM].

As the Australian Energy Market Commission [AEMC], the AEMO and others have stated, renewable energy targets have encouraged investment but they have not encouraged investment that is best for the power system overall; that is, power, as well as reducing emissions, that can maintain a secure and reliable grid. New South Wales needs to ensure that there are measures in place to attract the right type of investment that not only reduces emissions but maintains system reliability and security at affordable prices. To reduce emissions at least cost, all options need to be on the table.

Our recommendation is that New South Wales develops an energy strategy that articulates and monitors the risk to our State's electricity supply and the options to address that so that consumers continue to have access to reliable, secure and affordable power in New South Wales. It should be informed by power system experts, who provide independent, technically robust advice and give confidence to industry that the State has control over the State's future electricity system.

**Professor WILSON:** I am an energy economist and an engineer with more than 25 years of international experience in more than 30 countries. I have worked in electricity, gas and transport for all the primary fuels along the value chain, from the resources to the consumer. Before academia, I worked in industry and as a consultant I have advised governments, banks and companies. I have provided a summary of my experience and publications just for your reference. I thought I would share a few observations that may be helpful for the Committee to consider in preparation of your report.

The first one is that in a power grid, electricity supply and demand need to be balanced continuously to within plus or minus 1 per cent at second or subsecond timescales. Failure to achieve this feat can very quickly result in a cascading blackout. Some of the long-term strategies, for example, to reduce emissions, can make realtime balancing more challenging. I have included a figure to illustrate that concept.

The second point is that most computer models of the National Electricity Market, which you see referred to in the media, are half-hourly pricing models, which simply assume that the system remains reliable at all times. There is a table I have included that shows the different types of models that power system experts have used over the years to try to understand all the different aspects of the system.

The third point is that the difference between engineering costs and electricity market price formation is complex and subtle. There is more to the recent high prices we have seen than simple price gouging, in my view. Unfortunately, power markets are more vulnerable than are other markets to competitive conditions being undermined. I have included a table attached at the back that talks about the criteria that economists recognise as being requirements in a competitive market and which of those are easily met or not so easily met in power systems, including our National Electricity Market.

In my view, the establishment of the NEM following the Hilmer report is perhaps the greatest example of a broad deep consensus in peacetime Australian history. That consensus, in my view, is now being destroyed. Energy prices are political everywhere. That is why every country has an energy policy, and they are all trying to achieve the same three goals with their intention, so difficult trade-offs are usually needed between maximising security and reliability, minimising costs and prices, and minimising CO2 emissions and local environmental impacts. There is a figure depicting that. Although there is not consensus between political parties in Australia about what the policy priorities should be, there seems to be a remarkably high degree of consensus among the voters, at least on a national level. There is a table for your reference, table 3.

There are some exceptions, but magic wands to resolve the dilemma, in my view, should be viewed very cautiously. No one generation type can tick all three boxes in the trilemma. I have a quote from a senior Japanese official, "We reviewed all energy sources and we found no energy source is superior in every aspect." That is why most countries have a mix. History shows us that generation capacity is typically added in waves, lasting about a decade or so where one generation type dominates. My 2017 paper for the Energy Policy Institute explains that the design principles on which the renewable energy targets is based is directly conflicting with the design principles that the NEM is based on and I think that is a source of a lot of the problems we have seen in the market, including high prices.

In place of the consensus that we had in the 1990s, we are now in a world where there are two starkly contrasting views. There is the view that "It's simple: greater supply of renewable energy means lower power prices ..." That is a quote from Daniel Andrews, the Victorian Premier. Then there is a contrasting view that as more wind and solar comes onto the grid and coal is forced out, wholesale prices would go through the roof, which is the view of the new Federal energy Minister. In my view, symptoms of this problem can already be seen in the price demand data for the NEM. I have included a set of charts for your reference to illustrate that. What does it all mean for New South Wales? We have got South Australia relying on Victoria, Victoria now relying on New South Wales, New South Wales is relying on Queensland, and then we have got State Governments in Victoria and Queensland pursuing 40 and 50 per cent renewable energy targets. The engineer in me says this is going to make it very difficult to ensure reliability going forward. The economist in me says it is going to make it increasingly difficult to deliver moderate and affordable prices for households and businesses. I will leave it there.

The Hon. ADAM SEARLE: On that point, it is like you are approaching the discussion about renewable energy penetrations. It is not an objective in itself necessarily. We have these coal-fired power stations. Today they provide something like 75 per cent of our energy. For the next 10 to 15 years, most of them will reach the end of their life. I accept you can probably do things to extend the life of one or more of them for a bit but any machine comes to the end of its life whether it is a car, a washing machine, a coal-fired power station. When one of these gets clapped out and stops working, we have to build another machine to provide us with the energy we need going forward. At the moment, the cheapest new build, as far as I am aware, is renewable energy.

I accept some of the criticisms that it is intermittent and storage technologies are not everything we would hope them to be, but none of the energy companies I have spoken to—I have spoken to pretty much all of them have any plans to build another coal-fired power station. I have spoken to half a dozen major financial institutions about whether they would lend money to build a coal-fired power station, and not one of them would do so. The ultimate barrier is cost. They just say they are too capital intensive. Apart from anything else, there are also environmental risks, but essentially it is a question of money. It is like you are arguing for someone to build a coal-fired power station. You seem to be taking a philosophical approach that we really need to make sure that we have a mix. But if no-one is going to build a coal-fired power station, what do you suggest is the future of energy if it is not renewables?

Mr FRITH: In respect of new build greenfield coal-fired power stations, the capital costs are quite significant. But in respect of refurbishing existing coal-fired power stations, there are opportunities there. The owners of Vales Point have been investigating a 20-year life extension to Vales Point. Similarly, when the debate was going on around the potential sale of Liddell, there were a few parties that were interested in purchasing Liddell and extending the life of that power station. There is an appetite there and the lower capital costs that are involved with brownfield extensions, if you like, would be more attractive in the current policy environment. Professor Wilson might be able to talk about this more, but the engineering limitations of the system accommodate

a growing share of renewables as the share grows from a small proportion to a high proportion, but as that share increases, it will reach a point where there are system reliability issues that need to be considered.

**The Hon. ADAM SEARLE:** That is really 60 per cent penetration. That is when you need large-scale storage, is it not? That is what most of the engineers I have spoken to have indicated. Sub 60 per cent is not a massive problem, as long as you have the interstate connectors.

**Professor WILSON:** In my view, you definitely need it by 60 per cent, but I think you need it earlier than that. When I said South Australia is relying on Victoria, Victoria is relying on New South Wales, New South Wales is relying on Queensland, you cannot have everyone relying on everyone. Someone has got to provide the balancing services.

**The Hon. ADAM SEARLE:** True. But, strictly speaking, that is not true all the time. The whole idea of the NEM is that you can have electricity passing across State borders according to need, whether it is lowest in price or availability. That is the reason we do not have six individual systems.

**Professor WILSON:** That is right. The interconnected systems should be cheaper and more economic than what we used to have in the past, which was separate systems. But you have to remember that we offer customers—actually retailers sell to customers an on-demand service which, notionally, has reliability of 99.998 per cent. If you look at the data, the periods of time when there would be severe challenges balancing the system is significantly—in that very high renewable system, is much greater than 0.002 per cent. I do not think anyone is really having a proper conversation about the kind of reliability and service level expectation that we want to have going forward and whether we want to trade that off against costs and prices. That is my point.

**The Hon. ADAM SEARLE:** On the issue of cost, you started your submission with the significant cost increases that your members have experienced. We just had the IPART here telling us that electricity prices have fallen by about 5 per cent over the past four or five years. Has that been your lived experience?

**Mr FRITH:** That is not the feedback we have been receiving from members.

The Hon. ADAM SEARLE: Do you have any member who has said that electricity costs have come down at any point?

**Mr FRITH:** No, we have not.

**The Hon. ADAM SEARLE:** Do you think the proposition that energy prices have come down by nearly 5 per cent over the past few years does not meet the real-world test?

Mr FRITH: It is not the feedback that we have been getting over the last two years, in particular.

**The Hon. ADAM SEARLE:** Given that we are now in a system where, essentially, the generators are privately owned and operated, decisions about extending the life of or retro engineering coal-fired power stations is a commercial decision for their owners and operators, is it not?

Mr FRITH: It is, but I guess we need to make sure that the right policy settings are in place to be encouraging the right types of investment. As we have already discussed, things like a pure renewable energy target may not be encouraging the investment that is best for the system overall. I guess if there is an assessment done that the policy framework is not delivering on that right investment, then there may be a need for the Government to step in and look at what the policy settings are or what other types of investment facilitation they can provide to get the right types of energy in to maintain system reliability and security.

**The Hon. ADAM SEARLE:** System reliability can also be met by storage technology such as pumped hydro, can it not? That can be used to provide a safety net, as it were?

**Mr FRITH:** That can be one part of the system. In respect of how extensive the pumped hydro could be across the whole system—

**The Hon. ADAM SEARLE:** And battery storage, although it is not all we would want it to be on an industrial scale, that technology exists and is improving?

**Mr FRITH:** That could be another part of the mix. As we said at the beginning, there is going to be a range of generation technologies that are going to be needed over time. Renewables have a part to play, pumped hydro has a part to play, batteries have a part to play. Nearly every expert organisation agrees that carbon capture and storage for either gas or coal, or both, is going to have some part to play in the future energy mix as well.

**The Hon. ADAM SEARLE:** Where is the technology around carbon capture and storage in Australia? Does it exist? Is it in use?

Mr FRITH: The technology is in use around the world. Certainly, in enhanced oil recovery carbon storage has been used for decades successfully. There are a couple of examples of small-scale carbon capture and storage facilities on coal plants in Canada and the United States. In Australia it is not as advanced in terms of the capture demonstration, but there are storage sites that have been proven up in the Surat and Otway basins, and that is coming along quite well. The Surat Basin, for instance, they are looking at establishing some form of carbon storage hub around that area, not only for the power stations but the supporting industry as well. There is quite a lot of work going on that the industry is putting a lot of money into. There has been about \$300 million invested over the last 10 years and another \$250 million or so invested over the coming 10 years.

**The Hon. JOHN GRAHAM:** I just wanted to follow up from that key question about IPART so I appreciate the answer you have given. I would like you to recap though on that example you gave us first up in the metalliferous sector about \$35 an ounce, particularly about the time frame over which that impact is happening.

**Mr FRITH:** That was over the course of two years. I think the impact was originally up around the \$80 an ounce and they renegotiated it and got it down to around \$35 an ounce impact.

The Hon. JOHN GRAHAM: You have been reasonably scathing of both sides of politics in your submission. One particular part of your submission caught my eye—the bit where you say "the energy policies of nearly every government and political party fall well short of these worthy principles". I was interested in which governments or political parties had met the principles or the hopes of your organisation?

Mr FRITH: Perhaps I was trying to cover myself in case there was one I was not aware of.

The Hon. JOHN GRAHAM: But you are not prepared to name one in front of the Committee?

Mr FRITH: No.

**The Hon. JOHN GRAHAM:** I think the point about the real lived experience of your members is very important and I think it has certainly weighed on the Committee as we have taken evidence. Certainly what you have told us just then is consistent with what we have heard elsewhere as we have taken evidence over quite a few hearings.

**The CHAIR:** Do you have a comment about nuclear energy and what part it should play given the fact that technology has changed immensely and the modules systems are so much better for emissions and pricing?

**Mr FRITH:** We want a technology neutral approach to be applied, so we are open to all options. Nuclear is not something that we have canvassed particularly for New South Wales. I am sure Professor Wilson can talk more to the technical.

The CHAIR: I note that he had something to do with Rio Tinto.

**Professor WILSON:** In a former life, in a former role, I ran the industry analysis team, the market and industry analysis team in Rio Tinto Energy for five years. So both thermal coal and metallurgical coal and also uranium were part of my brief, which basically meant understanding the whole energy complex globally. I would link my answer to your question to the seventh point in my opening statement where I say there are exceptions but there are no magic wands to the trilemma. The reason when you see an exception is when something changes suddenly. An obvious example is when the oil price changed suddenly and dramatically in the 1970s, the equation changed, and then suddenly let us say you went from oil to nuclear, as countries like France and Japan did, you are ticking the price box, you are ticking the reliability box and you are ticking the emissions box and then you find a new equilibrium.

In Australia, as you know, we have a ban on nuclear energy. If you lifted the ban you might find that you may well be able to achieve all three goals for a time. But the caveat on this is: Can we in Australia build these plants at the kind of cost level that we would like to to achieve that? We do not know yet, but, as you say, there is a range of technologies. It is not just the big gigawatt-scale reactors like the Chinese are building but now small modular technology is available.

**The Hon. LOU AMATO:** In your opening statement you mention that you have 95 companies under you. Are you aware of any companies that have closed in the last few years because of the high cost of energy, either closed down or shifted overseas?

**Mr FRITH:** I am not aware of any specific mining operations that have closed down because of energy prices.

The Hon. LOU AMATO: You said the cost of electricity for some of these companies has gone up 70 per cent to 80 per cent in the last few years, which obviously is an astronomical amount. I know of smaller business owners, small and medium factories, and they have stated the same thing, that the cost of electricity has more than

doubled in the last few years. The ones I know of in manufacturing are contemplating closing their doors either permanently or shifting their operations overseas. It is a significant cost increase.

**The CHAIR:** Thank you very much. You have tabled a few sheets that will be very interesting. I started reading them and they will be very helpful. If you have taken any questions on notice, or we may, in light of your evidence, put some questions on notice, the secretariat will assist you in getting answers back to us in 14 days. Thank you very much for your contributions.

Professor WILSON: If there are questions to Mr Frith and he asks me I will be happy to answer them.

The CHAIR: Thank you very much.

(The witnesses withdrew)
(Short adjournment)

MELISSA REYNOLDS, Chief Customer Officer, AGL Energy, affirmed and examined

**DAMIEN NICKS**, Interim Chief Financial Officer, AGL Energy, affirmed and examined

TONY CHAPPEL, General Manager, Government, Media and Community Relations, AGL Energy, sworn and examined

JONATHON BRISKIN, Executive General Manager - Retail, Origin Energy, on former oath

GREG JARVIS, Executive General Manager - Wholesale and Supply, Public Policy and Government Engagement, Origin Energy, affirmed and examined

CHRIS RYAN, Customer Executive, EnergyAustralia, sworn and examined

SIMON DAVEY, Policy and Advocacy Manager, EnergyAustralia, on former oath

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

Ms REYNOLDS: I am AGL's Chief Customer Officer. I am joined by my colleagues Damien Nicks, the Interim Chief Executive Officer of AGL, and Tony Chappel, the General Manager - Government, Media and Community Relations. Thank you for the opportunity to address the Committee and to make an opening statement before answering questions. Following our submission and previous appearance before the Committee, I will spare honourable members an introduction to AGL, except to say that ours is Australia's oldest operating energy company. The company was established in 1837 to light the streets of Sydney, and we currently supply gas and electricity to more than 3.6 million customers across Australia.

Since AGL last appeared before the Committee, the Australian Competition and Consumer Commission [ACCC] has released a series of recommendations and the National Energy Guarantee's [NEG] future has become uncertain. AGL has been a vocal supporter of the NEG as a means by which we can achieve policy stability and thereby encourage the investment needed to build generation capacity and to bring down prices. The concerns of our customers are our number one priority. More than ever before we are dedicated to providing sustainable, secure and affordable energy for our customers.

From July this year, customers in New South Wales have seen a modest price reduction in their electricity costs. We know that energy prices have been a contributing factor to concerns over the cost of living. AGL understands and accepts the level of concern expressed in the ACCC report in respect of energy prices and the lack of transparency and comparability of energy offers faced by consumers. AGL agrees with the majority of recommendations in spirit and intent and endorses the need for reform of how energy products are marketed and sold to move away from the current practices that do not give customers sufficient transparency and comparability.

AGL and other industry participants have been working with regulators to find a better way to make offers transparent and comparable. AGL will actively support initiatives designed to move the industry quickly towards enhanced transparency and comparability of energy offers. AGL and the industry are already moving to achieve this by using the Australian Energy Regulator's dollar-per-year approach, and notes that approaches similar to the ACCC's other recommendations, for example, requiring comparison with a reference bill, can achieve this in the absence of price regulation.

AGL has also taken steps to address some of the affordability concerns. Earlier this year, AGL announced it will reward its loyal standing offer customers in New South Wales with a 10 per cent discount on electricity usage charges. We encourage our customers to contact us to access the right offer for their circumstances. However, we have recognised that not all customers are engaged and we want to ensure our loyal customers receive lower rates. In August this year, we announced a \$50 million debt-relief program for customers on our Staying Connected Hardship Program, under which we are forgiving debt that is older than 12 months. We will match other payments dollar-for-dollar until next year, and we have extended our affordability fund to enable the creation of a new energy literacy program.

AGL does not believe the ACCC's recommendation to reregulate retail prices is necessary to achieve the desired outcomes and introduces a level of regulatory risk that is not conducive to encouraging investment. AGL is supportive of reforms that make energy offers easily comparable and notes that the ACCC's other recommendations, for example, requiring comparison with a reference bill, can achieve that in the absence of price regulation.

The ACCC's recommendation to regulate a default tariff is more likely to entrench the practice of discounting rather than move the market forward and encourage innovation. In our submission to this Committee and in our previous statements, we referenced the Independent Pricing and Regulatory Tribunal's [IPART] 2016-17 report, which found that deregulation has had a positive impact on competition in the New South Wales electricity market. Last week, IPART released is latest energy market report, which found that since price deregulation each of the key indicators used to assess competition in the electricity and gas retail markets has evidenced increased competition: the number of retailers; the market share of small retailers; and customers on market offers and switching. Another three retailers entered the New South Wales electricity market during 2017- 18, bringing the total number to 24—which is 11 more since price deregulation.

IPART also found that there are no substantial barriers to setting up a retail business in the New South Wales electricity market. However, new retailers may face barriers due to inconsistent jurisdictional regulations and increased regulatory and political intervention in the energy market. As last week's IPART report noted, reintroducing price regulation or a default tariff is likely to lead to lower levels of competition and higher prices. In short, a default tariff could help disengage customers from paying excessive prices. However, over time, it is likely to result in fewer customers actively shopping around in the market as the benefits from switching decline.

We know that prices could be lower if additional investment in new supply occurred. With the crucial factor of policy consistency lacking from the current climate, Australia's energy markets are undergoing a significant period of transition. More than 80 per cent of electricity generated in Australia is sourced from the combustion of fossil fuels, the majority of which is provided by coal-fired generation reaching the end of its design life.

The transition to a decarbonised and modern generation sector will span several decades and will require large-scale investment to replace this infrastructure. Governments and the energy industry need to manage this transition with as little disruption to the Australian economy as possible, and significant investment from participants such as AGL will be key to achieving this. AGL endorses many of the suggested reforms, but the market settings must still be such to provide certainty and stability necessary to encourage investment. Vertically integrated retailers have been and continue to be the most significant investors in generation capacity. Retail price regulation introduces even further regulatory risk and overly restrictive retail price decisions risk upstream investment.

AGL also believes that some of the recommendations made by the ACCC are neither necessary nor beneficial to the market. These include the recommendation that a different mergers regime apply for the electricity generation sector and the recommendation that the Federal Government offers subsidies to new generation projects but excludes a significant sector of the market from the proposed process. Regulatory and policy settings that provide stability and permit the market to operate rationally will encourage investment, and this investment is what is necessary to drive down prices. AGL has been a vocal supporter of the NEG, and we acknowledge the New South Wales Government's support of the NEG too. Since August, when the NEG was abandoned in its original form, wholesale energy prices have increased. The lack of policy certainty is a contributing factor to this, exacerbating market concerns in relation to the investment environment.

AGL and our partners are currently investing over \$2 billion in new supply. This investment includes projects in New South Wales, such as the Silverton Wind Farm, the upgrade of the Bayswater Power Station and the new gas-fired power station in Newcastle. We continue to advocate for a stable policy framework in which investment decisions can be made with the requisite level of confidence. We look forward to continuing to work with you to address affordability, reliability and sustainability in the energy system.

Mr BRISKIN: Thank you very much for the opportunity to appear at this inquiry again. I would also like to thank the Committee for taking the time to visit the Eraring Power Station; I hope that you found that tour quite informative. Last time I appeared before this Committee I spoke about the challenges we have been facing in our energy market, especially as it transitions to a clean energy supply while trying to maintain affordability and reliability for customers. Clearly, this transition has not been smooth, with the impact of prices quite acute in 2017. The recent ACCC report released in July found that over the past decade power prices have risen substantially due to overinvestment in distribution networks, the cost of State and Federal green schemes and volatility in the wholesale power prices due in part to the early closure of coal plants with no new supply in its place.

With high wholesale prices being one of the key drivers of the price increase, the good news is that the market has already responded with increased supply, and significantly more supply is slated to enter the market. In the 2018 financial year, Origin increased supply into the market by lifting Eraring output by 14 per cent and bringing the second unit of Pelican Point back online to stabilise the South Australian market. We have also been rapidly contracting low-cost renewable energy, committing 1,200 megawatts of wind and solar plants, which will progressively come online by 2020. The forward curve for wholesale prices has come down significantly from its peak early last year, and this price relief has started to pass through to customers. In July 2018, Origin was the first retailer to deliver a modest relief to customers. Some markets received lower tariffs, and in New South Wales

Origin held tariffs flat. This required absorbing a 3 per cent increase in green scheme and network costs in New South Wales at a pre-tax cost of \$80 million. We have also frozen prices for customers on our hardship program since July 2016, and we ensure that those hardship customers are on our best guaranteed discount offers.

There is more that can be done to provide price relief for customers, and that is why Origin is working with industry, regulators and government to deliver better customer outcomes. We support the ACCC's view that reform is needed across the supply chain in order to deliver a genuine sustainable reduction in prices for customers including recommendations to address network costs and the Small-scale Renewable Energy Scheme [SRES], which will provide immediate bill relief. We also agree that energy offers need to be simplified so customers can readily and easily compare retailers. We support the banning of unanchored discounts, which only confuse customers, and the introduction of dollar estimates, which are easy for anyone to understand and to compare. We agree with IPART, which supports introduction of a benchmark, but last week warned against introducing price regulation because of the likely risk that it would lead to lower levels of competition and higher prices over time. We support banning practices that further confuse retail customers or target vulnerables, such as door-to-door knocking, a practice Origin recognised as being detrimental years ago.

Importantly, we are not waiting for these reforms to be implemented. We are already investing in ways to make it easier for customers to engage with and control their energy use, access savings and engage with us. This includes a simple-to-use online price comparator that immediately tells customers whether and how much they can save with Origin. Through this alone we have helped hundreds of thousands of Australians to access better deals on their energy. In summary, I believe that we are in a better position than when I last appeared before you. We have turned the corner on prices. This is in large part due to the response from industry, which has brought more generation online to get downwards pressure on prices, greater competition and more customers engaging in the market. We support sensible and considered reform across the energy supply chain, including ACCC recommendations that deliver further sustainable reductions in prices for customers.

Mr RYAN: Thank you for the opportunity to participate in this inquiry. EnergyAustralia appreciates your work and supports your endeavours to improve outcomes for the people you represent. Electricity is an essential service. Its reliability and its affordability matter to a lot of people and to a lot of businesses in this State. At the same time, people are concerned about emissions from the sector. Efforts, including your efforts here, to understand the reasons behind the current problems and to find practical and sustainable solutions that improve the situation are crucial, and we are here today to assist with those endeavours. We are convinced that together industry, government and the regulators can get electricity prices back on track with benefit for all.

There is no question that the price increases of 2017 tested households and businesses. Electricity supply and service should be vigorously debated and probed by the elected representatives of this State and solutions found. Crucially, the solutions should be acted upon. Understandably, the people you represent are frustrated, anxious and, in some cases, angry, and they are impatient for action. We would say that we do things to help our customers; however, I suspect that the message you are getting from your constituents is that we are not doing enough and they do not feel like we get it. We hear it all the time as well. It is not for customers to find the solutions; that is the role of government, regulators and industry. When we talk to customers about the details, they are not interested. They just want their bills to be lower.

In the last couple of years some of the brightest and most experienced people in Australia, backed by strong investigative powers and resources, have been working on finding why these problems exist and they have suggested some solutions. The ACCC has been mentioned and it has published a comprehensive report. There is no need for me to repeat what that report says; I am sure you are well aware of those recommendations.

The CHAIR: There are 56 recommendations.

Mr RYAN: I do not think you need me to talk to those. Crucially, the report talks about the entire supply chain, and I think we all need to recognise that is a really important part of the report. Those 56 recommendations are wide-ranging and comprehensive across the entire supply chain. There are, as others have noted, signs that pressure on household electricity bills are easing, but I would like to repeat what I said before: We can say that, but I do not think that is how people feel and that is what is really important.

We too have taken action to hold electricity prices down by absorbing cost. Again, I do not think that really feels so great for the people that are receiving our bills—I do not think they feel they are better off. There is much more to do. I would like to again emphasise the problems are known and they have been catalogued and the ACCC has provided a blueprint to fix them. So, what happens next? We would not say we agree with each and every recommendation the ACCC has made and I think you would be surprised if we said we did. Some of those recommendations are more complicated than others to implement and some of them involve lots of stakeholders and we have seen how difficult those can be.

We think as a comprehensive supply chain solution the ACCC blueprint is worth going after. In particular, the solutions that they propose in relation to the consumer protections and improving how consumers feel, the way that they will feel when they are interacting with us as retailers, those are solutions that can be gone after pretty quickly and they should have pretty quick effects for people. That is what we think is important. We think working together, the sector, government and regulators, using the blueprint the ACCC put forward can get things back on track. Most importantly we think we need to get on with it and get on with it quickly.

The Hon. ADAM SEARLE: In the media last month the chief executive of EnergyAustralia was reported to have told the New South Wales energy Minister that the introduction of a default offer as proposed by the ACCC would disadvantage something like 70 per cent of EnergyAustralia's customers. Is that a correct representation of EnergyAustralia's position, and what do other energy companies here have to say about that?

Mr RYAN: I was not at the meeting, so I cannot give you the context and the conversation that occurred. I can confirm that figure was mentioned and it is a matter of record. The context, though—this is my understanding from a brief discussion with my managing director—is that that is merely one scenario that was talked about with the Minister. The important thing to understand about that scenario is it was heavily based on an assumption that nothing else changes. It is not our position that is what will happen. It is an illustration of how important it is to get the default price that the ACCC recommends: It is important to get it right so we do not see things like that happening so we see better outcomes. If we get it right we can make sure we have a competitive situation in the State and more people benefiting from a working market. That is the key point.

The Hon. ADAM SEARLE: The test of whether competition is actually working is whether or not people are getting lower rather than higher prices. Would you agree?

Mr RYAN: I agree.

The Hon. ADAM SEARLE: What do the other energy companies have to say? I know you are not wild about the idea of the default offer, but you can see why the ACCC has recommended it. The Thwaites review in Victoria talked about a basic service offer and a market comparator, and it sounds like they are talking about the same kind of thing. It is to provide some protection for consumers that do not have the sophistication, capacity or time to engage with the market. That is a worthwhile objective, is it not?

Mr BRISKIN: That is a worthwhile objective. The truth is: It is too confusing for consumers to compare offers today. It is far too confusing. We support the introduction of comparator rates, reference prices, ways in which consumers can quite simply and easily understand what the choices are and the savings that can be made. The challenge you have when you start introducing pricing regulation is that you start to reduce competition. If there is not the opportunity for new competitors to enter the market, you then over time put less pressure on the existing competitors in that market and over time you run the risk that either costs increase which are borne by consumers or otherwise innovation ends up getting stifled, again to the detriment of consumers.

The Hon. ADAM SEARLE: I understand that is often what market participants say, but normally to take a theological approach to competition. It is only a good thing if it leads to better outcomes for customers, and you have had a plethora of reports—whether it is Bruce Mountain's report on the retail markets or the ACCC's very extensive report or other indications, such as from the Grattan Institute—that competition, far from leading to lower prices, may in fact be feeding higher prices through additional costs. The companies you represent here today represent something like 85 to 90 per cent of the retail market in this State and nearly 70 per cent of energy generation in this State. That is a concentrated market. How can you have meaningful competition with the market so concentrated?

Mr BRISKIN: If I draw out a few points there: The first thing is the market has been heavily concentrated but over time it is getting far more competitive. I think July was the most competitive month in New South Wales that we have seen. We have 24 competitors and, as Ms Reynolds referenced, more and more are coming into the market all the time. I think that is the first sign around healthy competition growing and continuing. I would also recognise in amongst all those reviews is the IPART review that was issued last week.

The Hon. ADAM SEARLE: Yes. On that, I think I can reasonably say I speak for the majority on the Committee: IPART's report issued last week has no credibility with us, just as its report last year had very little credibility. It does not match the believability test. No-one has come to this Committee and no-one we have met has had falls in their energy prices, whether they are households, small or large businesses. When IPART comes here and tells us that energy prices have fallen in the last few years, we have an inability to accept that conclusion. We accept that they are serious professional people and we know they have adopted a sensible methodology, but their conclusions do not match up with any real world experience. I thought I would let you know frankly what we think of those reports.

**Mr BRISKIN:** Notwithstanding IPART, what I would say is that each and every day you are seeing more and more customers engaging in the market and therefore there will be more and more customers getting on to better rates and deals. For our mind competition, the emerging of signs of that working and that continuing, the very high churn rate we are experiencing at the moment, there is the opportunity for that to increase and improve, but they are starting to deliver better customer outcomes.

Ms REYNOLDS: Just to make a couple of comments: In terms of the default tariff, we do not support the reregulation of pricing.

**The Hon. ADAM SEARLE:** Rod Sims says it is not reregulation.

Ms REYNOLDS: That is one perspective. The view that we would hold is that the outcome can be achieved in different ways and reregulation through a default tariff is not consistent with attracting new investment in any way. I think in terms of the standing offer, customers who either are unengaged or do not have the capacity to access market offers, one of the initiatives AGL has put in place is to reward those customers with a guaranteed loyalty discount. And in New South Wales we now have less than 5 per cent of our customer base who are on a standing offer that does not have some form of discount attached to it. Interestingly, I concur with my peers in terms of the degree of competition. I think it is important to note the reason why price increases did appear so sharply in 2017 and that was not through the lack of competition in the retail sector it was on the back of significant wholesale price increases as the result of the sudden closure of coal generation plants leading to a supply issue.

The Hon. ADAM SEARLE: Just on the issue of wholesalers, and you are wholesalers here, most of the assets you have are well established, they are not new. The capital has largely been repaid, although some are newer than others. People find it hard to understand why, given the established nature of those assets, the wholesale prices spiked in that way. I know that when Hazelwood closed the market saw there was a shortage, but that has largely been corrected now. It was almost like the wholesalers took the advantage of perceived uncertainty to hike their prices, and the lack of any regulatory impediment to doing so basically gave you free rein to, frankly, price gouge. Can you disabuse me of that?

Mr NICKS: I would not agree that the supply demand has certainly improved in that period of time. Certainly more generation is coming back online, but that period of time saw a lot of supply come out of the market. As a result that rose wholesale prices. What you have since seen is the market responding. The market has been designed to do that. Prices have lifted and you are now starting to see more supply coming back into the market in the form of, whether it be renewables and some of the other capital projects that our companies have put out there. As you can see from AGL, we have both approved and are working on the extension of the Bayswater plant. We have the Silverton and Coopers Gap wind farms coming online. That is the sort of investment that is responding to the market, and that was what the market was designed to do.

Mr CHAPPEL: It is worth noting the ACCC and the Australian Energy Regulator both investigated comprehensively the behaviour of generators in the wholesale market following the closures and found no evidence of manipulation. I think, just to add to Mr Nicks' comment, what you saw with the short notice closure of such a large plant is that generators then had to respond by trying to source more fuel, more gas, more coal, at the same time the price of those inputs was substantially increasing off the back of other global factors and local factors that I am sure you are well aware of. Also, the risk in the system systemically increased because it moved much more into balance. To manage risk, retailers have to buy insurance products too, so the cost of those dramatically changed and the level of risk changed. All of those factors played out, and now the market is responding, as some of my colleagues have said, through either extension of plants, through securing those longer term contracts for those fuel inputs for new construction, and that is why you are seeing that decline looking out into the future in terms of the wholesale outlook.

The Hon. ADAM SEARLE: You are right, Mr Chappel, to talk about the lack of notice with the closure of, for example, Hazelwood. That is in sharp distinction to the approach your company has taken about Liddell, for example. Most of the energy we rely on today from coal-fired power will retire or is scheduled to retire over the next 10 to 15 years. That energy has to be replaced, and the evidence that the Committee has received is that new build renewables is the cheapest form of energy that you can construct. How can that be made to be reliable and ensure that it is available as and when people need it? The criticism made of renewables is that it is not sufficiently dispatchable.

**Mr NICKS:** You would have seen the NSW Generation Plan in response to the Liddell closure. Our view is the market not only needs renewables but it needs firming capacity to go along with that. So, yes, renewables absolutely coming down in price, and we are seeing that in the market quite broadly. But there will be a cost of providing firming capacity, and we believe that is the way of providing both cheap energy but reliable energy at the same time. It is a combination. This market place is going to continue to transform over the years,

and our view is currently it is gas firming capacity, but in time it will move to both battery, pumped hydro and those types of technologies.

The Hon. ADAM SEARLE: Is that a widely held view across the industry?

Mr JARVIS: Yes. From an Origin point of view, I agree with many of those comments, but firming capacity is going to be very important for this market going forward. Pumped hydro: We have the Shoalhaven scheme, which is pumped hydro, and we could double the capacity. Those kind of investments going forward will be very important. I also think gas still has a very important role to firm. Fast-start gas plants: We are doing some of those investments across the board, especially in South Australia. They will become more prevalent. And I have to say batteries will have a role to play. But we need to see some costs coming down of batteries, which I am sure will occur over the years.

Mr RYAN: I would like to add to that, if I may. I fully agree with the statements made, and I think it is one of the tragedies that the debate sometimes becomes technology oriented rather than outcome oriented. Our view is that a well-designed framework will mean that investments can be made in the lowest cost way of delivering energy to people. Firming is going to be important, but it can be any number of—whether it is gas, battery, or it can be pumped hydro—other ways of doing this. A well-designed market actually allows the signal to get through that innovation will occur and costs will come down and people will choose and invest.

In New South Wales we would love to be able to invest in a further gas-fired power station to provide more robustness to the market. We really are working up to say we want to get to a decision on that as soon as we can. But it is pretty difficult at the moment to do a business case in the current environment. That sort of investment is crucial to being able to make sure that our transition to a cleaner energy future, instead of being really volatile and bumpy and leading to pain for people, is something that can lead to better outcomes.

**The Hon. ADAM SEARLE:** Is the impediment to that kind of investment the lack of something like the National Energy Guarantee, or is it something else you are referring to?

Mr RYAN: I think that is exactly right. We were supportive, as were others, of the NEG. Plenty of people would say that they thought the NEG was potentially a compromise situation, but it was the best available solution and the most important thing about the NEG—designed by really smart people—was that it really took into account this need for dispatchable and firming capacity. The other thing we really think is important is potentially demand response. We talk about the supply side but there is also demand side solutions here. After all, the issue we are dealing with here is not a lack of capacity per se; we are seeing masses of capacity. All the companies here are investing hugely in underpinning renewables. But that is not the big issue here. The big issue here is: How do you shift the demand and supply to occur at the same time? That is what firming does and that is what demand response can do. If the market is designed well or the policy frameworks are designed well, those things will work.

**The Hon. ADAM SEARLE:** The NEG, to all intents and purposes, has been abandoned by the Federal Government, as I understand it. The State Minister claims it is still the policy of the Minister for Energy's council, but my understanding is that will be formally abandoned later this month. What are the consequences of the lack of a national plan for bringing forward the investment you all say is necessary to bring costs down?

Mr NICKS: I think the challenges that my colleague mentioned, it makes getting the business cases up without the certainty more difficult in the short term. From AGL's perspective, like our other colleagues here, we have a number of investments we want to get moving on, but some of those investment decisions need the certainty around them so we can proceed with them. That was why within the NSW Generation Plan, you can see it was put out in three stages. Stage 1 is: What are we doing now, and what are we going to get going on? Stage 2 is: What are we doing next for our commercial and industrial [C&I] customer load? Because the C&I customers typically contract for very short periods of time, so they do not necessarily support a full 20-year plant. There is a lot of work that we need to do on policy certainty, but also working with our customers to enable us to invest into the future.

**The Hon. ADAM SEARLE:** If the Commonwealth cannot get its act together to lead, do the States need to come to an agreement themselves about what should be the face of our energy policy?

Mr JARVIS: I completely agree with all the comments in getting the market right: It makes investment decision with a board a lot easier. But I do not want to leave a message that the industry will not get on with it either. I must say that the Federal Minister for Energy did raise the reliability aspect again in a talk today. It is still something that the industry would like to be clearer—it does make it easier. I make one other comment about why it is important to get it right. Apart from new kit or new technology, there is also retrospective investment you can do on old coal-fired plant as well, so really making it far more flexible to make sure that it is there at night-time and maybe not even turned on during the day. There is a whole bunch of things you can do, and again, good policy

certainly helps those aspects. I do not want to stay here and say the industry is not getting on with it either. That is just not the case.

Mr RYAN: Could I add one thing? I know what Mr Nicks means about certainty, but we do see sometimes that term being confused. We are all—and certainly we are—comfortable with taking risk. So, to the point we are prepared to make investments on an assumption of what the future may or may not look like, we do not require certainty of outcomes. We just want a degree of policy, a policy framework that we can then make an assessment of. We are experienced at saying we can actually work on what might happen, take a view and make an investment. A calculated risk is probably the best way to put it. We do not require certainty of outcomes but, if we get a degree of confidence that the framework is going to be put in place and it will be pretty much the same for a good period of time, then the investment starts to flow.

The Hon. ADAM SEARLE: To address the issue of certainty, a number of State jurisdictions, in the absence of Federal leadership, have pursued policies of renewable energy targets combined with reverse auctions to bring forward, essentially, private investment in new supply. Do you have a view about those mechanisms?

Mr JARVIS: I have been in the energy industry for a long time. I have never seen the cost curves come down on renewables as faster and quickly as a lot of industry. I really do not think that you need subsidies anymore. It is costly for our customers. It goes to their bill and, quite frankly, I think it is reality. No, I do not think you need to encourage anymore. I think the role of subsidies initially did transition the industry. We learned a lot in those early phases, but the cost curves have come down so quickly that you just do not need to do anymore.

The Hon. ADAM SEARLE: But, for example in Victoria, the reverse auctions there are not subsidies. Essentially, they are tenders and contracts for difference and to try and bring forward lowest cost investment in new technology with a combination of technology-specific and technology-neutral in energy generation projects. It seems to have brought forward the investment in Victoria that was otherwise stagnant. In New South Wales we keep being told that there is something like 17,000 megawatts of proposals either approved or in the planning system, but less than 10 per cent of that is actually being constructed. At the rate at which we are going to be losing coal-fired power in this State as retirements take place, we are just not going to have enough new build take place. Assuming the Federal Government does not get its act together, what should a New South Wales Government be doing to make sure that you and other private providers bring forward that investment as needed?

Mr JARVIS: I have to say that all the evidence says that there is so much renewable. We have a 521 megawatt development in Victoria bringing on a wind farm that is called Stockyard. That is in Victoria. We are bringing on renewables faster and quicker than the market can probably absorb right now, so quite frankly I think it really goes to not being about just renewables but also about the firming capacity. It has to be ore and it has to transition well. But it is transitioning very quickly.

Mr CHAPPEL: Just to add to that, I think that AGL was willing to support the NEG, despite the fact that we would agree it is a compromise and certainly not first-best solution to any of the challenges, is having that architecture in place. In relation to your point about the States, I think our view would be that a consistent approach nationwide would be more efficient and therefore less costly for customers. You can get a national approach by the States agreeing. That is another way to do it. But the architecture, both on the emissions requirement or intensity, for want of a better word, over time and on the liability side gives industry those frameworks in which to model different outcomes. It is the difference between a higher or lower level of ambition: It is much easier to model to put into a business cases to get investments over the line in those different futures versus the absence of any architecture, which is much more challenging then. It creates much more uncertainty in terms of future outcomes we need to consider.

The Hon. ADAM SEARLE: We have been told that the reliability aspect of the NEG will still being pursued, but we do not know in what form. But the emissions side of it: Your guess is as good as mine. I am not hearing anything from the Commonwealth Government. The officials of the State Government seem to have no clue whatsoever about that. In the absence of any signal on emissions will surely have a retardant effect on new investment.

Mr CHAPPEL: In the long term, I think that is right. In the short run, as we have sort of set out, there is an economic imperative. The least cost energy today is from renewable sources, generally, so I guess the more immediate problem is making sure you deliver that in a firm and reliable way and in a least cost way.

**The CHAIR:** I think the undergirding is the issue. What a lot of people are really nervous about is undergirding the renewable source of energy—solar and wind. When that does not exist—when the sun is not shining and the wind is not blowing—and businesses need their energy, I think gas-fired might be the way through there in terms of firming up as opposed to new coal-fired power stations. Is that right?

**Mr RYAN:** Gas-fired is one of the options. It is a great option because it can be switched on fast for a short period of time and then turned off again to really make sure that you can actually manage that period of time really efficiently. But it is not the only option because there are other sources. As you are probably are aware pumped hydro is just like one really big battery in terms of what it does. Instead of having to build hundreds of batteries, you build one pumped hydro and then you have done the same thing.

**The CHAIR:** But it is limited on the south side. We are limited with transmission lines, from what I understand, at this point in time.

**The Hon. ADAM SEARLE:** For Snowy 2.0 to be effective, it will rely on an upgraded transmission capacity, we have been told.

Mr JARVIS: That is right. There are other pumped hydro investments you can do. I just think it is really important to recognise that there is a transition here. A coal-fired plant will be important in the transition as well. You have seen Eraring. The investment that will be put into that is actually how flexible it can be: really turning it off down the middle of the day but having fast ramp rates to deliver at night. There is a combination of things that have to occur over time, but it will transition out.

The CHAIR: Certainly, the American model is up to 2050. They have guaranteed their base load through coal-fired stations, but they know that, really, that is the only thing that is going to deliver on time when you flick that button. I am not trying to talk down renewables, but renewables just do not have that guarantee that when you flick the button, the energy will be there—short of battery technology and a few other things. If the United States are thinking this so far out, and it has a heavy industry use, my concern is about small business. They need the power to be there when they need it, not five minutes late. With their products and what they are selling—goods and services—they do not have the luxury of waiting five hours while something is switched on.

**Mr RYAN:** I would like to address that. I think you are absolutely right: Businesses do not have that luxury; nor do people want to be in a situation where, on a 40-degree day, their air conditioners cannot be switched on as well. There is no doubt about it: Unless we plan this transition well, we will have poor outcomes. But our position is that it can be managed through a mix of technologies. I am not an expert on the United States situation, but what I do know is they have developed cheap gas themselves. They also have that capacity with a cheap gas supply which allows them to also manage peaks through their gas-fired power stations as well. They have got a very resilient system. There is no reason why we cannot build a resilient system ourselves.

The CHAIR: We are energy rich. Everyone knows that we have got every energy under the sun that we need, so to speak, but we just cannot seem to get our act together to give a reliable source of energy. I came from the South Coast when we had load shedding. It broke the back of a lot of businesses. It just crushed them because someone chose to sacrifice the South Coast over the rest of New South Wales. We are not going there again. People have blackouts, but we are not going there again. We do not need to be there. You are right: Government needs to take a lead on this and whether that is by regulation or re-regulation, whatever it is—I know we are not popular on reregulation—but we will do whatever it takes to make sure that businesses have the assurance that when they switch the button, a power supply is there because they need it to function.

Mr RYAN: Chair, I would say that we completely—I emphasise "completely"—agree with you. We think, actually, that is the reason why we need to get on with this sooner rather than later. Quite frankly, our position is that there has been a lot of good work done to develop some recommendations, but we just want to get on with it. We want to get onto implementation because the longer we wait and the more we talk, the harder it is because we are getting closer and closer to coal-fired power station retirement. Our view is that we really want to get on with it.

**The CHAIR:** This inquiry is strategic. It is not by chance. The timing is strategic in the run-up to the March election to let the people of New South Wales decide what major party they want for their energy policy. We are getting on with it alright, and we will have a set of recommendations. I want to ask a left-field question. Do you think nuclear power has a role? Should we be reviewing that, given the technology changes at the time?

Mr JARVIS: I have looked at nuclear all the time. The cost is prohibitive.

**The CHAIR:** Even the establishment of a small module?

**Mr JARVIS:** I am thinking a sizeable nuclear plant. Certainly Origin would not invest in that—far too expensive. We would absolutely go with renewables and firming at this point because the technology is there and it is cheaper.

**Mr DAVEY:** If I may add to that, I think the time frames to resolve policy issues around nuclear and planning and actually building something is way outside of the time frames we have got to solve the problems that we are faced with.

**Mr NICKS:** I am not an engineer, but AGL would be in the same position in terms of we believe it is renewables. Renewables are getting cheaper, and then firmed up with capacity it will provide the liability the system needs.

The Hon. JOHN GRAHAM: Thank you for your evidence, particularly on the ACCC recommendations. It is helpful for the Committee. I want to put on record that the ACCC evidence this morning was compelling. ACCC witnesses are unapologetic about advocating for competition in the sector but they are also focused on the outcomes for consumers. We are critical of where some of that has ended up, for the complex range of reasons that you have all articulated. I want to ask about one particular finding in that report, and that is the finding about the comparison of the international retail net margin. They had some quite startling data in that report showing that New South Wales tops the league table for that retail net margin above most developed countries and essentially double the European Union margin. I wondered if you had any comments. Did anyone want to dispute that information or have any comments or context that they wanted to put on record?

Mr BRISKIN: I am happy to start. From Origin's perspective, I probably cannot comment on the industry as a whole, but I will take the ACCC's report. They have done a comprehensive review, but our margins are compressing. If I look into the current year, competition is driving it down. The number of customers now switching to discount offers, the cost of that has certainly increased. Even if I look at the impact of absorbing the recent increase in network costs, it is a cost of \$80 million to our business. When we guided market at our full-year result, we guided the market down across our in due market's business.

Ms REYNOLDS: Specifically on that point I cannot comment, but with respect to retail margins more broadly, they are also—to Mr Briskin's point—coming down and are under quite a lot of pressure, for a number of reasons. One is that input costs have gone up significantly as a consequence of the wholesale costs that we have talked about. Two is the cost of competition. Consumers are absolutely shopping around more and that is bringing more and more discounts into the market. One of the risks that we have called out with respect to re-regulation of pricing would be that that price dispersion would come back somewhat and you would find that there would be more customers paying more as a consequence.

Mr RYAN: I agree with the comments in relation to competitive pressure. I would add that the ACCC, as has been observed, did a comprehensive job. We produced something like 70,000 documents, possibly more, to them over that inquiry. They know their stuff. I am not going to dispute what they found, but it is only part of the picture. It is already a matter of record where our actual profits have been over the last four or five years, which are in no way stellar. That is part of the picture when it comes to then having the returns to be able to invest in the transition.

The most important thing for us, and I think there is a difference here, we would say a well-designed default price is part of or is going to go a long way to solving one of these—it is actually putting further pressure on margins. It will bring down prices for people. You will see less dispersions. A classic economic and competitive theory would say dispersion is a sign of a functioning competitive market, but what has happened here is that through the vigorous competition that has led to lots of these increased discounts there have been people who have not participated in that and that is seeing a dispersion which your constituents will not tolerate.

**The Hon. JOHN GRAHAM:** Thank you for those comments and observations. That is useful information and context about the future. No-one is disputing the work that the ACCC has done on that historic look at where retail margins are in New South Wales. I want to be clear on that point.

**Mr DAVEY:** We are not disputing it. I think what Mr Ryan mentioned is that over the last five years they varied.

The Hon. JOHN GRAHAM: That is an important context. The second issue I wanted to ask about was the consumer data right that the ACCC pointed to. It believed that in the medium term this was something that would be a significant benefit to consumers. It would have what it saw as a positive impact on price, but it saw that as happening in the medium term. It saw that there were barriers to consumers effectively having that right to have possession of their data and being able to see what offers might be available to them. I wondered if you had any observations about the practical barriers to that right being further enhanced. If the question was how could we do that more quickly, did you have any views that you wanted to put on the table today?

**Ms REYNOLDS:** I can comment that we agree that consumers having access to the data is a good thing. I would like to be able to give you a more considered answer with respect to what are the practical barriers to that occurring. I have not got a detailed response on that.

Mr CHAPPEL: We might take that one on notice, if that is okay.

**Mr BRISKIN:** There are two practical issues. The first is customer consent and the second is much more technical, which is actually building a data lake and how you build it, really. How we overcome both will be an opportunity to accelerate.

Mr RYAN: We would take it on notice as well in relation to any practical implications, but the key principle is if a data right helps customers use energy more efficiently, reduce their overall cost, if that can be made to work then that is a good thing.

**Mr NICKS:** If that can also increase the innovation of the products that can be put back to the customers, and that will particularly be through the use of smart meters. We know that smart meters do not exist everywhere, but in turn that will help with that use of data and how we can innovate that data as well for the customers.

Ms REYNOLDS: It is very important.

**The Hon. JOHN GRAHAM:** One of the views that has been put to the Committee is that two of the hurdles are, first, smart meters; secondly, an ability to agree on a data standard or data format.

**Mr NICKS:** One of the examples that we are delivering in Victoria is the insights on the bill. We can now take that data, break it down and tell the customers where they are using that energy and from which appliances. That is some of the advantages of smart meters and smart data.

The Hon. LOU AMATO: The IPART report mentioned that in 2018-19 the average residential bill in a regional area is 16 per cent higher than in a metropolitan area. I would like to hear your version as to why. Secondly, what can Origin, AGL and others do to help farmers and communities in rural and regional towns, particularly at the moment because, as we know, there is a drought? They are in dire straits and they are paying an extra 16 per cent. They are going through financial hardship as it is. It is not just the farmers. It also the towns in regional communities. Is there any way your organisations can help these people?

Mr BRISKIN: We are completely sympathetic of the dire straits that is happening in regional New South Wales, especially those affected by the drought. As a business, we have made a donation. We have also focused very much our hardship program to supporting those who really need it. Through that hardship program, they are able to access our best guaranteed discounts. We do things like bill waivers, matching payments for customers, and we offer them a range of access to other social services as well. We have been very proactive around supporting that. Just on the point about the 16 per cent difference: I suspect, without all the details in front of me, that is primarily driven by the network costs in regional New South Wales.

The Hon. LOU AMATO: Yes, that is what IPART alluded to. It is not just the farmers; it is the towns that suffer. Even for just cafe or shop owners, the price of electricity is astronomical. Apart from their rent, which is one of their major expenses, and obviously the wages—or some of them are only mums and dads and sometimes they are not even earning wages—electricity is one of the highest components. We need to keep these smaller rural and regional areas alive.

Mr BRISKIN: We could not agree more.

**The CHAIR:** Just on that note, thank you for that: It is a very poignant question right now with the drought. I thank you all for your cooperation in the inquiry. We really appreciate it. It has been a long-term inquiry, and many of you have invited us onto your properties and we have seen some of your infrastructure, which hopefully will make better decision-making for us. We really appreciate the time and effort and the catering and the people that you put on the ground to help us through that.

In light of your evidence today we may put some further questions on notice. You will have 14 days to answer those questions. The secretariat will assist you with that. We hopefully will have a report out in the last sitting week in November, so watch this space. If the lights do not go out there will be a report before the House. Thank you.

(The witnesses withdrew)

(The Committee adjourned at 16:47.)