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Peter Boxall: Thank you all very much for coming. My name's Peter Boxall and I'm Chairman of IPART. I'm accompanied by my fellow Tribunal members, Jim Cox and Simon Draper. Welcome to our public hearing on regulated electricity and gas retail prices for the period from 2013 to 2016.

Last month, we issued our draft determination on regulated electricity prices for this period. We also released our draft decision on the proposed gas pricing arrangements for the same three year period.

The draft determination sets out relatively modest increases in regulated retail electricity prices of 3% across New South Wales from 1 July 2013. This follows substantial increases in prices over previous years that have been driven by sustained increases in network costs and the impact of the Commonwealth green schemes including the RET and carbon price.

The market policy and regulatory settings in future years are not clear. Nevertheless, our indicative projection is for electricity prices to fall behind inflation in 2014 and reduce in nominal terms in 2015.

The outlook for future gas prices is much less clear. Our draft decision sets out increases averaging 8.6% across New South Wales from 1 July 2013. This increase primarily reflects increases in network cost, particularly for customers in the AGL supply area which makes up more than 80% of New South Wales customers.

Prices for most gas customers in New South Wales are likely to be driven for the following year by increases in gas network costs under distribution pricing determinations already in place, and structural changes currently underway in the wholesale gas market.

We recognise that price increases place strains on households and businesses. However, as we have made clear, in our view the competitive market now offers protection to customers against retailers exercising market power. Customers can minimise the impact of these regulated price increases and reduce their energy costs by shopping around. We consider it's in the long term interests of customers for price regulation to facilitate the development of competitive markets in electricity and gas. A well-functioning competitive market offers the best form of price protection to customers.



These draft decisions attempt to balance the short and long term interests of customers by continuing to include a customer acquisition and retention costs allowance. Indeed, in this determination we've been systematic and transparent in supporting competition consistent with the terms of reference for the determination of electricity prices.

Submissions on these reports are due on 20 May and given the tight timeframe, we will be unable to accept late submissions. Therefore, I encourage you to use this opportunity to provide comment on these draft decisions and to ask questions and seek clarification on aspects of the draft decisions.

In the first session, we'll provide an opportunity to discuss our overall draft decisions including the objectives of the review and our approach to meeting this objective. In the second session, we've scheduled a general Q&A session to allow stakeholders to provide further comment on any other aspects of the draft decisions.

Following morning tea, we've provided for a technical discussion on the energy costs allowance in the electricity draft decision.

To encourage stakeholder interaction, we will have roaming microphones. You can ask questions to the presenter, IPART's Secretariat or Tribunal. The Tribunal and Secretariat might also ask questions of stakeholders.

This hearing is being recorded and is available by webcast from our website. I ask you to identify yourself and the organisation with which you are affiliated. I also ask you to limit your remarks to no more than five minutes per intervention.

For the first session, we will now move onto the first session. First, Anna Brakey from the Secretariat will provide an overview of key aspects of the draft decisions. Stakeholders will then have the opportunity to provide comment.

Thank you, Anna.

Anna Brakey: Thanks, Peter.

First I'll step through the gas decision and then I'll step through the electricity decision.

In terms of gas, we regulate using voluntary pricing arrangements. We do have the ability to use a gas pricing order, but we prefer to try to come to a voluntary arrangement with each of the businesses. So we invited the standard retailers to propose a new arrangement to us and each of them did that. After review, we agreed with many of the aspects that were put to us, including the prices put forward by both ActewAGL and Origin Energy.



However, we did not agree with the proposal put forward by AGL who proposed an increase of 10.7%. Instead, we consider an increase of 9.2% to be reasonable and we're inviting AGL to submit a revised proposal.

Of that 9.2%, network costs contribute around 60% of the price increases or add 5.4% to retail prices. IPART has been concerned about network price increases in the past and we have participated in reviews, including the review of the merits review mechanism under the national electricity law and we would encourage governments to make changes in line with the expert panel's recommendations in relation to the merits review.

So what these price increases mean for bills is an increase for a typical residential customer of between \$59 and \$76 a year. The typical residential gas customer, the bills are smaller than residential electricity customers, so even though it's a larger percentage increase the dollar increase is not as big as what it would be if those increases were applied to electricity bills.

However, the gas small business customers tends to be larger consumers than the small electricity customers so those price increases result in increases in typical bills for small customers of between \$172 and \$356.

The standard retailers have told us that there is uncertainty in relation to future wholesale gas prices and we agree that there is considerable uncertainty. As such, we have agreed to include a periodic review of the retail and carbon components within the gas prices and we'll update those annually in order to manage that uncertainty.

However, we do note that in the Jemena area, which is the AGL area, there is another large network price increase coming through next year, on 1 July 2014, and that will add around 5% to 6% to retail prices before any other changes in any other cost component. So we're looking at price increases on 1 July again next year. But we will be reviewing the wholesale gas costs as well and that uncertainty may lead to further pressure on retail prices.

In terms of miscellaneous charges, each standard retailer has its own regulated miscellaneous charges, but they broadly cover late payment and associated fees, security deposits, dishonoured payments and account establishment charges. The standard retailers proposed increases in line with CPI for their miscellaneous charges and we have agreed that that is reasonable, with the except of Wagga where Origin Energy proposed



aligning the charges for those customers with the charges that it applies to its customers in the Albury and Murray Valley areas. So the most significant change to the miscellaneous charges for the Wagga customers would be an increase in the late payment fee from \$7.70 to \$12.

In terms of electricity prices, on average the prices are going up in New South Wales by 3% which is a lot more moderate than the double digit price increases that we've seen in previous years. However, the average price increase is different by area with the smallest price increase applying in Origin's Essential Energy area and the largest price increase in the Energy Australia area.

The reason that those prices are different by area reflects two main reasons, one being different underlying changes to the underlying network charges and also the relative peakiness of supplying customers in each area. So Energy Australia has become peakier or more expensive to serve and Origin Energy has become flatter or less expensive to serve.

In terms of bills, a typical residential customer will see price increases of between \$11 and \$83 a year depending on your area and the business customers will see increases of between \$6 and \$117 a year.

In terms of what's driving those price increases, the main contributor is retail costs and that include the retail operating cost which is increasing from just over \$80 to \$110 per customer per year, and an increase in the retail margin from 5.4% to 5.7%. There is also an increase in our allowance for customer acquisition and retention costs, but to some extent that is reallocation between the generation and the retail costs and I'll come to talk about that in a moment.

Green schemes and network costs are going up by less than inflation and generation costs are going down. So, as I said before, on average prices are increasing by around 3% in New South Wales and that includes 2.8% inflation.

We have provided indicative price changes for the future two years, so 1 July 2014 and 1 July 2015. These are indicative only and we will come back and review them prior to them being implemented each year. However, on 1 July next year we'll see price increases of less than 1% and that is a real price reduction and on 1 July 2015 we're expecting a material reduction in retail prices. That really reflects the movement from the



current fixed carbon price to an internationally linked carbon price that's linked to an international market.

We did model these results prior to the recent reduction in the cost of European carbon permits, so if we were to do this modelling again based on the current prices we'd see even larger reductions. But, as I said, those are indicative only and we'll come back closer to the time and set them.

The terms of reference requires us to report on the cost of green schemes to a typical residential bill. So our draft decision is that that is around \$330 a year. Currently that's \$316 a year but those numbers aren't comparable for two reasons. The first one is that we have observed a reduction in consumption in households, so in the 2010 determination residential customers were consuming around seven megawatt hours on average and it's now reduced. So these calculations are based on 6.5 megawatt hour consumption annually.

The second change is that we have moved from assessing the longer term impact of carbon costs on electricity prices to a shorter term impact of the carbon cost. So they're not directly comparable numbers.

In terms of electricity, there are three miscellaneous charges. The late payment fee, we are increasing that from \$7.50 to \$10.90 to bring it to cost reflective levels. With the introduction of the National Electricity Consumer Framework or National Energy Consumer Framework on 1 July, we will now rely on the provisions within that to determine when the late payment should be waived and also when a security deposit can be collected, how much that security deposit should be and when it should be returned.

In terms of the dishonoured bank cheque fee, it remains and we have continued it at twice the fee from the financial institution.

We think that this electricity decision balances the requirements of the Act and the terms of reference. The Act requires us to support the development of the competitive market and the terms of reference require us to set prices based on efficient costs subject to the energy purchase cost floor which is 75% ROC and 25% market based costs.



The terms of reference require us to include customer acquisition and retention costs in order to support competition and it also requires us to have regard to the long term interest of customers, and we think that customers are best served by a competitive market.

Our observation is that the market is more competitive and that it is providing protection to customers. This table shows you a few things. The first line is the incentives included in the regulated price over the past 6 years. You can see that over the 2010 determination there's been between \$24 and \$29 a megawatt hour included in the regulated price and over that period we have seen a step up in the market offers or the discounts and the regulated prices that are available in the market. Currently there are offers of over 15% in the market.

Over the period, we've seen the switching rates increase in New South Wales as the proportion of customers that have remained on the regulated price has decreased.

In order to continue to support the market, we have included the customer acquisition and retention cost allowance in a more systematic and transparent way. It reflects our view of the additional incentive required to promote competition to best serve the long term interest of customers.

To do it, we first formed a view on what the margin should be in excess of the short run efficient costs in order to promote competition. We then had a look to see what additional margin was included already within the price floor in the energy purchase cost allowance and then we set the CARC allowance having regard to the above. But I would note that price can't do everything in the market, that we did look at non-price measures as well and we have made some recommendations to encourage the retailers to be actively marketing and to make it easier for customers to engage in the market.

This table just illustrates how we set our customer acquisition and retention cost allowance. Our view was \$22 a megawatt hour was required above the short term efficient costs. So we started with that. We then deducted out the amount, the difference between the energy purchase cost floor and the market based costs and the market based costs are our view of the short term efficient costs.



So you can see that we've deducted that out and it leaves a residual CARC allowance that can differ by business and throughout time. So this CARC allowance could be between \$0 where there's already \$22 or more included by virtue of the floor in the energy purchase cost allowance, to \$22 a megawatt hour which is the allowance that would be included when the market based cost is equal to or greater than the long run marginal cost.

So that's all I wanted to say on the electricity decision. I thought it was a good position to launch into questions. I just would note that on the line we do have Jason Hall from SFG who provided us advice on margin, so if people have questions on margin Jason will be available to answer them.

Peter Boxall: Okay, thank you very much, Anna. Right, open for questions. Who would like to go first? Oliver.

Oliver Derum: (Public Interest Advocacy Centre) My name's Oliver Derum. I work in the Energy and Water Consumers Advocacy Program at the Public Interest Advocacy Centre.

PIAC has some concerns about the proposed customer acquisition and retention cost allowance. We fought quite hard for the change in the energy purchase cost allowance in the terms of reference and we thought that would be a win for consumers, that the price would go down and now we're seeing that allowance plus a bit more given to the retailers.

We have three key issues with it and I suppose they also will be a mixture of comments and questions to the Tribunal as a whole.

Firstly, we have a bit of a problem with the logic of pushing prices up in the belief that in time they will be forced back down. It might make sense according to the theory, but we're just not sure if it will happen in practice. And if, say, there's \$143 allowance for an average customer, have you done any figures or any calculations about how long it will take for that, for competition to drive that allowance out of the system and how much extra a household might have had to pay by the time that happens?

Secondly, we think that giving retailers this extra allowance is doing the opposite of encouraging innovation. You don't encourage someone to try harder by making things easier for them. So if they can just give less of a discount than what's been offered in the CARC, we think there's a risk that they'll do that and consumers will end up paying more.



Finally, this proposal will greatly advantage the standard retailers who will just take this extra money for all their regulated customers and, therefore, it could have the effect of increasing market concentration, increasing their market power and not aiding an increased diversification in the market. Has IPART done any calculations about how much money, how much extra money this proposal will just be putting in the pockets of the standard retailers?

And to finish, just another comment probably. This idea that people who are on the regulated price aren't participating in the market I think is something that again might need to be looked at a bit. The Morgan research that was done for the AEMC's review of the effectiveness of competition found that between 90% and 92% of consumers knew that they could change retailers and yet 40% of consumers remain on the regulated price. I would argue that that suggests that plenty among that 40% know that they don't have to be on the regulated price and yet they are choosing to remain on it because it comes with extra protections.

So I don't think it's right to say that if you're one of those people on a regulated price you're not necessarily participating in the market.

Peter Boxall: Thank you, Oliver.

Alexus van der Weyden: (IPART Secretariat) Okay, thanks, Oliver. My name's Alexis van der Weyden from the IPART Secretariat.

I guess there's a couple of different elements that I should probably comment on. One of the main findings we had as part of the review was that the market is sufficiently competitive and customers do have access to a range of products that on the whole are priced at lower than the regulated price. So one of the questions was around how long will it take for these efficiencies to sort of be reflected in the regulated price. Well, I think the question really is do people want to move off the regulated price and access lower prices. They can do that tomorrow if they choose to do so.

So people can avoid many of these increases and probably do better if they choose to shop around in a competitive market. So it's basically a function, I think, of how prepared people are to exercise their choice and shop around.



In terms of the question in regards to how much money will standard retailers be making on this, that's a function of how many people choose to stay on the regulated price. Once again we've seen that sort of decrease fairly rapidly over the last determination I think. It was around two-thirds of customers and is now around 40%. It was two-thirds of customers three years ago. Remember we are moving from an industry that was once a natural monopoly where there was 100% of customers on regulated prices, so you don't expect this to happen overnight, but you can see there is a fairly rapid trend there.

In terms of the extra protections the regulated price offers, yes it may offer some protections but many customers are aware and may not be shopping around because they don't feel that it's worth them spending the time looking into the different offers available. That's fine. That's sort of a cost benefit analysis for each individual customer.

So I think the fact that a lot of people may choose to stay on the regulated price may not be necessarily a function of protections that are available, just that, for them spending an hour looking at the offers available may not be the best use of their time. But if they do want to save money then there's offers that are available and they can save, we've said, up to 15% if not more.

So I guess one of the questions you didn't raise, if there's concern that there are some customers that can't access a market offer, then I think that's actually a separate debate and I think there's a range of policy solutions then if that is the question, and maybe some other stakeholders have comments on that.

Peter Boxall: This is being recorded Oliver. Anna will just follow up and then you can re-join.

Anna Brakey: Sorry, in relation to your comments about the additional protection provided by the regulated price, with the introduction of NECF now the provisions around the imposition of the late payment fee, when it should be waived, will be uniform across regulated and market offers.

I guess we don't see the regulated price as a price to offer additional protection, so to the extent that we would encourage the retailers to be developing products that effectively offer better services and conditions to customers than what is available on the regulated price. So there are discounts for pay on time or now there should be no differences and, in fact, some market offers don't impose late payment fees at all.



So I think that it's not necessarily true that the regulated price is offering something that the market can't offer.

Peter Boxall: Do you have a follow up, Oliver?

Oliver Derum: (Public Interest Advocacy Centre) Yes, just I may have missed it but you answered the question about it doesn't encourage innovation by making it easier and I think there might have been a few [unclear] to that.

Alexus van der Weyden: (IPART Secretariat) Sure. I guess I need to start off again by saying that we found the market was sufficiently competitive. So if standard retailers choose not to innovate, well that's a decision for them but you would expect that would result in a loss of customers to their competitors basically.

So I guess the incentive is on shareholders of the standard retailers to encourage them to drive whether it's efficiencies or other sort of product diversity to maintain their customer base and, if they fail to do that, then you would expect they would lose customers.

Oliver Derum: (Public Interest Advocacy Centre) But that's always the case. That's the case now and so by giving them this extra allowance, you're making it easier. How is that going to make them work harder?

Alexus van der Weyden: (IPART Secretariat) The same point, it's still a competitive market so what we've tried to provide is what we call supply side incentives, so second tiers will have increased incentives to enter the market. So you would expect this to make customers even more valuable and second tiers to work even harder to win some of those customers away from the standard retailers. So that, I think, should provide some level of incentive for standard retailers to offer products that their customers value.

Peter Boxall: Thanks, Oliver. A question here and then Cameron.

Andrew Dillon: (Energy Supply Association) Thanks, Peter. Andrew Dillon from the Energy Supply Association. My question, I think, relates a bit to what Oliver was talking about in that, and I'm paraphrasing a bit, both the decision and what's been presented today. The regulated deal is not the best deal out in the market and Commission's said that and was in the media saying that last week, and certainly that's the case with what's happening in the market.



The Commission, the Tribunal, sorry, has made some recommendations to retailers in terms of making switching a bit easier and that sort of thing. What recommendations, how many people out there across New South Wales do you think understand that the regulated rate isn't the best deal, and what would you like to see from Government in terms of information or other campaigns to help promote that awareness?

Peter Boxall: Thank you, Andrew.

Anna Brakey: I think the people that we would like to act most vigorously on this is the retailers themselves to engage more meaningfully with their customers. So in the first instance I think we'd like to see action from the retailers to make it easier for customers to understand the information that is available. Firstly to make the information easily available and then to make it easily understandable for customers and easy for them to then compare offers so that when they engage in the market they're doing so to deliver benefit to themselves.

So our first port of call would be to the retailers to make that easier, and also to improve the confidence of customers so when they sign a contract they're not then facing changes that the customer wasn't expecting. So while it might be within the terms and conditions of the detail within the offer, in our experience customers have experienced changes in their offers that they weren't necessarily expecting and that has led to customer dissatisfaction.

So we'd be encouraging retailers in the first instance to try and engage with their customers in a better way.

In terms of government, I think what we're after is an increasing awareness and customer education so that customers do know that there is an offer, there is a market out there and how they can get in there and assess their offers to sign up to a deal that benefits them.

Peter Boxall: Thank you. Cameron?

Cameron O'Reilly: (Energy Retailers Association) Cameron O'Reilly from the Energy Retailers Association.



I first of all just want to say that as far as we're concerned, IPART has done nothing other than implement the terms of reference it was given, and you can debate the numbers at the margin but I think you've done that correctly. And the objective of those terms of reference was, as I understood it, that the regulated tariff is a fair price, which it will be, but it's not necessarily the best price in a competitive market.

We agree that the long run interest of consumers is better served by having 10 suppliers of the same product as opposed to three. But, in the short term, I think there is a challenge here for some of the consumer groups to be encouraging activity on the part of the community because we don't have a problem in encouraging consumers to seek out the best service station for the best price, we don't have a problem with encouraging consumers to go to the cheapest supermarket for products and now that's becoming the case in electricity and gas.

So the challenge of this decision is to drop the mindset of clinging to the regulated tariff. It will be a fair protection for those people who want to stay on it, but there will be better deals out there in the short term and some of these costs that we're debating now will not be paid by consumers who switch to market offers. And that is the way we should be encouraging consumers to respond to this decision. Short term to get away from some of these charges, longer term to get into a market to encourage 10 suppliers or more for this product as opposed to three or so that it is now.

Peter Boxall: Thank you, Cameron. Yes, EWON.

Chris Dodds: (Energy and Water Ombudsman's Office NSW) I think everyone was really relieved when we saw the headline figures after so many years of - sorry, Chris Dodds, Senior Policy Officer at the Energy and Water Ombudsman's Office New South Wales.

The relief was palpable when we saw figures of maximum of 3% or 4.5% for the Energy Australia area after years of double digit increases on an annual basis. So first off I think everyone needs to take the debate, this is the best decision there's been in a long, long time.

A minor point I wanted to make was about the late payment fees. I mean I find it quite ironic that in looking at setting the actual prices for electricity and for gas you commission and pay massive amounts of money for experts to provide you with expert advice and you expect and get from the retailers detailed justifications for the prices and you work out the



price objectively as best as you possibly can, but when we come to a late payment fee we have a look at what they charge in market contracts, which is whatever they like, and we say we asked Energy Australia and Origin Energy for evidence of the cost of late payment fees and you say they didn't bother replying.

On that basis, I'd say until they do reply leave it at \$7.50 and follow your own practice everywhere else where you look for and seek evidence rather than taking a guess, and \$10.90 is a guess. One of the objections EWON has had consistency about late payment fees is we don't want to see a process that's occurred in telecommunications and in banking where income is generated through a series of fees that eventually regulators have to step in and bring back under control.

Now we've got no objections at all where costs and evidence is produced, but in this instance the evidence wasn't produced. And, at the very least, we think you should be consistent with the gas and if there's a CPI increase deserved in it, fine. Again, can't object to that, but just pick a figure at random, \$10.90, and bung it in is not consistent with the rest of IPART's methodology, I would argue.

The final point I wanted to make is just on the point, Anna, you made about encouraging consumers. In our last industry report to our members we pointed out that it's really, really difficult for consumers sometimes to actually get a quote. You go on a website you actually have to start giving your details and your NMI number and your birth date before you get to where the price is. Now you can find the prices by going deep into the website and find that part of the website that IPART require the energy providers to have, but for many of the retailers you've got to give your details and virtually enter a contract.

And we get complaint after complaint from people who are phone marketed where the only way, they want to see what the offer is but the phone marketers say the only way you can see the offer is to agree to the contract and then if you don't like the details cancel within 10 days. And people actually get very confused and it's probably one of our biggest sources of complaints around marketing at the moment.

So I really, EWON would really endorse make it easier for people to find the information and people will be more trusting of the market.

Peter Boxall: Okay, thank you, Chris.



Anna Brakey: I would encourage people to go to our My Energy Offers website in order to compare offers. It is there, it's free, it's independent and it does a lot of the work for consumers. So I think it would be worthwhile sending customers to the My Energy Offers website.

Peter Boxall: Yes, in the front.

Melinda Green: (Energy Australia) Melinda Green from Energy Australia. I'd just like to respond to the points from EWON.

We, I was involved in providing data to IPART for this review. We did look closely at our late payment fees and justifying the increase we put forward. The way our business is structured, given that the old TRUenergy business took over the EA business and is now one entity but with two different systems, we have a transition services arrangement with the old Energy Australia business, for some of those retail services and we don't get the complete breakdown of our late payment fees.

We also have an outsource arrangement on the old TRUenergy side of the business and, again, that is not very easy to get that data either. So we would like to provide that. We believe that the late payment fee proposal, sorry, decision by IPART is reasonable in that it's above where it used to be, it's below what the market offer late penalty is. We understand that that's been subtracted from retail operating costs so there's been no double counting.

We're looking for something that's cost reflective. It's probably below that level but we understand that if we can't justify it, it won't go any higher. So I'd just like to say that we do like to support these things with proper data where we can, but this was one area where it's not easy to do that or not possible to do that.

Just in terms of the other points around customers finding prices, with NECF being introduced in New South Wales on 1 July, Energy Made Easy will also contain that information and we also support the use of IPART's My Energy Offers site as well.

Peter Boxall: Thank you very much, Melinda. Okay, other questions? Yes, Jonathan.

Jonathan O'Dea: (Parliamentary Public Accounts Committee) Jonathan O'Dea. I chair the New South Wales Parliament's Public Accounts Committee.



We did a report last year on the economics of energy generation and, hence, I have a personal interest. I understand that you're, although independent, you're somewhat constrained by your terms of reference. I note also that, like our committee, you support deregulation of retail prices. However, my concern is that in the rush to get there you may be giving too much emphasis towards encouraging further competition as opposed to trending prices or driving prices towards the efficient cost of retail supply.

In that sense, I think it's worth pointing out that you're increasing the retail component of prices by over a third. Now it's easy to lose that in the context of falling prices for networks, falling prices for generation of electricity, but that is a huge increase in terms of the retail component and further to the question I think that was rightly asked by the PIAC representative, when does this result in lower prices for consumers in the longer term? Because there is a risk, I think, that we pursue competition for competition's sake.

There is already a healthy degree of competition, we're trending in that direction. There is a danger that we manufacture competition, artificial competition or an artificially unhealthy level of competition, an unhealthy level of churn that in turn further contributes to rising costs for the retailers but also to consumers.

So in striking that balance, I just, I suppose, caution us not to go too far down the encouraging competition route with the ultimate aim of having deregulated prices, which I think is a good thing and if you look at the considerable amount of work that you've done, a lot of very good analysis and work, it highlights though how many variables, how many assumptions there are and how difficult it is for us to second guess what a properly operating market should do more automatically.

Peter Boxall: Thank you, Jonathan.

Alexus van der Weyden: (IPART Secretariat) Alexis van der Weyden from IPART. I thought just to help answer that question we might bring up, actually the slide is already here.

So we can, I guess we have a balancing act in the terms of reference to balance the short and longer term interests of customers and you could argue in the past that IPART has given greater weight to those short term interests of customers. I think you can see from early determinations from 2007/08, and we haven't provided the figures for earlier determinations, you can see the levels of incentives in prices was fairly low.



So I guess what the result of that is, is you have market offers that are very, very small. Customers feel it's not worth their while to shop around and look for other offers and there are very few entrants coming into the market. That's why you have a far larger proportion of customers remaining on regulated prices.

So what we tried to do as part of this determination, and which is broadly consistent with the last determination, was ensure there was a level of incentives in prices to provide both those supply side incentives for retailers and to the market and the demand side incentives for customers to go out and shop around. What we've done in this determination is provide a level of incentives that is broadly consistent with the previous determination.

Part of, I think, the increased attention we're getting is because we've been probably more systematic and transparent in the way that we've done it. What we've done is reallocate some of the costs across the baskets but what we've done is provide a level of incentives that is actually broadly consistent with the previous determination, so what's actually been in prices for the last three years.

Anna Brakey: In fact, it's reduced from \$24.30 to now \$22. So that top line is effectively our \$22 headline that we start with and then we deduct off what's in the energy cost floor. So we are actually talking about a slight step down in the amount of incentive included in the regulated price.

So while you were talking about a step up in retail costs, in actual fact it's a slight reallocation between what was included in the generation by virtue of a 100% long run marginal cost floor and an allocation to the retail costs.

Peter Boxall: Yes, Jonathan.

Jonathan O'Dea: (Parliamentary Public Accounts Committee) Sorry, if I could clarify, because certainly what we've got to look at is the overall component and, as you said, prices are going up by 3% on average but for the retail component of 3.6%, prices would actually fall this year. So I think you've got to look at the overall figures and while yes we can look at different components and apples and oranges and the like, there's no doubt that the retail component of pricing is going up massively by over a third of the current level and in that there are various reasons or justifications you can use. Ultimately, the main justification is it will encourage competition.



The purpose, I would suggest, of encouraging competition is to drive prices down. So there's a trap there and the balance, albeit difficult, I don't think you've got right.

Peter Boxall: Thank you.

Anna Brakey: Customers are able - part of your question was how do customers avoid these costs. They avoid them by entering the market. As soon as you enter the market and secure a better deal, you can get a discount off the regulated price and customers can do that. So we would encourage them to do that and to avoid these costs.

Jonathan O'Dea: (Parliamentary Public Accounts Committee) They still get costs increases under discount offers or the regulated amount. So it's an increase for everybody.

Peter Boxall: Would you like the microphone for that, Jonathan? Thank you. Somebody back here had their hand up.

Phil Moody: (Origin Energy) I think just to maybe put some context around Jon's comments there, it's worthwhile considering what's happened in Queensland which is where the tariff has explicitly followed what people would call the contract price. And if we were to put up, I guess, a similar chart there for Queensland you'll observe that competition has actually decreased markedly in Queensland since that decision was made.

The other comment I would make, your comment about the third highlights a couple of things. One is that the retail component's actually a relatively small part of the price and, in fact, what you're trying to manage is the risk of the generation costs. So it's a little bit misleading to describe all of that in retail. It also presumes that you can buy 100% of the load at today's contract prices which is just not possible, so.

Happy to hand over.

Peter Boxall: Jonathan? Would you like? Just get the mike.

Jonathan O'Dea: (Parliamentary Public Accounts Committee) Certain I commend IPART on their transparency and their open dialogue and encouraging this sort of discussion, which is great, but just in response to that certainly in Queensland it's 100% market costs. In New South Wales it's 75% long run marginal costs which is very different, actually favours a higher cost. So your comment is not valid.



Furthermore, and I'm not an expert but there's probably generally a lack of understanding, dare I say, from where I come from in terms of how the market actually operates. But ultimately what is the most important thing is that we represent consumers to see efficient market operation and efficiently reflected prices.

I'll leave it there, but I think it needed to be responded to. It's not like Queensland.

Peter Boxall: Thank you, Jonathan. Do you want to come back on that, Phil?

Phil Moody: (Origin Energy) No, I'll leave it.

Peter Boxall: You'll leave that one. Andrew?

Andrew Dillon: (Energy Supply Association) Yes, I have a short comment on that one.

Sorry, Andrew again. I'll keep it brief. Just on one of your points, Jonathan, the key is where an efficient, and it will change company to company, in the market price is relative to the regulated rate. So if IPART in their decision for 1 July, moving the regulated price further away from the efficient price of the market, what you'll see is bigger discounts. So the way those customers can get the price cut now is to sign up to one of those competitive offers.

Peter Boxall: Thank you, Andrew. We do need the microphone, Jonathan. Do we have another microphone? We could give you one.

Jonathan O'Dea: (Parliamentary Public Accounts Committee) Only doing this to encourage debate because it's a debate we'll have ultimately anyway, so it's better to get it out.

So yes I agree with you, there'll be more people who'll be going away from the regulated price, which of itself is a good thing, but you've got to remember that those who are getting the discounts now will, in fact, lose some of that discount because the regulated price has gone up by a factor of 3.5%. So everyone is paying extra. Okay?

If you left things as they are at the moment, you're trending pretty healthy competition. The retailers are doing a good job in competing, but let's look at that chart up there, the table, percentage discount on regulated price. You put the regulated price up, it goes up for everyone including those getting the discounts, albeit that's a little bit misleading in the sense that some of the discount, including the 15% I understand is only on the variable component of the bill, not the fixed component.



Anna Brakey: Just in response to that, there are different product offerings in the market not all linked to the regulated rate. So it's not the case that anything that happens to the regulated rate flows through to everybody in the market.

In relation to that 5% to 15%, there's actually offers of up to 20% available currently and that 20% I think is on the usage only, but when we convert it we've been a little bit conservative in our view there just to cover off those issues.

Peter Boxall: Thank you, Anna. More questions? Yes.

Andrew Dudgeon: (AGL) Andrew Dudgeon from AGL. Just in terms of the electricity price decision, we're probably supportive of IPART's approach and think it balances short term efficiency or efficiency with promoting competition. In terms of all the specific components, we'll probably have some technical arguments that we'll raise through our submission.

I think broadly we're supportive of the approach to update the retail operating costs which is more broadly in line with publicly listed companies and what's been published, and the updated approach in terms of CARC and in terms of having CARC within the regulated price for a second tier retailer such as AGL going out looking at offering market contracts and developing offers. We see this as an important part of the regulated price, somewhere where I'm broadly pleased to see that approach recognised within the prices.

Peter Boxall: Thank you, Andrew. Cameron?

Cameron O'Reilly: (Energy Retailers Association) I'd just like to reiterate my original comment that I believe IPART has implemented the terms of reference given to them by the government, and I'd also emphasise from the government's point of view that the objective is in the long run interest of consumers to have a more competitive market and I think it was a time for those sorts of terms of reference because if we look at Victoria as a market, 25% of the Victorian market is held by second tier retailers. Today in New South Wales it's 2% or 3%.

Now these terms of reference and the Tribunal's decision is setting things in the right direction, but we also need to say that we keep reiterating that this is a fair price, the terms of reference make it the actual price and it's a hypothetical price to consumers if they choose to make it that way, because they can do a lot better in the market.



The last thing I'd say, we need to keep re-emphasising we're debating here the retail component of a regulated tariff which is around 10% of the overall price to the consumer. As we know, in this state it's been networks, green schemes and so on that have really been pushing up the prices to the level that has been causing hardship in recent times and the good news is that those things, in terms of networks, are starting to come under control and that is a welcome development.

Peter Boxall: Thank you, Cameron. Other questions or comments? Yes, Melinda.

Melinda Green: (Energy Australia) I'd just like to reiterate some of the comments by AGL and also by Anna just in terms of the overall view on the determination made by IPART. We're very pleased to see some of the comments around competition and the views there. We've also looked at the AEMC's review of competition and seen some of the surveys that have come back from customers, so that's quite compelling evidence. And IPART sort of taking a positive step towards price deregulation we think is positive as well.

In terms of lightening the form of regulation, that's also, in our view, a good thing and taking a slightly different approach to some of the annual pricing reviews.

In terms of CARC, we still have the position that we prefer an LRMC floor price, but we do recognise that what IPART have come up with does comply with the terms of reference and does recognise that - it's a totally different approach to an element that was already there and we support that does need to be there and it is an appropriate mechanism. It's not our preferred one, but it's acceptable.

In terms of the competition, I'd just like to say that it's been quite noticeable how much competition has come into the market. It's intensely competitive now in New South Wales and I think that's why we're seeing such a rapid drop off in the customers remaining on regulated tariff. This figure of 40% is from February/March this year so by the time we get to June I'd expect that to be significantly lower again.

In response to different decisions by IPART, you'll see a different level of discounting in the market like you do with Queensland as well. No one can really predict what wholesale prices are going to be in a year and some of these variables will just fluctuate up and down a bit and that contributes to do retailers go and keep discounts where they are, do they increase them, do they sort of wind them back a bit? A lot of things are going on behind



the scenes in that mix, so broadly we support that approach by IPART to support competition in that way.

We also appreciate that IPART have taken into consideration a lot of the evidence we provided on retail operating costs and some of the changes in the market. There have been a lot of additional costs there that have driven up. In past years there has been a lot of sensationalism around some of the network price increases, but really there has been very, very little movement on some of the retail aspects.

The last determination, we believe the operating costs decision came out too low so there has been a sort of a rectifying of that component which we recognise. Saying that, it's clear in the determination that the costs allowed by our part are considerably lower than what our actual costs will be, so I don't think by any means anyone should think that we're getting any cream out of this. It's a tough retail environment at the moment, it's a tough wholesale environment, so we think IPART have got the balance to a reasonable thing and I don't think the consumer groups should think that this is by any means a win for retailers.

Peter Boxall: Okay, thank you very much, Melinda. Oliver?

Oliver Derum: (Public Interest Advocacy Centre) Thank you. I just wanted to throw my support behind some of the comments Mr O'Dea made and say how refreshing it is to see an elected representative at an event like this, in the trenches if you will.

A couple of comments just to respond to the one that was just made about it being a tough retail environment. From a consumer perspective, it should be a tough retail environment. That's the whole idea, retailers competing with each other and making it difficult to give consumers the best deal.

The other thing is that I do agree with what Chris said and what Cameron's mentioned now, the increase is not big in the context of recent years and all that, but IPART knows full well from its own research that it does how much people are struggling to pay the bill and how many are getting disconnected. So, as Jonathan said, we could have been talking about the price going down and that would have made it a bit easier, but instead it's holding steady and that's not going to make it any easier. That's just a great concern that PIAC has, as I'm sure IPART's well aware.

Peter Boxall: Thank you, Oliver. Other questions or comments? Phil.



Phil Moody: (Origin Energy) Phil Moody again from Origin Energy. Again, look, I would certainly like to commend IPART on their approach in this and I think it's quite refreshing, I guess, the balance that's been taken between long term and short term opportunities.

One thing I would comment on, and IPART have stuck to the terms of reference which you're required to, but there's definitely a temptation amongst policy makers to, I guess, race towards what's observed in the wholesale contract market. I'd certainly caution everyone in that regard. It feels, from my 20 years in the industry, that the contract market right now is at the bottom of the cycle and so any upside that you see from rushing to that, as has been the case in Queensland, will probably result in a bit more pain down the track, and definitely wouldn't recommend that as a strategy.

I'd also comment on even Frontier's own modelling of spot prices which were circa \$10 a megawatt hour higher. So there does feel to be a disconnect in the wholesale market right now, not complaining about that, it is what it is, and the market will resolve itself one way or another and retailers, the big boys, will find our way through that. Just be aware that there are a number of contributing factors to where that price is at the moment, softening demand, ongoing solar penetration and wind. All of those are yet to play out and the supply side hasn't really responded. There has been some mothballing, but I would expect economically that there'll probably be more of that from supply side players. It's just not economic to continue to produce energy at those prices.

So with that comment in mind, we will be commenting on the essential load shape. It does appear from our analysis to have become less peaky from IPART's perspective from the previous determination to now and we'll be providing more information on that.

And we do have a couple of comments to make in relation to SFG's work on margin. We feel that there's systematic risks of other industries haven't been fully reflected in the electricity piece, but on that note I'll hand back.

Peter Boxall: Thank you very much, Phil. Other comments, questions? Yes, Chris.

Chris Dodds: (Energy and Water Ombudsman's Office NSW) A general question, comment, sorry. Chris Dodds, Policy Officer at EWON.



I just want to point out that while the price is good and the impact of this price rise on consumers is going to be relatively minimal, there are still significant customers in hardship and the affordability issue doesn't go away because one price rise stabilises because people are still living with the previous price rises. And, indeed, all the projections, as I understood the gas paper, and indeed, the AEMC's strategic direction paper pointing to gas is that we're going to now experience a number of years of gas price rises starting to do what electricity did two or three years ago with network costs and then the impact of world equity pricing, or whatever the appropriate term is there, for matching world price for gas.

So the issues of affordability haven't gone away and in having the discussion with the AEMC the other day in their strategic directions workshop, there was a tendency of some economists from some of the, particularly the distribution businesses saying well you shouldn't mix energy policy and pricing policy with social policy. But the reality is that the impact of affordability has an impact on energy prices. It was noted, as I understand it, in the IPART paper, the debt books, the debt levels that some of the energy companies are carrying, the cost of the hardship programs, which is a regulatory requirement, is an impost on all customers, quite rightly, but it is an impost. And as affordability increases and people run into problems with their accountability and the increased responsibilities under NECF to deal appropriately with hardship customers, then those costs become a burden that needs to be addressed and the response has to be one that is holistic.

It's not good enough just to say well that's a government social policy. Equally it's not good enough to say well it's the retailers, they should do something about it. It has to be a rounded response and EWON has been working with the Energy Retailers Association and cost in the community groups to try and develop a package of measures around affordability and one I think IPART has called for in the past, it would be good to repeat that call, and that is for an objective assessment about the most efficient use, the term we're using, way of delivering customer assistance both in terms of concession regimes but also in emergency assistance regimes so that there is a consistency across the country.

That reduces the cost on retailers who, at the moment, have to have a range of different concession and emergency assistance measures that they have to take into account and their call centres have to know this is a New South Wales one, or this is a Victorian one and that's something else, this is a Victorian customer, therefore, they're eligible for this



medical instrument, not that piece of medical equipment. If they're in Queensland and they're on Newstart, they're not eligible for a rebate, but if they're in New South Wales or Victoria they are.

So all of those things impact on the bottom line for the retailers, but also on the bottom line for customers. So it is an energy policy issue and it is a pricing issue and it is a social issue and those things all combine and the solutions come from all working together. So I'd encourage IPART to think about the sorts of things they called for in the past, like a review of the concessions regime, and to keep that pressure on so that the necessary reforms in our industry happen both in New South Wales but nationally as well.

Peter Boxall: Thank you very much, Chris.

Anna Brakey: You're right, we have made that recommendation in the past and we do support well targeted customer assistance measures. A point that was also made is that the regulated prices do not offer protection against price shocks, so with the large increases in previous years in network prices, for example, they have flowed through to retail prices and retail price regulation does not provide protection from price shocks.

Peter Boxall: Okay, thank you. Melinda.

Melinda Green: (Energy Australia) I just wanted to address Chris's point as well. I consider that although you're right, there is some link and I do support your comments around a national approach to concession, because you're right, that would make it easier for us and we're supportive of those programs, but I think the best thing that IPART can do is set a price that is efficient and does result in better competition. Because then you can better balance out the overall cost to the whole of society rather than considering an increase in the tariff may increase bad debts and that sort of impost.

It's got to be balanced up by what everyone else is paying as well, so I do believe that the approach IPART take is the best approach overall.

Peter Boxall: Thank you, Melinda. Any other questions or comments? We're sort of morphing into the second part of the agenda which is the general Q&A before we have morning tea. Then after morning tea we're planning a more technical session on the energy cost allowance, but any other questions or comments that people would like to raise now? Yes.



Meng Goh: (AGL) Meng Goh from AGL. I'd just like to briefly shift the focus to gas. I'd like to take this opportunity to clarify AGL's position on gas for next year.

First of all, the number of customers on regulated prices has been moving down quite rapidly over the last few months and our estimate is that there is currently less than one in four customers remaining on regulated prices in gas, and that compares with electricity which is at 40%.

In our view, the current review has been conducted in the proper spirit of a light handed approach whereby IPART have taken an independent view of retail costs, especially wholesale cost, and IPART has also taken a holistic view of the price change rather than a strict cost build up, and we agree with that approach.

Having said that, we know that IPART has to make a judgement on where the balance is between the various objectives of the review. From our point of view, we consider our original proposal to be reasonable, so we do have some difference in opinion on where that balance sits. Having said that as well, we have taken note of the draft decision and we will be revising our pricing proposal in line with the draft decision.

Thank you.

Peter Boxall: Thank you very much, Meng. Okay, anything else? A question from Alexis.

Alexis van der Weyden: (IPART Secretariat) Sorry to switch it away from gas again, Meng. It's more a general energy question I was going to have.

Some of the debate around competition and the role of the regulated price in competition I think is a welcome one, particularly with AEMC's report due to government very soon.

I guess the question I have was, is the view from stakeholders and some of the consumer groups that there are sections of the community that cannot access the competitive market? Because it seems there is a general view that we're concerned about the price impacts that the regulated price is having on a small section of the community, and I just wondered, what section of the community that is that you find are having difficulties accessing the competitive market. Because maybe there needs to be some sort of tailored policy solutions there rather than using the regulated price as the tool to address these customers' needs.



I guess that's an open question.

Amelia Christie: (Combined Pensioners and Superannuants Association) Amelia Christie from Combined Pensioners and Superannuants Association. One of those groups is definitely older people. They're also not able to access things like that really great website, the Energy Switch, and I know that they can call up as well, but a lot of people if they call up a retailer or they have the doorknockers come, they're really overwhelmed by the information they get and they also feel quite pressured to sign up to a particular offer. So that's a real issue there.

And also the implications about smart meters, there's a lot of fear around that and if they go unregulated do they have to get a smart meter, where do they stand on that, which is worrying for a lot of people, particularly given that older people and people who are at home during the day are less likely to benefit from the potential price gains that they can get from a smart meter.

Peter Boxall: Thanks, Amelia. Any other questions or comments? Oliver.

Oliver Derum: (Public Interest Advocacy Centre) Just to respond to Alexis and echo Amelia, certainly there are groups and it's not only older people, people with a disability, but more broadly obviously I don't disagree, it's impossible to disagree that by going into the market you can get a cheaper price, but at the same time participating in the market for consumers, particularly less savvy consumers, is not always a pleasant one. If you have a door to door seller come to your door who's all over it like a rash, how to get you to sign up to something, often, well I can't say often but there's been research in Victoria that shows that people sign up to offers that leave them worse off.

So it's all well and good to have the theory that you only go onto a new contract if that leaves you better off and people are perfectly capable of understanding what is and isn't better off, but in practice that isn't always the case. And that's one of the reasons why we'd like the regulated price, and why we are prone to referring to the regulated price as a safe haven, if you will, and I accept that maybe that's not the perfect term.

Peter Boxall: Thank you, Oliver. Any more questions or comments? Jim.



Jim Cox: One of the things that has impressed me listening to people this morning is just how difficult it is for consumers actually to process the information to decide to take up an offer. I'd be really interested in views from retailers in particular about what could be done to make that easier.

Peter Boxall: Phil?

Phil Moody: (Origin Energy) Well I'll start the conversation. Look, unfortunately the starting point is that it is quite complex. I won't go into that, I think most people here appreciate that. There's certainly examples of products where we've tried to, I think the industry's moved to improve that situation and probably the one that you saw in New South Wales specifically in the last few months was the two year fixed price offer where we could make that choice quite simple for customers and they would know that there was no price movement coming. That was effectively retailers willing to take a view on where the prices and other pieces were going. Within the risks that we could manage, we were happy to take that on and balance up, I guess, making the product more attractive and consumable for the customer.

It is something that we think quite a lot about because there are a lot of movements. As mentioned earlier, most of the price rises in recent years have been networks, carbon and green schemes, so trying to balance all of that. We offer other products to customers. We sell solar. We bundle those things up to make it easier for the customer to pay. I know our competitors also sell a range of other products and appliances as well, so we try to, I guess, assist the customer in as many ways as we can, but certainly open to more ideas on how we can develop that further.

Peter Boxall: Thanks, Phil. Cameron.

Cameron O'Reilly: (Energy Retailers Association) I just want to introduce a little bit of balance here to this conversation. Yes we can always do this industry better, and I certainly think making consumers aware of the comparator sites as a good reference point, operated transparently by regulators. Making consumers aware of their right to choice is always a good thing, but I think when you look at this industry there is a range of consumer protections through the national energy customer framework. On the marketing side there's a range of protections through the Australian consumer law, the marketing framework in the NECF. There's the energy assured scheme implemented by the industry if consumers want to get information about comparing offers.



On petrol we saw that Fuel Watch fell over a few years ago. All of these were important things for the household budget. I think electricity in terms of having hardship schemes, consumer protection frameworks, reference points in terms of comparison, all those sorts of protection is as good as any industry and I challenge you, in some areas of telecommunications, more complex but just as essential for people and it's very difficult to understand their plans there.

So I think electricity's doing things as well as it can be done vis-a-vis a lot of industries but we can always get better, but also we're not also allowing things that could help consumers manage things like debt by allowing technology that allows for more potential regular bills. We've had bans in some states against prepayment meters, if we accept prepayment as an option for telecommunication. All sorts of things can be done to make this better and that's some of the areas that were discussed at the recent affordability summit involving the ACOSS and the Ombudsman, but I don't think we should be too hard.

There are a lot of areas we can do better and I think particularly, for instance, I understand there are a lot of people that comparisons on internet websites are fairly challenging which is why we perhaps need more mediums for people to help some of those groups get third parties to understand some of the ways you can use comparator sites. But I do think that we shouldn't be too hard on this industry as the way that we are helping consumers get the best deal by comparison and the comprehensive consumer framework that is used by comparison to a lot of other industries.

Peter Boxall: Thanks, Cameron. Anybody else? Melinda.

Melinda Green: (Energy Australia) I'd also like to add to the question from Jim that in addition to all the regulations that Cameron mentioned that we have to comply with, we have a vested interest in keeping customers happy and sometimes that does occur by partial trial and error. Phil talked about the fixed rate plans. If we see a niche there we can go out with those products. We also don't want customers to get into a position of hardship because then we don't get the money from that bill.

So if they don't understand the contract or if they think we've changed the discount on them when we shouldn't have, then that can end up in a complaint. It costs us money through the Ombudsman. So we have to definitely balance all these things and this can hurt us if we get it wrong. It hurts us in competition.



Also, a lot of the ways we do this may not be obvious like a plan or an offer or a channel that we use, all of which are evolving, it sometimes just happens at the front line.

Everybody has an electricity account. If they're calling up or moving house or things like that, we try and make sure they're on a better offer then because if they're not then we consider that risk of being doorknocked or going with a competitor some other time.

So we need to keep them happy. If they're in hardship, we forward them through to people who can help them with their debt and things like that. So there's a number of different ways we help them try and understand this industry and how they can operate within it. So there's a number of guises that those sorts of things come in.

Peter Boxall: Thanks a lot, Melinda. Anything else before we wrap up for morning tea? No? Well I suggest that we take a 15 minute break now for morning tea, which means we would resume at 11:30 and that will be the third session and that's the technical session on energy costs. That does not mean to say that we will not engage in other discussion, but that's what it's primarily about. Thank you.

[Morning Tea Break Music 1:16:00.8 - 1:34:51.8]

Peter Boxall: Thank you for coming, for resuming after morning tea. We'll now move to the next session which covers the energy cost allowance. First John Smith from IPART Secretariat will provide an overview of key decisions in relation to the energy cost allowance. We will then open the floor to stakeholders to ask questions of IPART or Frontier Economics who are also at the table as they advised us on energy costs. Over to you, John.

John Smith: Thank you, Peter and thank you to everyone who's decided to stay on for surely the highlight of our public forum today.

In this session I will discuss our approach and draft findings on energy costs and the cost of complying with green schemes. I will cover our modelling framework, key inputs to this modelling framework, namely forecasts of regulated load and input costs for electricity generation and what this means for our draft decision on the energy purchase cost allowance. In estimating the costs of purchasing electricity and the costs of complying with green schemes we prefer to use a market-based approach. This means we prefer to rely on traded market price data - this means we prefer to rely on traded market prices over a modelled or cost-based approach. However this requires a well-functioning liquid market.



We consider that a market-based approach is more transparent and more likely to reflect a retailer's short term efficient costs. Our approach would also be to set the energy purchase cost allowance using a market-based approach as our framework for this determination considers both the short term efficient costs and the incentives needed in prices to promote competition. However, as I'll discuss later in the presentation we've set the energy purchase cost allowance in line with the floor in our terms of reference.

Many of you will already be familiar with the two approaches we use to estimate energy costs. The first of these is a long run marginal cost of electricity generation. Under this approach we effectively build a whole new least cost generation system designed to meet the regulated load. In our previous determination the energy purchase cost allowance was set in line with the LRM estimate. The second approach is a market-based approach which considers the costs and risks of purchasing electricity in the wholesale market again to meet the regulated load. We commissioned Frontier Economics to provide advice on energy costs under both of these approaches.

Our approach for estimating the LRM of electricity generation is essentially unchanged from our previous determinations. However, there is an important change in our methodology for estimating the market-based energy costs. Under our draft decision we've used market forward prices from d-cypha trade in 2013-14 instead of using modelled forward prices. This is consistent with our preference to use a market-based approach where there is a well-functioning and liquid market. In previous years we have presented results using both market and modelled forward prices and generally these results have been fairly similar.

However because d-cypha forward prices in 2013-14 are considerably lower than the modelled forward prices the market-based energy cost is also considerably lower than had we used modelled forward prices. Later in the presentation I'll talk some more about the difference in these results.

Forecasts of regulated load are a key input into both our approaches for estimated energy costs. The profile or shape of the load forecasts is an important driver of energy costs with peak year load shapes being more expensive to serve than flatter load shapes. In this determination our terms of reference requires two separate load forecasts for the standard retailer in each supply area.



One for regulated customers who consume up to 40MWh per annum and another for all regulated customers who consume up to 100 MWh per annum. We have based our energy purchase cost estimates on the sub-100MWh load shape in line with the definition of a small retail customer in our terms of reference. However, we've also reported results using the sub-40MWh results. Our regulated load forecasts incorporate publicly available historical data including the net system load profile, controlled load profile and where available half-hourly interval metered load data for regulated customers. Importantly using publicly available information has a benefit of transparency. Frontier Economics provided advice on the regulated load forecasts which were also developed in consultation with standard retailers.

In our previous determination the regulated load shapes were developed by the standard retailers and were based on data from the Electricity Tariff Equalisation Fund. This data is different to the net system load profile, controlled load profile and interval data used in this determination. This has produced differences in the regulated load shapes across the two determinations. In summary Energy Australia's load shape is peakier than that in the 2010 determination. Origin Energy's Endeavour load shape is similar, slightly more peaky than in the previous determination and Origin Energy's Essential load shape is flatter than in the 2010 determination.

Frontier Economics also provided advice on a number of input assumptions for electricity generation. These include the capital costs of different electricity generation technologies, fuel costs and other operating costs. The most important of these in terms of our energy cost modelling are the capital costs and fuel being coal and gas costs. We have also provided Frontier with the weighted average cost of capital or WACC for a number of different energy-related businesses for use in their modelling.

In our previous determination we relied on third party consultant reports for our input assumptions. This makes it difficult to explain some of the changes in our input of costs from the last determination. However our forecasts of gas costs both capital and fuel costs are relatively lower than the forecasts we used in our 2010 determination. We used estimates of gas spot prices in our electricity modelling as opposed to long term contract prices. For 2013-14 these spot prices are relatively consistent with recent spot prices reflecting the expectation that there will not be a substantial change in supply and demand conditions by 2013-14. Gas prices increase over the remainder of the determination in large part due to LNG exports increasing demand for gas.



Our forecasts of coal costs both capital and fuel costs are relatively higher than the forecasts we used in our previous determination. Our coal spot prices are based on netback prices reflecting the fact that there is existing capacity to export additional coal.

Our WACC estimates are also higher than the previous determination and this reflects largely a change in our WACC methodology. Whereby we take into account WACCs using current market data and longer term averages.

Using our modelling frameworks and the input costs just described, I'll now talk about the draft results for the long run marginal cost, the market-based estimates and the energy purchase cost allowance. The results for the LRMC modelling are around \$1.50 to \$11 per MWh lower than in 2012-13. Although a number of factors have influenced this result there are two main drivers of this change. Firstly peakier load shapes for Energy Australia and Origin Endeavour put upward pressure on the LRMC. However this has been offset by lower gas costs with gas-fired generation dominating the investment mix under the LRMC modelling. In the case of Origin (Essential), the result is also driven by a relatively flatter load shape combined with the lower gas costs.

The results from the market-based energy cost modelling are between \$1 to \$5 per MWh lower than in 2012-13. The main reason for this is our decision to use d-cypha-forward prices for 2013-14. Had we used modelled forward prices in 2013-14 the market-based energy purchase costs would have been around \$9 to \$12 per MWh higher. Because there was considerably less trading in contracts beyond 2013-14 we did not use d-cypha-forward prices in the final two years of our determination. Instead for the purposes of presenting the market-based energy purchase costs in the final two years of the determination we have rolled forward the results from 2013-14 using the modelled change in outcomes. We will update the estimates in the final two years of the determination during our annual reviews.

As our draft decision we have set the energy purchase cost allowance at the floor described in our terms of reference. This is a weighted average of 75% of the LRMC and 25% of the market-based estimates. This is a change from our previous determination where we were required to set the energy purchase cost allowance at the higher of these two estimates. The resulting allowance is relatively lower to the result in 2012-13 given the lower LRMC estimates and the 25% weighting ascribed to the lower market-based estimate. We decided not to set the energy purchase cost allowance above the price floor



in line with our approach of using the CARC allowance as the mechanism to provide additional incentives in prices to promote competition.

It's also worth clarifying that in the situation where the market-based estimate is above the LRMC in practice we would set the energy purchase cost allowance at the market-based estimate.

Our terms of reference also requires that we determine the efficient costs of complying with green schemes. These include the large scale renewable energy target, small scale renewable energy scheme and the energy savings scheme. As mentioned earlier our preference is to use a market-based approach for estimating the cost of complying with these schemes. We assessed that there was sufficient liquidity in the market for SRES certificates to use a market-based approach. This produced certificate prices of \$34.31 in 2013 and \$37.64 in 2014, down from the \$40 nominal clearing house price we used in our previous determination.

In the case of the LRET and the ESS we considered there was insufficient liquidity in the market-based approach for these schemes. We've instead continued using a cost-based approach for the LRET and an after-tax penalty price for the ESS. During our annual reviews we'll re-assess our approach for each of these schemes.

In terms of the results for the green costs, the LRET costs are higher in 2013-14 relative to 2012-13 due to both higher targets and higher certificate prices. For the SRES the fall in the projected costs over the termination period relates to the lower projected rate of liability in these later years. Note also that the cost pass through amounts for 2013-14 relates to a catch-up component for the SRES costs in 2012-13. For the ESS the projected increase in the final two years relates to an increased rate of liability.

That's the end of my presentation. Does anyone have any questions?

Peter Boxall: Thank you very much, John, questions? Yes.

Keith Robertson: (Origin Energy) Keith Robertson from Origin Energy. I've got a couple of areas we'd like to cover but would like to start with one of the key inputs which is the regulated load shape for each of the network areas. As you pointed out the load shape for residential is quite a bit flatter than the other two distribution areas and also quite a bit flatter than has been used in the previous determination. That's really a key area of concern for us, is to try and better understand why, when we think market developments



would tend to lead to peakier load shapes over time, we've had PV installations, energy efficiency measures, again moving more energy rather than peak demand.

When we compare it with historic data and with our own data, some of which we've shared and can make more available to you shortly. It just seems too flat and there's very little difference between your P50 or your normal or average shape from what you would expect to be a more extreme or P10 shape. We wondered if you had any more insights? We thought there may be differences but were either inherent in some things that you can't observe. So the data you've used is fine and the methodology seems sound but nonetheless the results don't align with our own data and this could perhaps be due to loss factors. Loss factors or indeed the calculation of the controlled load shape perhaps not being true to the sample any more.

Alexus van der Weyden: (IPART Secretariat) Thanks Keith, Alexis van der Weyden from the IPART Secretariat. I'll just provide I guess a bit of an overview and Andrew can dive into some of the detail. Our preference has been to rely on publicly available data, in this case, data from AEMO. The reason we've done that is because obviously it's more transparent. That's something the stakeholders including Origin have asked for in the past. One of the challenges in relying on market data is that it's difficult to investigate what's causing changes through time in terms of the NSLP. It sounds like you have some concerns around how AEMO have derived the net system load profile. I guess just from an overall level it's difficult for us to understand what may be driving it. That's part of the challenge of relying on some of the market data. Andrew, did you have anything else you wanted to...

Andrew Harpham: (Frontier Economics) Yes I guess I would just...

Peter Boxall: Andrew can you just...

Andrew Harpham: (Frontier Economics) Oh yes sorry, Andrew Harpham from Frontier Economics. I guess I would just reiterate that as far as our analysis is concerned, ultimately for essential areas load shape we use three key pieces of input to develop the load shapes. That is the half-hourly NSLP from AEMO. The half hourly CLP from AEMO and an estimate of the relative size of those two shapes. So unless we change the methodology - if there is a difference between the load shapes we're seeing and the load shapes you're seeing, it ultimately has to come down to one of those three things. Either the half-hourly



NSLP or CLP that we're getting from AEMO to not line up with what you expect. Or the relative share of CLP and NSLP don't line up with what you'd expect.

Now we're more than happy to look at any data that you'd like to provide on what your expectations is, what your expectations are. Perhaps once you've done that we can have a chat about you know where we think the gap might be.

Peter Boxall: Okay, thanks, Keith, anything else?

Keith Robertson: (Origin Energy) Yes there were a couple of others. The LRMC as I understand it has been based on a modelled gas portfolio, OCGT and CCGT and the key input to that as you noted was the gas fuel cost. When we look through the report we see that - and it's a little bit difficult to break it down and get sort of a benchmark gas cost. But when we try and strip out what we think we've used for transport costs and we think some of the transport costs appear to be a bit understated as well. We come down to a commodity cost that seems quite a bit below the other sort of reference points that we've got. Either in terms of our own gas costs, the costs we see in the market or indeed the costs that were explained and modelled through ACIL Tasman's earlier work for IPART on the gas wholesale side.

So it would help to get a bit more of an explanation as to why you think there is such a disconnect? In ACIL's work they looked at a high, a medium and a low scenario. Even if I turn to the low scenario and within which they express things as range and terms of the bottom of the range within the low scenario. That's still sitting above the assumed gas input price as I can sort of decipher it from the Frontier report. So I think it would be helpful, firstly if we had just a little bit more information about the gas cost in terms of just which supply sources are driving that selected marginal cost? What load factor has been assumed for the plant and a split out of the key components? Perhaps in the same way that ACIL did the commodity component, the transport component and deliverability? Then we can get a sort of like-for-like comparison.

Andrew Harpham: (Frontier Economics) So I guess there's a lot of questions in that. Just starting at a very high level I guess our view on gas costs is that, and I think this is something that IPART have formed a view in their gas review is as well. Is that there is a lot of uncertainty about where gas costs or gas prices are going to be heading over the next five years. In our view that uncertainty really is driven by what's going on in Queensland with LNG developments and with the development of CSM. It seems to us



logical and it certainly flows through into our modelling that that uncertainty really comes in play once you start to see LNG exports commence. So in our view yes there is a lot of uncertainty about where gas prices or costs are going to head. But in a regulatory framework in which we have annual reviews, I guess our view is that that's less of a concern. Because we don't think that's going to be as big a force in 2013-14.

So trying to address some of your more specific questions, one of them was about splitting out transportation and commodity costs effectively. So the way we do our modelling and I think this reflects the way gas markets work, is that often what our model is optimising is the combined commodity costs and the transport costs. So we don't work out a commodity cost say in Moomba and a commodity cost in Longford and then take an average of that and add on transport in any sense. What we do is, what our model does effectively is work out for each demand centre, so for New South Wales for instance or for Sydney for instance. Work out where the marginal gas supply is going to come from and what is the combined commodity cost and transport cost for that - you know meeting that marginal increase in demand.

In doing that and I guess this gets to one of your other questions we use the system shape. So the demand shape for New South Wales as a whole rather than for instance you know a small customer load shape. We use the system as a whole, that shape. So initially in New South Wales the marginal supply in our modelling is coming from Moomba, so the price we're seeing is a combination of commodity cost and transport cost from Moomba to Sydney. Now I can't quite remember if that answered all of the various questions or if you have some other questions?

Keith Robertson: (Origin Energy) I quite understand and agree entirely with the uncertainty in the latter years that you're trying to model through. But that's much less the case for the coming financial year. There still seems to be quite a disconnect between the view that ACIL landed upon and IPART ultimately accepted or took into account when forming its view of wholesale gas prices and the modelling input we've got for gas-fired electricity in next financial year.

Andrew Harpham: (Frontier Economics) Sure, maybe I'll just say one more thing that I should have said originally. So I guess the starting point for our gas modelling and this was something John referred to is, we're interested in the spot or the current price of gas. I sort of use 'price' a bit loosely here. Of course we're talking about an LRMC in our



modelling. But we're interested in the cost of gas for next year as opposed to the cost of gas that you might see under a long term contract. So if you understand that in an environment where costs and prices are going up you would expect to see, if you enter into a long term contract for 10 years say at a flat real price or a relatively flat price that the starting point for that contract is going to be higher than the price that you currently see or the price that we're forecasting.

With that in mind, it seems to us - I mean it's unclear to us what the substantial change in those supply demand dynamics for next year would be that would give rise to a substantial change in the gas price for next year. Yes there are a lot of changes coming in gas markets in Eastern Australia. But it's not clear you know where you have relatively flat forecasts of domestic gas demand. In particular it's not really clear to me where the impetus is for a substantial shift from this year and the last few years to next year. Certainly after that I can understand it. But I'm not sure why you expect to see it next year.

Peter Boxall: Okay, thank you, Keith. Melinda?

Melinda Green: (Energy Australia) I've got some questions on gas as well. It's Melinda Green from Energy Australia. I just wondered, Andrew, if you could comment a bit about the - if there's any relationship between the gas costs and the quantity of gas required? Is - and the link between the states and you know to the degree to which Queensland gas prices are affecting the prices you're calculating for New South Wales gas?

Andrew Harpham: (Frontier Economics) When you say link between prices and quantities are you referring to sort of quantities for the system as a whole?

Melinda Green: (Energy Australia) Yes the LRMC you calculate is basically a gas world, it's all OCGT and CCGT so it's all gas. So you know is that much gas available and what would the price of that gas be if - is there a link there between...

Andrew Harpham: (Frontier Economics) Sorry, I think I was talking at the same time.

Melinda Green: (Energy Australia) Yes.

Andrew Harpham: (Frontier Economics) So the gas demand forecast that we use to come up with the LRMC of gas the gas demand forecasts from AEMO's GSOO. So as you will have seen if you have looked at those, those are relatively flat for most of Eastern Australia. The exception is Brisbane where there is a bit of increase in gas demand.



Certainly they're seeing less increase in demand by gas-fired generators than they were the year before. In terms of the question I guess about the link between the standalone LRMC modelling we do for our - I guess the energy purchase cost and the gas price. I mean effectively what we're assuming is that that gas will be available to meet the regulated load shape.

Recognising that the standalone LRMC is - you know you are in a fairly hypothetical world there. We think it's a useful way of thinking about what the costs would be of you know building and generating to meet the regulated load shape. But you know it does necessarily involve some stepping away from the reality of the market. But you know having said that, I don't think there's reason to think that necessarily just because you're building you know CCGT and OCGT to meet this sort of hypothetical standalone regulated retail shape that you'd see a substantial difference in the gas price. That was the first question.

Melinda Green: (Energy Australia) [Inaudible microphone inaccessible]

Andrew Harpham: (Frontier Economics) Oh yes so a link between, yes. So yes certainly our model does have a representation of the interconnectedness of the gas market. Both our electricity and our gas markets have all of the sort of you know interstate or inter-regional gas connectors. So we do see in our modelling, in our WHIRLYGAS modelling we do see links between the gas price or the LRMC in various regions. You can see that in particular in the modelling we have done for IPART. You can see that particularly in the southern states, so Victoria and New South Wales, South Australia or Tasmania all - those prices are all relatively closely linked.

In the modelling we've done for IPART we've just gone out to 2020. There's not a strong link between Queensland prices and New South Wales prices in particular in the first few years. Essentially that's because, among other things, in that modelling we have the existing 6 committed LNG trains coming online in Gladstone. Obviously that's a big increase in demand, but on our view it will take a further commitment to LNG exports before you're starting to see sufficiently large demand for LNG to create a stronger link between Queensland and New South Wales' prices. Or you'd have to, you do start to see that if you look out further, so beyond 2020 we start to see a stronger link between Queensland and New South Wales' prices.



But essentially on our view there's you know sufficient gas in Queensland to supply those 6 LNG trains without sort of resulting in shortages which start to flow south. But that is obviously one of the things we'll need to keep an eye on when we do the modelling for the annual reviews. Alexis?

Alexus van der Weyden: (IPART Secretariat) I just want to follow up from Andrew's comment. He partially stole my thunder there. So I guess just to emphasise some of the points that Keith brought up. Both Frontier and ACIL's work demonstrated that in the short term the prices were more likely to reflect the cost of supply. So more likely to reflect an LRMC world. We sort of have a divergence in views about what happens over the medium term and Andrew has commented about some of that. Some of the views around how those dynamics may play out and they will affect prices in Queensland and New South Wales has been discussed.

So whilst that's demonstrated some of the uncertainty around longer term price forecasts and I guess it's one of the reasons we were happy to agree to have an annual review. Hoping that this time next year there may be a little bit more certainty about what's happening for the next year ahead.

Melinda Green: (Energy Australia) I'd just like to say that the gas price for the '13-'14 year was quite low in our mind. We'll comment further on that in our submission. But I guess for us, we understand it'll be recalculated every year. But it's about making sure the methodology is right. I mean we feel that this is our chance to talk about that now. So we just want to make sure that you know valid gas prices are coming out of that model before we sort of live with it for potentially another few years.

Peter Boxall: Thanks, Melinda, any...

Keith Robertson: (Origin Energy) My comments were in terms of the actual number constraint, where Melinda was saying from year '14. There still seems to be that price that's below the expected range that other consultant's report.

Peter Boxall: Thanks, Keith. Other questions, comments. Andrew?

Andrew Dudgeon: (AGL) Andrew Dudgeon from AGL. I think we'd just echo the concerns from EA and Origin in terms of that 2013/14 gas price assumption. That it is at that lower end of the range in other reports that we'd see and that cost base approach probably isn't



reflecting again. I think you've talked about that in your report what these generators might see in terms of entering contracts.

A second question just in terms of spot price modelling and the model contract prices that you have as a reference in the report. I'd just be interested to hear a little bit more around- from Frontier around how carbon is modelled through the spot prices and then into the contract prices? The sort of general trend of the level of pass through within those contract prices? Because we'd be interested to know obviously using d-cypha prices to calculate the EPC. At this stage if we get to a stage where we're looking at model prices, we'd be interested to understand a bit better what sort of level of pass through and what's driving that within those contract prices? Potentially if Frontier could provide those model contract prices on a carbon-exclusive basis as well as part of further data?

Peter Boxall: Thanks, Andrew.

Andrew Harpham: (Frontier Economics) Thanks, so taking them in order and you'll remind me if I leave any of them out.

Andrew Dudgeon: (AGL) Sure.

Andrew Harpham: (Frontier Economics) So how we model carbon. I mean it's essentially the same methodology we've used as long as there's been modelling a carbon price. So when it comes to our spot price modelling, what we do is for the short run marginal cost of each generator that we include in our market model, we have an emission's intensity for that generator. Of course we have a sort of a global carbon price, or sort of I should say national carbon price I guess to avoid confusion. We have a carbon price for that year. So \$23 odd multiplied by whatever your emission's intensity is for each plant goes onto the model for that plant. Effectively we model the carbon price when we do our spot prices in the same way that you know generators should be thinking about the carbon prices. Effectively a cost they face for every MWh or electricity that they generate.

So when it comes to the contract prices, I guess there's two separate sets of contract prices that we use in our reports. I'll just be clear when we're talking about the contract prices we derive from our spot prices, effectively the carbon price feeds through in the same way. So consistent with the way we've always done this for IPART. We assume that contracts trade at a 5% premium to the spot price. So to the extent that carbon price is reflected in the spot price it then flows through to our estimates of contract prices.



The second set of contract prices that we use in our report and you know typically always have, are the d-cypha contract prices. So d-cypha contracts are a carbon inclusive contract. So the expectation of next year's carbon price will be reflected in the contract prices for 2013-14. Now there is an issue with d-cypha which you're obviously aware of in that if there's uncertainty about either what the carbon price will be or whether the carbon price will be around then that will be reflected in the contract price. Which is something we've grappled with for the previous determination when there was some uncertainty about carbon.

Now I mean we've looked at this and we're reasonably confident that for 2013-14 the d-cypha price is effectively fully passing through the carbon price. But clearly once you get beyond 2013-14 financial year there is less certainty about carbon still being around. It looks like d-cypha is not fully passing through the carbon price for that year. So that'll have to be something that is dealt with through the annual reviews. Hopefully when we get more certainty about you know the carbon position for 2014-15 and beyond. So, but 2013-14, at least our view is that both estimates of the energy purchase cost that are - market-based energy purchase cost reflect - you know fully reflect the carbon price. I've forgotten, you had one more question at least but I've forgotten it I'm afraid I think.

Andrew Dudgeon: (AGL) That was about it. I suppose is there any - there's some commentary about the level of pass through within those model prices?

Andrew Harpham: (Frontier Economics) Ah right.

Andrew Dudgeon: (AGL) But in terms of the contract prices?

Andrew Harpham: (Frontier Economics) Yes can we get back to you about that? I'd have to double check. But yes so I remember you want to see the - without carbon contract prices. I'll - we'll check on that. Do you want to say anything?

Doug Telford: (Energy Australia) Yes sorry, just Doug Telford here from Energy Australia. Just on that last point with the level of carbon that's being currently reflected in the '13-'14 d-cypha prices. We'd probably disagree with it that it's reflecting 100% certainty that carbon will be there, particularly in the Q1, Q2 '14 flat prices. So there is - we believe there's still a discount sitting in there. So the prices being used aren't fully reflecting the existence of carbon.



Which is also flows through to then if there is a repeal and carbon is to be removed then if it's not put there in the first place, it probably shouldn't be taken out as if it was 100% either. So I think there just needs to be consistency (a) in getting it right to go in and then(b) when you know if it's to come out then that needs to be reflected accurately as well.

Peter Boxall: Thanks, Doug. Do you have any comment?

Andrew Harpham: (Frontier Economics) Other than you know we're happy to see any data even if it's supplied confidentially that you have.

Doug Telford: (Energy Australia) Well the best way to do it is compare the [AFMA] pass through with the futures. It's a very simple process.

Andrew Harpham: (Frontier Economics) They're pretty consistent.

Doug Telford: (Energy Australia) So did - I guess it depends on what you assume the intensity of the NEM is and yes.

Andrew Harpham: (Frontier Economics) It's not - you know you can't say with perfect certainty how that's going to play out but on our numbers that looks pretty consistent.

Doug Telford: (Energy Australia) So do you think the NEM intensity is the same was - is being observed and the discount? Do you think they're the same number?

Andrew Harpham: (Frontier Economics) We'd need to check. So it's the difference between d-cypha and AFMA comparing that to the NEM intensity. Yes so that's - I mean that's how we checked and on our numbers they looked pretty consistent.

Doug Telford: (Energy Australia) Okay well look - yes that's where I guess we have a point of disagree, you know we have a different view on that.

Peter Boxall: Alexis?

Alexis van der Weyden: (IPART Secretariat) I'll let John answer that.

John Smith: Something on oy part. John Smith. Just to add to that, there was a bit of analysis done by our counterparts in the ACT on this very issue. Looking at in 2013-14 was there a difference between you know ASX traded d-cypha contracts and the AFMA in terms of what the carbon was. Whether there was any discount on carbon between those two



contracts. They found that there was no discount for carbon in 2013-14. However post that period there was a difference.

Peter Boxall: Maybe this is an area for your submission, Doug, yes.

Doug Telford: (Energy Australia) Yes.

Peter Boxall: Other questions or comments? Yes.

Martin Exelby: (Red Energy) Martin Exelby from Red Energy. This may seem like a bit of a second order issue. But on the SRES costs that you're assuming you can pass through. My understanding is that the scheme is intended to create a balance every year between the liability and what is created. Which means that the price should be \$40 per certificate as that will be the clearing price. Currently you've got a forecast there which is quite a bit below even the current spot price today. So I think that looks like it needs revisiting.

Peter Boxall: Thanks, Martin.

Alexus Van der Weyden: (IPART Secretariat) Alexis van der Weyden from IPART you're exactly right that is the intention. But it's proved to be far more difficult to execute. As you can see the market price has consistently traded, apart from the first six months of the scheme at well below \$40. Because there has been an excess of supply relative to what the liabilities have been set at. We've decided to use a market-based approach this time around. The reason you've observed that the number is low compared to current spot prices is because the prices are generally on the way up and we observed them six weeks ago, so.

Martin Exelby: (Red Energy) Just going back on that, I think that just in itself highlights the risks that the retailers have to take in sourcing these certificates at these sorts of prices. It's not actually possible in our experience to actually just to and hedge your requirements for the year and lock them all in like that. You end up basically purchasing at the spot price through the period of time. So I think there needs to be some recognition of that risk premium as well.

Alexus van der Weyden: (IPART Secretariat) Sure, we've considered that issue at length in regards to the sort of broader operating costs in the NEM and the cost of black energy. We've taken the view that the regulated price should reflect current market prices rather than historic prices.



Peter Boxall: Thank you very much, Martin. Any other questions or comments?

Doug Telford: (Energy Australia): Just a question this time on the carbon repeal. There was a comment in the report, the Frontier report that talked about a \$30MWh that would be a reduction in the case of a carbon repeal. I was just looking for a little bit more explanation about that number and where it came from?

Andrew Harpham: (Frontier Economics) I'm not sure what number you're referring to. So we did in the report present estimates of the market-based energy purchase cost with and without carbon. Are you talking about that difference?

Doug Telford: (Energy Australia): Yes so it's in section 6.2 page 61.

Andrew Harpham: (Frontier Economics) Which report? Ah you're talking about - oh sorry, 6.2. Yes so that's the difference between our estimates, sorry I guess it's clearer in - by comparing table 8 to the equivalent carbon inclusive table. But sorry, that's the LRMC we should be looking at the market-based ones. But essentially that's our estimate of if we estimate the market-based energy purchase cost using our methodology not using d-cypha because currently this was d-cypha. But if we estimate it using the carbon price and then we do exactly the same thing without the carbon price then the difference in the market-based energy purchase costs and not the spot price, but the actual you know cost of contracting et cetera is around \$30MWh.

Doug Telford: (Energy Australia): Yes I guess that to me that seems a very large difference that \$30 implies at a \$24.15 a tonne. That's a very high marginal intensity which is way higher than sort of the marginal intensity of the NEM. Can you explain why that would be?

Andrew Harpham: (Frontier Economics) Yes so this is not a difference in spot prices. So we modelled spot prices and we find sort of a pass through on spot prices. But this then includes the additional costs of you know we add a 5% premium to those spot prices to get contract prices. Then the energy purchase costs reflects the particular mix of those contracts that retailers have to buy to hedge their loads for the mix of sloughs and caps. So we're not surprised that it's higher than the sort of pass through that typically gets reported for the spot pricing. In fact as long as we've been calculating that pass through for the energy - market-based energy purchase cost we've consistently found that it is you know it's materially higher than the pass you'd expect on the spot prices. For those



reasons basically they're sort of additional costs to contracting that are not reflected in those spot prices effectively.

Peter Boxall: Thank you, Andrew. Any other questions or comments? Yes, Keith.

Keith Robertson: (Origin Energy) Could I turn a little bit to the modelled spot prices and how they interact with the assumed contract portfolio that's been set up as well? Sort of the two observations come together, one is that there is a relatively high level of contract cover that's been assumed in typically lower demand periods. For example quarter 2 relative to quarters 1 and 4. So a high level of contract cover. That's coincident with a high number of extreme or high pool prices. The upshot of which is positive payouts that you wouldn't normally expect a retailer to set up their hedge portfolio to have such a high level of cover in quarter 2. Nor indeed for there to be those higher extreme pool prices giving a very positive calc payout which of course leads to a lower market cost estimate.

Can you explain a little bit, Andrew or IPART why those assumptions have been made?

Andrew Harpham: (Frontier Economics) Well so they're not assumptions. The contract positions that we present I guess from in our report from figure 2 onwards, sorry figure 22 onwards, and the contract positions that ultimately feed into the market-based energy purchase costs are not assumptions that we make about what kind of contract cover makes sense for a retailer. They're in fact outputs from our modelling and from our portfolio optimisation model. What our model does is try and you know effectively minimise risk for a given return or vice versa.

So, you know in effect it's given the half-hourly load and half-hourly prices and the contract prices. It's looking for you know the mix of contracts that reduce the risk to the greatest extent it can. So I guess to be clear they're not assumptions we make. They're actually outputs from the modelling assumptions we make are, what are - well not the assumptions I wouldn't say. But the inputs into the model are half-hourly prices, half-hourly load and contract prices.

Keith Robertson: (Origin Energy) So does that mean that the way the modelling works you generate the pool prices and then - so we seem to have a lot of high pool prices in for example quarter 2. The model then selects a high level of cap contract cover which are purchased at deeper prices and you then get a positive payoff. You know it's almost like having perfect foresight in a modelling sense to be able to say well, I see I'm going to



have some volatile periods so I take a long from a retailer's point of view position with caps and generate a positive payout?

Andrew Harpham: (Frontier Economics) So yes, obviously the model works out the contract position based on the inputs we give it. So we give it - and recognising you know the issue you raise about the model having perfect foresight. What we do is put in you know three possible future states of the world. So we have in the model we have a set of correlated prices and loads for a POE10 a POE50 and a POE 90, because we recognise that you know a retailer doesn't have perfect foresight about what next year is going to look like. But in the end you need to come up with a contract position based on some expectation about what next year is going to look like. We do it on those three future states of the world, because we think they sort of you know fairly recognise the range of risks which - or the range of outcomes to which retailers are exposed. But I mean we certainly can't come up with the contract position in a vacuum.

Keith Robertson: (Origin Energy) So perhaps that's being compounded by the earlier comments on essentials load shape where there's very little variation between those P10, P50, 90. So we've got a sort of modelled outcome that generates high pool prices. Then hedges up to those and then there's little difference?

Andrew Harpham: (Frontier Economics) So certainly the Origin (Essential) load shape is important to this market-based energy purchase cost. If we had a different load shape we'd have a different outcome. There's no doubt about that. I guess I disagree with the proposition that the POE 10, 50 and 90 load shapes look the same. I mean certainly they are less, I guess diverse than for the other retailers that we've looked at, there's no doubt about that. That ultimately comes down to the same issue that the historic data we have, the combination of NSLP and CLP is itself less diverse. So I guess just to follow through, if we had a set of loads that was both peakier and historically more volatile for Origin (Essential) as a starting point, then no doubt we'd come up with peakier load shapes and more diversity across the POE 10, 50 and 90.

But with you know with the NLSP and the CLP and the combination of the two that we're using, that's where we end up.

Peter Boxall: Okay, thank you, Keith, thank you, Andrew. Any other questions or comments, Phil.



Phil Moody: (Origin Energy) Just to follow that line a little bit further, Andrew. One of the - and I'm not quite sure how to solve this. But one of the oddities seems to be that the cap payout is - so that the caps are costing circa \$5MWh but they're paying out about \$7.50 based on the modelled spot prices. Which I mean if I stand back far enough Frontier's report is saying that the contracts are a buy at this price, which we'd probably agree with. But it does have the odd effect of actually lowering the cost outcome by virtue of that - that the contract premium for the cap is relatively low anyway, which is the market is pricing it, around about \$5.

Then we're actually getting another \$2.50 effective discount off that by virtue of paying off against the modelled spot prices. So those two things just feel like they're compounding - I guess inappropriately compounding or bringing down the contracted, the apparent contracted price.

Andrew Harpham: (Frontier Economics) So I'm not sure - are you suggesting that we don't - I mean so yes there are settlement payments. There are difference payments as a result of our contract position. You know inevitably there are a few blocky contracts to cover you know a variable load at a variable price. There are going to be difference payments either way.

Phil Moody: (Origin Energy) I think the issue if you look back over time, you know there are periods definitely when contracts - the cap products pay out. But you would expect those generally to be in much more volatile conditions than what us and the market are expecting in the next year or so. But in Frontier's modelling, there is a lot of volatility, much more than is effectively priced into that cap. By virtue of that you're sort of getting, or in my opinion, you're getting a double - I guess two compounding issues are pressing the price. Which is (1) is the lower cap price and then again they're paying out. Based on the model spot prices that Frontier have you would obviously expect a much higher cap price in the market. That would, you know presumably be roughly square. It might be \$10 I don't know actually it's \$7.50. So therefore you would expect \$7.50 to be the cap price in fair value terms which would then appear in the contract cost for the energy price assessment.

Andrew Harpham: (Frontier Economics) [Inaudible - microphone inaccessible]

Phil Moody: (Origin Energy) Whereas at the moment it's \$2.50 is what effectively ends up in the cost of energy.



Andrew Harpham: (Frontier Economics) So there is undoubtedly - so perhaps I can just step back a bit and talk about where the half-hourly prices come from that we're using here and the half-hourly loads as well. I mean essentially what we do and probably you've all heard this a million times, but I'll just briefly go through it once more. You know essentially what we do is we take the six years of half-hourly data that we use for regulated load for system items for prices and we run a Monte Carlo simulation on that. Then we choose you know load outcomes and combined with price outcomes that we think represent a POE 10, 50 and 90.

Now under the current circumstances that does present some challenges because I think it's no secret to say that the market and ourselves are both expecting that particularly next year but even beyond that the market is going to be fairly subdued. So there are going to be, we would expect, lower prices on average and you know what that ultimately means is there's going to be, we would expect fewer high price events than we've seen over - for most of those previous six years.

Now the issue is I guess what we're trying to do is I guess balance two objectives. We don't want to come up with a set of half-hourly prices which don't have a number of higher price events. Because that is the risk that you guys face as retailers. It may turn out for whatever reason that next year even though prices are on average subdued, there are you know particular issues, generator issues, network issues or whatever that result in a reasonable number of high price events. Now if we - and we could have done this. If we ignore that and try and come up with a half-hourly shape that has much fewer of those, which is probably more consistent with the d-cypha prices and our own spot price forecasts. The issue is are we truly reflecting the risk that you guys face in the event that there is, you know one of those events or some of those events that lead to higher price events.

So it is - I mean it is a balancing act and it is difficult in current circumstances. Because there is a noticeable difference between how the market has operated over the last six years and how it looks like it's going to be, you know particularly over the next year or two. I guess we've taken the approach of incorporating in our price duration curve a number of high price events on the basis that they may still occur next year. But certainly if we did not do that I suspect some of the effects that you're pointing out would be - well less pronounced.



Phil Moody: (Origin Energy) I won't labour the point but I think - if I think about previous periods, you know there was the Frontier spot price modelling connected quite nicely with the d-cypha prices and that helped close the loop quite nicely. I'm - I don't disagree with your comments about volatility and risk, although the consequence of the combination of things that we have here being the low d-cypha cap price and the high volatility conditions actually have the consequence of removing - or lowering the cost of energy rather than what you might expect would increase it for that risk.

Andrew Harpham: (Frontier Economics) Yes so I guess it's all interrelated. I mean if we change the shape of prices the contract position is going to change as well. So it's not simply that we could come up with a difference price shape and sensibly hold these contract positions the same if that's what you're suggesting? I think Liam wants to say something?

Liam Blanckenberg: Yes I think, Liam Blanckenberg from Frontier. The other thing to bear in mind, Phil, is that by virtue of those caps being effectively in the money at the moment, that's a function of these half-hourly prices. If the half-hourly prices reflect the cap premiums that we're using from d-cypha then you may not get those difference payments on the caps. But the cost of serving the load just from a pool exposure point of view would be lower as well. So there would be an offset. You would get a reduction in effectively the difference payments on the caps. But you would also get a reduction in the cost of selling the load, because the prices would be less volatile.

Phil Moody: (Origin Energy) Yes that would be volatility reflective of a \$2.50 premium for the cap which is kind of what you're describing. So anyway, we won't solve it here. But I just - I do observe that it feels that there's two things combining to inadvertently suppress the price rather than reflect the risk it was probably intended to. It is you know a combination of circumstances where the contract prices does seem abnormally low.

Peter Boxall: I thank you, Phil. Keith, one more? Yes, anybody?

Keith Robertson: (Origin Energy) One more if I may? The retail margin and I understand there were three approaches that were adopted by SFG to calculate suitable ranges for the margin. If we look at the expected returns approach, one of the key drivers of the risk and hence the appropriate margin is the proportion of fixed to variable costs that SFG have calculated. My read of it was that there'd been an assumption that they'd pretty much used the IPART view of operating costs, which seemed reasonable, a 75/25 split. But that



there hadn't been any fixed energy purchase costs. I didn't feel that that reflected the way retailers purchased their energy. Where we just had a discussion around cap premiums which of course are fixed costs.

Indeed Origin is a party to one of the gentailer agreements, as you'd expect has a high fixed capacity related payments for the use or access to that tolling arrangement. Was consideration given to looking at the energy purchase costs and what proportion might reasonably be assumed to be fixed?

Alexus van der Weyden: (IPART Secretariat) Alexis van der Weyden from IPART. Yes it was and we asked for that information as part of the information requests back in November. We asked for your views on the proportion of fixed and variable for the different cost components. Because that is an important driver in the methodology. We've had to use some judgement to provide that overall number, because we had quite some differences in views on different elements. I don't know if Jason is still on the line and wanted to provide any further comments on that?

Jason Hall: Yes so I was going to say the same thing, Alexis. I mean we've asked for information about fixed and variable costs under all components. And we've done the best with the information that we received on those things. So if there's any more, if there's any more information that's forthcoming on that we're more than happy to review it.

Keith Robertson: (Origin Energy) Perhaps that's something we can do.

Peter Boxall: Okay thank you. Okay any other questions or comments? Yes, Doug.

Doug Telford: (Energy Australia) Yes, sorry I just wanted to raise a couple of other - just on the hedge levels that Frontier have assumed the efficient Frontier of the hedging of the load shape. Our risk group wouldn't let us do this type of hedges. There's a little bit - basically there's a lot of dots there that aren't hedged. I guess we don't hedge to - we don't hedge with foreknowledge, we don't know what the future holds. So hedging is really, as you say, don't buy too much, but don't buy too little and you do explain that in your report. But there is a lot of red dots there that are unhedged which would lead to some pretty negative payments. How do you - I mean how do you go about deciding where to - the right level of hedge if you don't know the future?

Andrew Harpham: (Frontier Economics) Well so there's two questions there. I guess how do we decide or how does a retailer decide? We don't decide it, we model it so what this



hedge position reflects is the least risk you can achieve with these, you know blocky contracts, swaps and caps. Now how retailers may go about it, you know I'm sure every retailer has a different approach. You now obviously we understand that some retailers would indeed be concerned about seeing those red dots are basically the high price events that occur in the POE 10 year and you may well decide that if you think that the POE 10 year is going to result in outcomes like this you want to have a higher degree of contract cover. That's fine. I guess one of the ways that that is accounted for in the determination is through the volatility allowance.

So we recognise that even for this contract position you can't have perfectly hedged your load. But one option is you know you can spend that volatility allowance on more contract cover to more cap cover print for instance to cover those few high price events in Q1.

Doug Telford: (Energy Australia) But do you think that volatility allowance fully pays for that?

Andrew Harpham: (Frontier Economics) Well I mean it depends on the - which cap price you're using. But it's certainly you know in the ballpark.

Doug Telford: (Energy Australia) Just one last one as well, just on the price duration curve. I notice the P50 versus the was it the P90 and the very high prices. There was the P90 exhibited more high prices than the P50. Can you explain about that?

Andrew Harpham: (Frontier Economics) It does, that's right. So I guess at the very top end of the price duration curves P90 has fewer higher prices than P50. But you know if you look over the next sort of number of half hours, the P50 is generally higher than the POE 90. So as you can imagine, Liam's job is not easy in choosing these shapes. Ultimately what each of these lines represents is a combination of historic outcomes. You know it's difficult to, from the historic data come up with three price duration curves combined with a whole bunch of low duration curves which look perfect and smooth and well related to one another. But you know we think that these price duration curves are clearly going to be resulting in relatively more sort of risk if we can call it that, of high events for the POE 50 than for the POE 90.

Doug Telford: (Energy Australia) But there is a lot of value at the very top end of the price events, right, is that fair to say?



Andrew Harpham: (Frontier Economics) I mean we are still finding, you know we've got a POE 50 highest price of basically next to VOLL so yes there are a lot of values in these high price events. That's why you know spend so much time looking at the top of the duration curve. But, you know it doesn't come down to just the top one or two or three half hours. There's a sort of a balance. You know we think on the whole it's fairly clear that the POE 50 is going to be a higher price than the POE 90.

Peter Boxall: Thank you, Melinda?

Melinda Green: (Energy Australia) If I can sort of summarise some of the points that we've been making. You know we've pointed out a few, not just us, probably Origin as well. Commenting on a few things that look a bit odd in terms of the outputs of the model, in terms of how we'd do things. So I mean we do, we have been doing a lot of analysis on this and will continue to do some more. But I think you know it's inherent in a modelled approach or a theoretical approach that's trying to you know replicate what retailers do in practice to come out it with you know a realistic result. Some of the outputs in the draft determination are a little odd and different than what we would expect and lower.

So you know that's - some of it can be hard for us to know what levers to pull to get a more realistic result. But there are a number of areas on this we're uncomfortable with. But we'll you know put that in a submission and substantiate that further.

Peter Boxall: Thanks, very much, Melinda. Okay any more questions or comments? No, well thank you all very much and I thank you everybody for participating. I think it's been a particularly productive discussion both before and after morning tea. The recording of today's proceedings will be available on our website in a few days. Just to remind you again that submissions on the electricity and gas reports are due on 20 May. I remind you that we will not be able to accept late submissions because of the tight timelines.

We intend to release our final decisions by mid-June to facilitate prices taking effect from 1 July 2013. So once again, thank you all for coming and thank you for your very high quality participation. Have a good day.

End of Transcript