THE PARLIAMENTARY JOINT SELECT COMMITTEE ON ENERGY MATTERS MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART ON TUESDAY 20 OCTOBER 2026.

ENERGY MATTERS

The Committee met at 9.00 a.m.

Tasmanian Policy Exchange

CHAIR (Ms Forrest) - Thanks, Richard and Lachlan, for appearing before the Energy Matters Committee. This is a more refined Terms of Reference focused around the demand for major industries and not the direct link to Marinus link as such, but those challenges, the new potential load and how that all interplays. We're trying to understand those factors, particularly with reference back to our initial Terms of Reference. We appreciate the submission you provided and thank you for preparing that.

This is a public hearing. Everything you say before this Committee is covered by parliamentary privilege. That may not extend beyond the Committee hearing. If there's anything of a confidential nature you wish to share with the Committee, you could make that request, otherwise it is all public. It's being broadcast and transcribed for our parliamentary record. Do you have any questions?

WITNESSES - No.

CHAIR - I ask you to both take the statutory declaration and introduce yourselves and speak to your submission if you wish.

Prof RICHARD ECCLESTON, DIRECTOR, and **Dr LACHLAN JOHNSON**, SENIOR RESEARCH FELLOW, TASMANIAN POLICY EXCHANGE, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

Prof ECCLESTON - Thank you for the opportunity. I should acknowledge a few people and colleagues. Our submission was fairly broad and drew on the work of colleagues across the university, and cut across four or five themes. But really happy to focus today's discussion on the issues that you raise, Chair. I'd like to begin by acknowledging the Palawa and Pakana people as the traditional owners of the land on which we meet. I'd also like to reflect on the appalling news overnight in terms of the political violence committed against Helen Haines, and our thoughts are with her. I know they'll be weighing on you as a group, but also all MPs and public leaders across the country.

I think our central message is pretty clear, and that is globally, and particularly here in Australia, the energy system is in flux. The energy transition is continuing but the outlook is very uncertain, and there's some real pressure points there. I do think Tasmania's energy system is a real asset, not only because it's essentially a renewable electricity system, but also because of Hydro's role in that. Also the fact that it is almost entirely publicly owned. That provides the state with distinct opportunities. But we do need a clear strategy in the context of the uncertainty we face in order to realise the value of our energy assets.

The other thing I was reflecting on in terms of preparing for this, because there are so many different and complicated things and, as you know as a committee, energy is incredibly complicated. In order to understand the kind of intersection, you need to be across the technical details of energy systems, energy markets, energy financing and then the policy and community piece. There are very few people that can draw and have a credible helicopter view of all of those issues. I think we've got a broad understanding, but not the deep expertise. I thought perhaps the value that we could add is in terms of being a sounding board for some of the issues that you're grappling with and just to point out a few high-level observations.

I'm very aware that this Committee, in various iterations, has been sitting for quite some time. Even in the last 12 months, there have been really significant developments in terms of the energy market and outlook, so we do need to be adaptable and agile. For example, a really big increase in both grid-scale and home batteries. That's been positive in the sense that it's knocked the peaks out of energy prices and is putting a downward pressure, in the short term at least, on prices. It's not necessarily going to replace the need for more reliable generation, and that's where we're stuck as a country. Prices have stabilised but investment, particularly in new wind projects, anything other than solar and batteries, has dried up or it's very difficult to make that work financially. So, it's hard for us to get coal out of the system.

There are potentially new sources of load and, as many of you are aware, we have done a fair bit of work on data centres over the last month or so. But also the outlook in terms of our traditional industrial users and consumers of energy is uncertain. Obviously, Liberty Bell Bay has fallen over. A new five-year agreement has been negotiated with Bell Bay Aluminium (BBA), but there's uncertainty there in terms of the outlook, particularly once we get into the 2030s.

The other really challenging part of this is that the cost of new generation has increased significantly. When we started having these conversations three or four years ago, we acknowledged that we needed to invest more in transmission to have a reliable renewable-based energy system. But wind as a source of generation was relatively low cost, $70-80 a megawatt. That's more than doubled. So, we have this situation where it's very, very difficult, notwithstanding the various initiatives that the Commonwealth is rolling out, to make new wind projects commercially stack up. So, that's the uncertainty across the system.

They’re some of the challenges that we're dealing with. I guess the other part of this, and that was part of the Committee's early work, is that it does appear that Marinus is going to progress and, hopefully by 2030 or 2031, there'll be more interconnection between Tasmania and the National Electricity Market (NEM). That's the context we're dealing with.

We've probably got four or five observations in terms of thinking about what does a future-focused energy strategy looks like? And Lachie might help me out here. There's uncertainty, but I think we really need a credible evidence-based discussion around future demand and generation scenarios. We have an energy policy, but it's not really a strategy, to double renewable generation. It's kind of informed by the overall ISP, integrated service plan, but that in itself is just based on assumptions that are fed in by state governments. I do think we do need that scenario. I'd note, and I haven't discussed this with John recently, but John Devereaux's submission made a similar point: that we need a clear future-focused energy strategy.

Talking about industrial load, I guess the basic assumption is, let's assume that electricity demand is going to continue more or less as it is and increase slowly over time. As you'll be aware, and I think we noted it now submission, from a climate point of view - and we've seen this in the context of the global fossil fuel crisis, we do need to increase generation if we're going to decarbonise our transport system. It's been a big development that has also played out in Tasmania and industry. So, we do need more capacity over time. There is a scenario around, essentially, deindustrialisation. What happens if the viability of our major industrial users, they're no longer viable, or if energy prices change, or if we really do decide to get a full commercial return on our energy assets and generation, what does that look like? That's a choice, and it has implications. And then there's also a load-growth scenario. What is going to be the cost of additional generation, what is it used for and are there long-term benefits to Tasmania?

It's easy to paint these pictures in scenarios. How they actually play out in a really complicated energy market does require deep expertise and it really does require a genuinely collaborative approach. Once you're thinking about, well, how much energy do we need and what are we going to use it for, then you think about what generation and interconnection do we need. Again, there are different scenarios. Do we continue as we are? What does the scenario look like with increased interconnection but not much new generation on island? That's an option that I don't think has been fully explored, or not in a way that I understand it. I've asked the question of a few people who should know over the last couple of years. What are the best and lowest-cost options in terms of new generation, and new generation that's also consistent with broader community values and environmental outcomes?

Really quickly, and then we'll open up to questions, I think there are real governance tensions in terms of the current energy market, particularly. Tasmania has a distinctive system, not only in terms of the energy mix but also in terms of Hydro's role. One argument that we have articulated a few times is I think Hydro's ministerial charter and directive needs to be much clearer. On one level, it makes sense to balance commercial imperatives with economic development and job creation but, in practice, for a board it's really hard to do that.

CHAIR - How will it be clear?

Prof ECCLESTON - I think the best way of doing it - and this is something to test with Hydro and others, is to have a clear commercial imperative. I think there can be greater transparency about reporting aggregate revenues and costs across different customer classes. Then there is a legitimate conversation about, should we be selling energy to certain industries or consumers because of their contribution to the community? But that's a political decision.

CHAIR - Just on that point, Richard, on reporting. I've been banging on about this for years across the table in GBE scrutiny. I understand that the Australian accounting standards have altered to require them to do a far greater breakdown of their revenues and expenditure, both sides. They can get an exemption from the minister, I understand, which I believe might have occurred, but that's a matter for them. When you're talking about transparently reporting with what their revenues are, as well as what their costs are, how important is that in understanding the system and what their job is?

Prof ECCLESTON - I think it's absolutely essential. I can't comment on the obligations under the accounting standards. I'm not an accountant, but -

CHAIR - Neither am I.

Prof ECCLESTON - I have an undergraduate degree in economics and political economy, and spend a lot of my life studying budgets and follow finance very closely, and it's actually hard to work out what, from my point of view - and I've sat down a few times, it's hard to actually work out from Hydro's annual report; because of the trading revenue, it's hard to work out what the return is on generation in a clear way. There are probably barriers but, at the level of principle, I think we need to do better.

There is the ministerial charter and greater transparency in being clear about what the return on investment is, because this is going to become really live in the early 2030s. We can talk about the data centre debate, if you like. Unfortunately, wholesale energy prices are going to have to go up, in terms of the energy transition. Either that or really significant Commonwealth subsidies. Then there becomes a greater opportunity cost of supplying established major industrials at whatever rate their long-term contracts are. There's speculation: is it $60, $70, $80 a megawatt? But the commercial rate for energy or the cost of the new-generation capacity is more like $150 a megawatt. There's a greater cost. And if you have other industries willing to pay that or, if hydro generation could be sold during times of high demand for a high price on the national market, it actually becomes a bankable opportunity cost. Whereas previously, if there weren't any other major customers - and Tasmania's energy system was essentially designed around serving major industrial customers, it's a kind of a moot point about whether we're selling that energy too cheaply because there's no other customer. But that situation really is changing.

Mr BAYLEY - What about the calls for transparency around those arrangements? Have you got a view on that?

Prof ECCLESTON - The question about whether the specific terms of individual contracts should be disclosed, I think as a kind of a class, there should be greater transparency. At the very least, I think you need a really clear, robust and credible framework about how those decisions are actually being made, even if it's not disclosed publicly. As you're probably all aware, I think parliament and committees like yours should play a much more active role in this in terms of representing community voices and community views. There are models. This happens all the time in terms of some of these commercial details being disclosed in camera or they're in confidence. That's another option. At a foundational level, my view is that the current ministerial charter and directive, is if I was on the board of Hydro Tasmania, it would be very difficult to know how to interpret those trade-offs.

Ms FINLAY - Or you'd be free to actually make your own interpretation because it's so broad and open?

Prof ECCLESTON - That's right. And it becomes less certain and probably more political.

The other point I'll touch on, and it should open it up to general questions, is this role of trying to make the market in terms of energy. One of the problems - and this is a global problem, the Commonwealth is trying to address it. But fundamentally, we want private investment in new renewables projects, but in order to get that investment, you need long-term certainty in terms of purchasing agreements. But people buying electricity will only tend to provide a three- or a five-year contract. It's like, you know, building an -

CHAIR - The purchaser's only asking for that or are you saying the companies are only offering that?

Prof ECCLESTON - The companies are only offering that. So, is there a kind of an intermediary, and who carries the risk? My understanding is that, well, there are a lot of complexities and details in data centres and data centres financing, and whether they're falling victim to financial gravity. But one of the challenges with data centres is that most of the developers were very willing to pay top price for energy, but probably over three or five years, because that's their revenue horizon. Yet if we, as a group, want to develop a new renewable energy project, we need 30 years of contracts, and that's a big risk. This is what the Commonweath's trying to do with its new ESEM, and it's developing legislation which is trying to provide that long-term security for investors.

The challenge has got a particularly Tasmanian flavour with Hydro, where it's traditionally purchased energy off private providers and then on sold it. I think there's a discussion about what that role is and what are the risks involved.

Mr HISCUTT - Is that risk mitigated somewhat with the potential inclusion of Marinus: that we may no longer have that on-island but there'll be an opportunity to sell that energy somewhere else more than there used to be?

Prof ECCLESTON - Yeah, absolutely. With a more integrated system it both improves energy security but also broadens the market.

CHAIR - We'll only be able to sell if we've got enough on-island to sell, though.

Mr HISCUTT - I guess what I was saying is that it mitigates the risk of those short-term contracts because there's more opportunity to sell it to other places throughout Australia, not just in Tasmania, is the question.

Prof ECCLESTON - Yeah. And if I was in government in 2026, thinking about five-year supply contracts, you'd be thinking that in the early 2030s, with the ongoing energy transition, there will be more demand for energy, but we certainly don't want to overbuild generation. This is where it goes back to the demand scenarios. In the ISP I think there's 1.2 gigawatts of new renewables in Tasmania and we've got the renewable energy target. The question is, are they really the right numbers? If they were the right numbers? If they were the right numbers three and four years ago, are they the right numbers now, and what are the trade-offs around them?

The other points, and these really came from other colleagues, and Lachie was involved, there's obviously the overall climate risk around energy generation and Hydro in particular, but I do think we've got a reasonable handle on that.

There's the opportunity around distributed energy systems. Lachie led a piece of work with Hobart City Council and others around the so-called BPP networks, which are kind of the modern 2026 version of community power stations. I think they're part of the mix, and this technology is changing.

The final one is energy affordability, particularly the burden of energy bills and costs on low-income Tasmanians hasn't abated in terms of the number of Tasmanians who are in energy stress, and also those that have got either deferred payments or support programs from Aurora and other retailers. Again, other colleagues have been doing work on this which we touched on. One broad observation there is that perhaps someone needs to be accountable for energy affordability in a more holistic and systematic way. And if the overall cost pressures around energy systems and electricity supply are heading in one way, particularly in terms of grid-distributed energy, then we do need a long-term plan in order to address that.

Did you have anything?

Dr JOHNSON - No, I don't think in particular. My main points of interest from my contributions to the submission are about that distributed and behind-the-meter generation and storage. Tasmania actually has a real opportunity in some ways, relative to the mainland, with very high penetration of smart meters, a suitable amenable tariff structure and a pattern of demand that would allow us to have a much more coordinated and strategic approach to increasing behind-the-meter generation and storage than we currently have, including through potentially state programs like the now former Energy Saver Loans Scheme. I'm very happy to open up to questions and I can address any of that if we'd like to discuss.

Ms FINLAY - I'm really interested in that. However, my first question is going to be - Thank you for the paper, for your submission and for your summary comments. I'm particularly interested in the opportunities and, equally or more so, the risks to Tasmania of AI infrastructure establishing in Tasmania without new renewable on-island and sourcing its energy from the mainland. I don't know if you saw or familiarised yourself with the contribution from Saul Eslake that we had last week, but he made a particular comment: if the energy was being drawn from the mainland, then that changes the intention of Marinus in terms of those opportunities for trading in the markets. I'm keen to see whether you have a position to share around generation for large-load AI infrastructure needing to be on-island. The challenges and cost of developing new wind could be supported by that load, so there's an opportunity there. So, firstly, a comment about the generation needing to be on-island. And I'm particularly interested in - you talked about markets and you talked about balance in the system, about the timing of that - if we were going to contemplate policy around the timing of load entering the network and generation coming on board on-island, how you see the risks and opportunities in that?

Prof ECCLESTON - Thank you, Janie. We touched on this in terms of some of our recent work and submissions to the AI data centre inquiry and also to the government's community expectations consultation. In terms of timing, it's a really interesting question. We don't have full visibility, but everything that I understand is Tasmania's energy system is pretty finely balanced. There's not a surplus of renewable generation, as we and others have pointed out, for the reasons I touched on. There have been no large-scale new renewable projects have got up and come online since 2020, so that's a problem.

I think we absolutely agree with the principle that particularly AI data centres with their business model should be supporting new generation on-island. In fact, they actually should be supporting additional generation because if all of the capacity, capital and expertise about building new renewables projects is just going to service data centres, how does that help with the broader energy transition and having that reliable renewable capacity so we can start phasing out coal? It doesn't help.

There's this timing challenge, and it's really obvious to anyone who knows how the systems work and has thought about it. In fairness to the government, it was a very clear consultation question in terms of their AI data centres expectations framework, and we've certainly named this up. If the proposed Firmus data centres proceed - and I think that's looking a lot less likely than it was a month ago, and not only for reasons of the failed book build and IPO in Australia, but the broader concerns around data centre financing globally. But if they did need 450 megawatts of load, I don't think there's any way that could be provided between now and when Marinus comes online, or when new renewables projects that are currently in the planning stage come online. That raises the question: would they be operating at partial capacity or would they be relying on other sources of generation, like diesel gen sets, for two or three years in a really intense way? From my understanding, I just don't think there's enough energy to support 450 megawatts of data centre capacity in the 2020s operating at a fairly full capacity.

That's a transitional issue, and the challenge there is there's this global scramble to develop computing capacity and data centre capacity now. and it's just at that pointy end of that investment curve. When things calm down in the 2030s, I think costs will fall down and the cost of compute will probably decline, so there are risks.

CHAIR - It'll interesting to see who is still standing at that point.

Prof ECCLESTON - In terms of on-island, when Marinus stage 1 comes online and with Basslink, we will have 12 to 1250 megawatts of interconnections. That's quite a connected capacity. Ideally, again, if it's a sort of a one-way draw from the mainland to service data centres, that is taking up quite a few lanes on the highway. That's where you need the really detailed modelling about what are actually their demands? Does it need firming here? Who's the intermediary? And these are the complicated market design questions. I think it is a risk and, ideally, you'd probably have that generation on-island, which would mean that there are more opportunities to ultimately use Hydro's deep storage to support the NEM and also get a good return for it. That's how you want to be using Marinus.

Whether - and this is where is gets complicated, Casey, if a data centre developer commits to and funds, through a purchasing agreement, renewables projects on the mainland, it doesn't necessarily mean that the energy, the electrons from those projects have to cross Bass Strait. These are sort of swap agreements, that I think makes sense in economic theory but a bit hard to get your head around.

Mr BAYLEY - It's an extension of this conversation, I guess. Matt Kean, the chair of the Climate Change Authority, actually identified Marinus, data centres, you can't have both. One of the concerns, and one of the things that we've been talking about a lot here, is some of the models and assumptions that have gone into Marinus and the outputs that it spits out, including Hydro's super profits, $470 million a year returns to the Tasmanian government. How do you square the circle in terms of the assumptions that have been made and accepted in terms of Marinus and the benefits that it would bring, which is all based on exports and exporting at high prices, and being able to really leverage that into the connectivity, versus a massive amount of additional demand here that removes that ability. Can Tasmania have both, in your mind, and they both succeed?

Prof ECCELSTON - Potentially. But again, this is where - and I've seen a lot of the modelling. It's really complicated. And then you need to test it for all sorts of sensitivities. Certainly, if there is significant new on-island demand, data centres without on-island generation, it probably limits the way in which you use interconnection or Marinus. Marinus is not just about exporting; it's about using the right mix of energy at the right time. So, there's a question, and I know your Committee have explored it. Most of what I know about the credibility of the quantum of financial benefits accruing to Hydro from Marinus under different trading scenarios - the $460 million in the business case, comes from this Committee and its work.

CHAIR - Returns, as opposed to profit, which would possibly go far higher than that.

Prof ECCELSTON - Yes. But in terms of the trading scenario, what we want to be doing is we don't want to be using hydro generation to power this building Tasmanian homes, cities and industries during the middle of the day for nine months of the year. That's a waste of a really valuable resource. So, that's the opportunity. It is a trading regime, and we get full value for hydro when it's really needed across the NEM. The question I don't know, Vica, is exactly what is the demand profile for these data centres. Can they cycle up, can they cycle down? If they're for training language models, there's flexibility. If they're for a computer running large language models, as opposed to training them, they need to operate 24/7, is my understanding. These are the sort of questions that we need to explore.

Ms OGILVIE - That's a great segue to a couple of questions I'd like to put to you. I will just preface this by saying I'm fairly new to the energy sector. I think people at this table have been around it for a long time. My background and expertise is in the tech sector. So, I'm really trying to, without being over the top about it, marry the need for Tasmania to reduce its national digital divide, to keep up with the nation in relation to the use of new technology and AI, and the benefits and productivity that that will bring. One of the things I think you mentioned was smart meters. So, if I could just start with that, and then perhaps explore a little bit.

Smart meters, great. It gives us the ability to have more efficiency around metering and how, when, why and what we do. I would imagine already that Hydro is utilising AI itself. I know the other major industrials are, and we're seeing benefit in that. It's a new productivity layer. I guess I just have a little bit of concern that, because of the big dialogue that we're having, if I can use that word, around AI and data centres, that we risk not getting the benefits of what this technology can do for things like productivity, which can improve. Do you have any thoughts about, or any insights into - that's where the sticky paper is for me, I think. We can't just say no to new technology. I'd love some thoughts if you have them. Together, the duet.

Dr JOHNSON - Yeah, undoubtedly, AI is going to be a really important part of our solving or moving past our productivity and digital and technical literacy challenges in Tasmania going forward. I suppose it is a really difficult, ultimately, a challenging political discussion because I think so much of the opposition to data centres in Tasmania is not necessarily about water or power or noise, or where they are. It's how people feel about AI itself.

Ms OGILVIE - Yes, I agree. Which is real and genuine and concerning. That's true.

Prof ECCLESTON - Huge question, so I'll try and respond briefly -

Ms OGILVIE - Sorry, it's like the central point.

Prof ECCLESTON - We've been discussing this in the office and across the university every day for the last two years. We're all grappling with it. Look, AI is incredibly powerful. There are massive risks and disruption, and a lot of that's beyond our collective control. So, it's about considered and informed adoption. We use it across the university. We use it on a daily basis in our work, I guess, as knowledge workers. The link to data centres is, I think of it in terms of -sorry, this is energy jargon, latency. What's the advantage of having data centres on-island?

Ms FINLAY - That's the question, right -

Ms OGILVIE - It's also tech jargon, so, we agree on the latency -

Ms FINLAY - Is it necessary?

Prof ECCLESTON - Yeah, and it depends. This is not just a Firmus question, but from my understanding of the Firmus model, their contracts were with Meta. So, basically, running Meta inquiries on Facebook and Instagram and whatever else. So, there's no proximate kind of benefit and spillover initially in the intention about how you do that. One thing that we advocated in our submissions, looking at developments around the world is - and I think the local ICT sector and Russell Kelly and others are absolutely supportive of this, is: do you quarantine some of that computing power for local businesses, industries, researchers? And that needs to be baked into any agreement. The other thing that seems to be happening -

CHAIR - At what stage does that need to be baked in, Richard?

Prof ECCLESTON - Well, I mean, is it part of the planning? I think we probably need almost a licensing regime. I'm not a fan of new regulations for new regulations' sake. Given the limited specific tools that are available to government at the moment, perhaps it's an aside in terms of any power supply agreement. The one thing that's not unsurprising, but these need to be requirements, not optional extras.

The other point, Madeleine, is that my understanding is that, like energy systems, data centres actually are coming a bit more decentralised. Someone who doesn't have skin in the game here in Australia was sort of arguing and I found out they were working on it and spoke to them. Sort of the North American model, these neo-clouds with massive, massive campuses and racks and racks of computers. The European way is about smaller facilities that are more decentralised, probably a bit more expensive, but actually better in terms of redundancy, more distributed across the energy system and less impact on local communities. There's also an argument that, as we get into not just large language models but AI-enabled robotics and all the rest of it, it actually will become more important for your queries to go to a data centre nearby. Whereas, at the at the moment, that's not the model being proposed. With the caveat that I'm not an insider or an expert, but I think we've all been working pretty hard to try to understand the business models and the technical models, and what's going on and what it means for Tasmania.

Dr JOHNSON - I was just going to add that. Richard kind of touched on this earlier, but there's a point here about -

Prof ECCLESTON - Is that a polite way of saying I've got it completely wrong?

Dr JOHNSON - No, not at all. But there's a sort of transition going on in the development of AI itself that changes the role of these data centres as well; that very, very large 150-plus-megawatt hyperscale data centres are really important for training these models and they can be just about anywhere and do that much the same. But as we move towards these agentic and query-based models, once the large language models themselves have been trained and fully developed, the latency becomes a lot more important and the data centres themselves can be a lot smaller and more local.

Mr HISCUTT - I'm backtracking a little bit just to what's called the flow of electrons across Bass Strait. If our on-island production matches our on-island need, that doesn't necessarily mean that there is no benefit to that flow. Like you were saying about using hydro when it's appropriate to use it. You could still have 100 per cent of our energy go to the mainland at a profit and buy in this same amount of, once both Basslink and Marinus are both going. Is that a true statement, or a reasonable assumption: that just because we make the same amount we need, it doesn't mean that that all has to stay on-island? That can come from and go, and so we still get those benefits that are being talked about?

Prof ECCLESTON -Yes. In terms of the energy system, absolutely. The problem with electricity is it's really hard to store. We're lucky we've got, with the exception of the Pedder-Gordon Scheme - but that's another environmental discussion from a generation ago.

CHAIR - Don’t upset Vica.

Prof ECCLESTON - Vica and I probably won on that. Yes, absolutely. And by happy accident, hydro is incredibly invaluable in a renewable energy system because of the deep storage, so even if we had a balanced energy system, there are advantages from interconnection. Also, in terms of energy security - and obviously we had a very dry year the summer before last, and this summer is looking pretty dry, so there are risks there. The caveat - and I know this committee has looked at it - is what's the actual cost of that interconnection? And there's a point when the extension cord becomes too expensive.

Mr BAYLEY - And who pays?

Prof ECCLESTON - Who pays, and which groups of consumers pay for that? We have obviously expressed views about that, but it's almost water under the bridge. But there are advantages from trading.

In terms of those scenarios, one scenario that I don't think is desirable for the Tasmanian community is, essentially, an isolationist policy where we don't have that connection to the mainland; we use hydro power to support Tasmania. The problem there is that we won't have that flexibility and those returns, and we'll probably end up with some of the more expensive energy across the NEM in the medium term. And we'll probably have a decline in the consumer base, and that's going to push up costs, and this is the kind of death spiral. So, if in five or 10 years' time, and all of the current major industrials we've got there aren't there, and there aren't data centres or other consumers, then we'll have the costs of running our energy system, maintaining our transmission and distribution systems spread over a smaller base.

This is one of the arguments for data centres. If we got it right, and we could have confidence in their business model, and that they were here for the long term, they are sort of breaking this investment deadlock because they are someone who has got a revenue stream, in theory, that could support paying full price for new generation. And they could, potentially, cover network upgrades and also cover a share of the broader transmission costs. That's the optimistic view.

Ms FINLAY - That's interesting, because in the very opening statement you made, you talked about markets. There are so many markets, and when someone says they're willing to pay market price, which market? At what point? With what consideration? Because what you just said then is that perhaps they're willing to pay a price that covers the increased cost of new generation and other things. I wonder whether transparency needs to be across that as well in terms of, well, what market and price are those contracts being offered at compared to, perhaps, what was being proposed with the major industrials? Without the transparency, we all make assumptions on what they're actually paying and whether we're extracting a premium for that, because there's a benefit to them being in Tasmania, because they don't physically need to be here and so they're receiving a benefit. Are we actually extracting enough for what is required and the benefit? Because the simplicity of price on our megawatts versus - and you talked about this - the supply chains and the other economic driver and benefits, we can't actually get a full picture of that unless we have all of the details.

Do you think actually just covering current market conditions is enough to pay for AI infrastructure in Tasmania, or do you think there is a place for seeking a premium above that?

Prof ECCLESTON - I think there is a clear case for seeking a premium for a host of reasons. And you're absolutely right, Janie, you do need to be very careful about using specific prices at specific markets, because even if we can talk about, you know, a notional kind of spot price per megawatt, there are all sorts of other considerations in terms of when you use that energy, the system services you provide and others, and that's where it gets complicated. You know, $150 a megawatt, that really comes from the national work around what the level - I was thinking about the total project costs of new projects is. So that would be a kind of benchmark.

If you were going to put additional demands on the system or purchase additional energy, you should be paying an equivalent rate, probably with a margin that costs to build that energy, and that's where that ESOO - terrible acronym, I'm not quite sure, I can't remember what it is. That's where that ESOO figure comes up, and that's the one we sort of started with, the ESOO for -

CHAIR - What's the acronym?

Prof ECCLESTON - Something like Energy System Operator Outlook [Electricity Statement of Opportunites]. It's done by the CSIRO here.

CHAIR - We'll look it up.

Prof ECCLESTON - But then this is central to our, you know, data centre thinking, is that there's massive demand at the moment for compute and if you get it right, it generates massive revenue in the short to medium term, but there are a few broader community benefits from that. There's a construction benefit. There's probably an energy benefit for Hydro, and it's good that Tasmania can extract that, but the normal benefits we get from private

investment - and we need private investment in terms of reasonable numbers of sustainable, decent jobs, in terms of tax revenues, in terms of supporting a broader ecosystem of businesses around it. From the data centre models, it's just not evident that they deliver those. And that's why I think it was positive that that Premier announced a community benefit sharing model, but it needs to be robust and genuine and have a material investment from data centre providers. Having said that, there's a lot of uncertainty around their model and whether they can attract the vast investment and financing that they need.

Ms OGILVIE - Thank you, and that's a great segue to what I want to talk about as well. We talk about the ecosystem in tech land and the data centres, and this goldrush that we're seeing right now, won't last forever; it will settle. I've been around a long time. I know data centres themselves are on a technology iteration as well. There is one down the road from me in Sandy Bay, that's with the telco network. The big data centre's slightly different. But I feel that unless we find a way to balance the tech sector step-change that is happening, Tasmania may miss out on things - like, you talked about robotics. One of the great applications of robotics is in surgery and health. For that stuff you need very low latency.

I also support what you've said about the Community Benefits Fund, and I've been in conversation with Russell Kelly and I think we've had chats, yeah. We're all very supportive of that and I think the ability to allow our researchers to have access to compute power, particularly big data stuff - I'm thinking about Antarctic marine climate science - really, really positive, and that should be part of it.

So, my question is, do you think it's possible to better map the benefits of this tech sector uplift around the ecosystem which we see - if you think about Silicon Valley and what they do with Stanford, all the little businesses and innovation that come up from that, that's certainly on our minds, the small businesses that are developed, the patents that you see generated, et cetera, because the big players are in town. I sometimes think we're having a too -

CHAIR - If you could get to the question, Madeleine, because we're going to run out of time.

Ms OGILVIE - Sure. Too narrow a perspective on - we're trying to measure the data centre as a traditional business rather than a connected ecosystem.

CHAIR - So the question, Madeleine?

Ms OGILVIE - Do you think we can map that better or do you think we've got that right? It's a complex area. That's why I have to sort of give the context.

Prof ECCLESTON - Absolutely you can map that better. Then I guess the threshold question that we've been trying to understand is does hosting AI data centres actually contribute to the broader innovation and ICT system?

Ms OGILVIE - That's our desire.

Prof ECCLESTON - Look, some of the leaders and biggest players in the sector in Tasmania, I won't name names, but they said, 'Well, no, not really'. This is why we need to work with the sector to think about what could the potential benefits be.

Ms OGILVIE - To craft it.

Prof ECCLESTON - I think that's the connection.

Mr BAYLEY - On the issue of bringing on new renewable generation, whether it's on-island or not, we've had the conversation about on-island - but Firmus, and acknowledging there's a lot of spin and hyperbole in the lead-up to the IPO about its aspirations, it says everything, from it's going to build two for one - build two megawatts of electricity for one that it uses - it's going to bring it on, et cetera. I think I heard you allude to it, but is simply a power purchase agreement with a major new generator - does that really meet the pub test, do you think, of bringing on new renewable energy, or building new renewable energy? Or would most people, do you think they should be investing in it actively in terms of capital construction et cetera?

CHAIR - Like the funding the capital.

Mr BAYLEY - Well, funding the capital, it feels like there's a power purchase agreement, you get a benefit from that and you run your data centre. They've got a power purchase agreement with Aurora. Aurora doesn't need to build anything. Is it just spin that they're going to build two for one through a power purchase agreement, or is there something tangible there?

Prof ECCLESTON - A couple of things there: you'd want some sort of certainty that that was going to happen. Even if it's contractual, you've got to think about what's the track record in assets, for instance? These companies - are we confident they're going to be here in 10 years? In fairness to the major industrials, they've been part of our community and economy for a long time. I know they have gone through different owners, but we won't talk about Liberty Bell Bay at this point.

The other point here, Vica, is that it goes to this kind of market-making role that different governments are thinking about in terms of how to address this kind of standoff in terms of renewable investment. My understanding is, and I think we mentioned this before, if we were developing a renewables project and we needed to borrow money and get finance, which you need to, you would need to have a supply agreement of at least 15 years with a really reputable customer with assets to back that agreement. Again, I won't talk about specifics, but my understanding is that, even if they wanted to do it, it would be difficult for a renewables developer to get finance with a direct kind of contract from a data centre because they tend to only offer three to five years. There were probably questions around the long term, whether that model - and whether they would be a long-term consumer. I think those questions have only intensified over the last few weeks. So, you'd really need to think about what the mechanisms are, because we don't want to be in a situation where, you know, because once these things are built and even if the economics changes, there's ongoing demand for computing power, they'll still be operating and they'll need to be serviced, so we need to make sure there's a credible way of doing that.

Ms FINLAY - Where do we best look for the best mechanisms? Who's playing that out?

Prof ECCLESTON - I mean, Queensland with their CleanCo, who have still got quite a lot of state-owned generation, set up a whole separate entity to do this. But that also demonstrates the political challenge associated with the energy transition and climate action,

because you've got a coalition government that is much less committed to renewables. So, I think that model is struggling.

CHAIR - What was it called?

Ms FINLAY - CleanCo.

Prof ECCLESTON - Yeah, I think that's the Queensland statutory entity that manages contracts between retailers and generators -

CHAIR - How transparent is that process?

Prof ECCLESTON - I'd have to take that on notice. But I think it's quite transparent, and this is the de facto role that Hydro's often assumed, and rightly so. It's just not very clear in terms of its mandate.

Mr HISCUTT - Is there more opportunity for state-run instead of privately invested energy production? Is that perhaps where -

CHAIR - New.

Mr HISCUTT - New, yeah, new energy, is there more, because obviously that's what it's built on the back of Hydro which is state-owned. Is that perhaps a direction that we should be looking? And we'd have control?

Prof ECCLESTON - In theory, but I think a couple of things. I think: a) the government's budget situation and ability to support capital projects is pretty limited -

Ms FINLAY - It's good revenue.

CHAIR - There's a lot of mixed pressures on it at the moment.

Prof ECCLESTON - That's right. I guess the usual policy response, given the fact that there are regulated returns, well about regulated returns. If you've got the right purchasing agreement, there are fairly certain returns, is that it is an opportunity to get private capital, but in a sense.

CHAIR - Transmission, they're the only ones who are regulated. Hydro's not regulated.

Prof ECCLESTON - Sorry, that's right. But if you've got a supply agreement, then that's what allows the private investment.

But Casey, I guess this is where the Commonwealth is, so they've got their new ESEM [Electricity Services Entry Mechanism] - so they have the Capacity Investment Scheme that hasn't really worked in terms of underwriting the bottom price. Now they're trying to support longer-term finance, and I think it was just announced this week is that the Clean Energy Finance Corporation is also going to provide concessional finance to get some of these projects.

So that in a sense, it's not state ownership, but it's state financing and providing financial concessions, and obviously that's also what is taking, that's the good part of the

Commonwealth's contribution to Marinus as well. So, it's a difficult one, but you'd hope that there would be a way where there can be the certainty so that we can have a decent chunk of private investment, because the last thing we need is more state or government debt.

Mr HISCUTT - Thank you. I guess the other thing is getting the projects finished as well.

CHAIR - Well, thanks Richard, we are out of time but thank you for your submission. Is there anything you want to close with particularly that you wanted to say, or you think we've?

Prof ECCLESTON - No, I think we've covered a lot of ground but, and because we did cover a fair bit of ground, Chair or others let us know if there's anything we can we can follow up with.

CHAIR - We appreciate you bringing your submission. That's really helpful. Thank you.

Prof ECCLESTON - I was getting a bit of robotic hip surgery at the time, so Lachie and my colleague Kim Brockman and the team.

Ms OGILVIE - Love the robots! Just got to control them somehow.

Prof ECCLESTON - That's right. Yeah. It's a bit disconcerting walking into the theatre.

CHAIR - Well, thank you very much for your appearance today.

The witnesses withdrew.

The Committee suspended from 10.03 a.m. to 10.15 a.m.

CEPU Tasmania

CHAIR - Thank you, Dr Hepworth, for appearing before today's hearing for the Energy Matters Committee. Everything you say before the Committee is covered by parliamentary privilege. That may not extend beyond the committee hearing. It is a public hearing. It's being broadcast and transcribed for part of our parliamentary record and will inform our deliberations and report at a later time. I understand you've been given some information from the Secretary regarding that. If there's anything of a confidential nature you wish to share, you can make that request, otherwise it will all be in public session. Because you're appearing by Teams, I will just read you the affirmation and ask you whether you agree.

Dr KATIE HEPWORTH, NATIONAL POLICY DIRECTOR, ELECTRICAL TRADES UNION OF AUSTRALIA, CEPU TASMANIA, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED via TEAMS.

CHAIR - If you could introduce yourself. Thank you for your submission as well. It's really helpful. We've asked various times for different submissions, so thank you for your most recent submission. I invite you to introduce yourself, speak to that submission, add any further matters you wish to and then we'll go to questions.

Dr HEPWORTH - Thank you Chair, and thanks to the Committee for inviting myself and the union to appear, and apologies that we couldn't be there in person. We've all been in Adelaide this week. My name is Katie Hepworth, I'm the National Policy Director at the Electrical Trades Union, and I'm here representing our Tasmanian branch of the Communications, Electrical and Plumbing Union in Tasmania (CEPU). CEPU members basically build, operate and maintain the power stations, poles and wires that keep Tasmania running and also the industrial plants that employ Tasmanians in every region. Tasmania was built on cheap, clean, publicly owned power. Generations of Tasmanians harnessed the rivers to build the power that brought new industries to the island. Alongside those industries, it created thousands of skilled, secure jobs that came with it. Members are proud of that legacy, but we have watched it being squandered.

When we joined the national market - and I think we've made this point a couple of times in different submissions - we were promised that the Battery of the Nation would double the island's renewable energy capacity. Instead, the last wind farms, Cattle Hill and Granville Harbour, were finished in 2020. At the same time, Tasmania is switching to electric vehicles, we have industries like the Boyer mill that are looking to move off coal, and data centres are asking for hundreds of megawatts more. It's clear that we really need to go back to that building out of renewable energy generation because at the same time, in 2024-25, we saw Hydro's output fall to its lowest level in 20 years, and we had to rely on net imports from across Basslink. With mainland power comes mainland prices, and this is something we've made clear throughout our submission: when we're exposed to higher imports from across the mainland, prices in Tasmania go up. We found that Tasmanian hydro and wind is associated with lower prices, but more gas from the mainland, particularly when Victorian power prices themselves are high on the spot market, push up prices for all Tasmanians.

We're now building Marinus, but the question is what sits at the end of the cable? We've said again and again that without new Tasmanian generation, Marinus is just a bigger extension cord. It exposes the island to more and more mainland prices. But with new generation, Marinus

will become an asset for Tasmania. It allows more exports and it allows for protection against droughts.

In our submission and across a lot of the submissions that we've made, we've recommended three things. First, that Hydro Tasmania needs to build, own and operate new wind, solar and storage. Second, that the energy businesses in Tasmania need to be given a clear mandate to deliver affordable power to Tasmanian industry and households, not just dividends to Treasury. And third, every new project, public and private, must train Tasmanian apprentices to build the new workforce of the future and share in the benefits with Tasmanian communities. I'll leave it there and take questions.

CHAIR - I appreciate, Katie, your thoughts on that. One of the arguments that has been put, I guess, in terms of the demands for new load, or keeping industry in our state and potentially having new load come in, is that Marinus Link was approved to allow power to travel both ways. But the business case was predicated on 800 megawatts of new renewables on-island. What I hear you say is that Hydro should be involved in building, owning and operating new renewables. I assume you mean wind, solar? Or do you mean new hydro?

Dr HEPWORTH - That's correct.

CHAIR - Wind and solar?

Dr HEPWORTH - Wind and solar, I should say. Yeah. Wind, solar and battery storage is what we need to complement and just round out I think that kind of hydro storage. And that provides that drought protection in addition to whatever exposure you have to the mainland.

CHAIR - We know at the moment, and particularly last year, and the financial results aren't out for this year yet but they will be very soon for Hydro, that they have had a challenging period. They have a lot of capital expenditure in maintaining their aged assets, the dams, the power stations. We lost parts of Tungatinah recently in the fire, and the Tarraleah project adds to the debt burden. Cethana's sort of way off in the distance it seems now. But they have huge amounts of debt and capital requirements already. Can they really afford to do that?

Dr HEPWORTH - I guess the question we've always come back to is: can they afford not to do that? The benefit of owning things in the public market is that more Tasmanians can share from the input, so not only are they investing in those new assets but they're also getting the returns back to the community. There are other kind of mechanisms; obviously, where the Tasmanian government is partnering with the federal government around the solution for Bell Bay, and we'd probably be inviting the Hydro Tas to explore what it can do in terms of those kinds of relationships in order to build out those assets. We don't suggest that Hydro Tas will be able to do the entire build in Tasmania, but it is important that it does some of that and does not just leave the building out of new assets to the private sector.

We've looked at this both in Tasmania but, as the electrical trade union, also in other states around the country. What we're looking at is really growing what Hydro Tas used to do as well as them partnering with the private industry, so a combination of those build, own and operate as well as allowing private assets to come in.

CHAIR - You're not concerned about the financial impost that would have on Hydro Tasmania to remain profitable without a debt burden that makes it difficult for them, because

we know these things are not cheap to build? As you said, the Granville Harbour wind farm was built in 2020, was it, I think?

Mr BAYLEY - Cattle Hill was 2020.

CHAIR - Cattle Hill was 2020. Granville was before that, so they're not happening regularly. There are some in the assessment processes with private enterprise. I think there's varying views on this. It just seems that Hydro has a lot on their plate right now, and if they had to do this as well as all the other things, does that put them seriously at risk?

Dr HEPWORTH - I think they're building, own and operating. I think there is a muscle that needs to be built on how they did this. They have done it in the past and I think it is something that they can go back to and keep doing again. I think what you're speaking to is the way in which it's probably lost the capacity somewhat to do that, and that we need to look at the way that it can be doing more of that. At the moment, though, the current model is not working. We're not getting enough renewables. Without Hydro Tas, enough renewables aren't coming onto the system.

What you've pointed to, though, separately to that, is that we have this huge backlog in Tasmania around that approvals pipeline. I think there is a broader question, apart from what you're talking about around the money, which is, how do we actually get that pipeline moving, which is something that we've been commenting on quite a bit, both at a federal and the Tasmanian level; how do we make sure that we unlock the pipeline of renewables? Part of that is the role for Hydro Tas and part of that is the planning approvals process, the way in which community consultation works and making sure that, along the way, we do that, we bring everyone along to share in the benefits.

Mr BAYLEY - Can you expand on that, Katie? It's Vica Bayley, Greens member for Clark. What is it around the community consultation process that you propose needs reform or adaption?

Dr HEPWORTH - One thing actually - and I have the benefit of looking at it all nationally, in that we've actually seen some of the regional planning things in Tasmania as being some of the better work that we're seeing done around the country in the way in which it's identified areas that are available for renewable energy development that rather than doing an ad hoc one-by-one piece, are actually looking at what zones are more and less acceptable for renewable energy development. That is something that we want to use to basically say, how do we actually - like, with those areas that we've got picked, that would be a way forward to actually start to use it.

The other thing that we've proposed is that things like a fast track for new renewable energy development, but only things that already meet the guidelines of community consultation, apprenticeship. So, once renewable energy developers commit to a suite of community benefits and, for the ETU - I'm not going to speak for community organisations, that is predominantly renewable energy developers that commit to hiring a percentage of apprentices, to investing in building that new generation of electrical workers, that they can access a fast track for that assessment. For us, if communities can see that their children are employed in these renewable projects, that does a lot to alleviate that tension that often emerges when they're being called on to host these new renewable energy generations. It

becomes a very tangible benefit to those communities to see that they're getting the jobs immediately from youth onwards into their communities.

Ms FINLAY - Thank you for your submission and for the outline so far. Beyond the question of who builds the new generation in Tasmania, I'm interested in your members' views around AI infrastructure. Obviously, there's an abundance of opportunity through construction and getting AI infrastructure developed, I suppose, whether that be in the country or whether it be in Tasmania. But post-commissioning, what the feeling is around the ongoing jobs and opportunities, and the level of those jobs that are likely to be local versus not local? I'm also interested in whether you have an opinion around the timing of bringing on load versus generation being available in-island into the system?

Dr HEPWORTH - Both very good questions. It would not be surprising there's a lot of jobs in construction for the Electrical Trade Union. They are effectively large sheds with a lot of wiring through them. I think we're now looking at something like 10 per cent of our membership nationally is involved in the construction of data centres. They are incredibly good jobs for our members. They pay well. They are also very good places to train the next generations. They're clean, they are well-paid and they offer much of the spectrum of experience that an apprentice will need across the four years. That means we've been working closely with our counterparts in industry, the tier one contractors, on how we maximise those opportunities around the country, and also with the technology companies themselves to make sure that right from the outset we are building in those opportunities to create these long-lasting jobs at the end of the period.

It is true that there are more jobs in construction than there are in the ongoing operations. I think that the industry figures are probably 10 jobs in construction to every ongoing job past, in that sense. Our national secretary has just come back from the US, where he's been visiting and meeting with different AI companies. What they've found is that some of those figures, now that we're looking at more and more data centres coming online, we are probably seeing, with technology upgrades and different things coming online, that just doing that ongoing maintenance of them is probably creating more jobs in perpetuity than maybe what was assumed just on a maintenance framework.

What we've said is that none of these jobs are going to happen by accident; we need to build it in. So, we've been engaging on the AI standards across all of our branches, and we have made another submission into, I think it's the Tasmanian government's data centre expectations, that calls for minimum ratios of apprentices and also that data centres pay into a data centre levy, so that not only are they employing the apprentices, but they are also funding the new training infrastructure that will be required so that they'll basically be supporting and growing out of the VET sector, and that will become a long-lasting contribution for the island.

That's the workforce one. I think you were asking a question as well about the energy piece and bringing new energy to the grid?

Ms FINLAY - Yes.

Dr HEPWORTH - We've been really clear that we expect data centres to bring enough renewable energy generation to meet demand. We have supported the federal government's proposal around use of a renewable energy generation certificate as a compliance metric. These certificates allow data centres to show that they are contracting enough renewable energy

generation. But we've also said that it needs to go further, and that data centres should be demonstrating that they're signing power purchase agreements with new renewable energy developers. We think that, if we look at those power purchase agreements - this has been an issue that renewable energy developers have pointed to for a long time, that they are struggling, particularly wind developers, to get to market and to reach a financial investment decision, and there is an opportunity for data centres to support those developers to get to market by basically signing these power purchase agreements with them. But it's really incumbent on governments, I think, to require that to happen. Again, I think it's not going to happen by accident.

I think the second part of your question speaks to the fact - I mean a discussion that is starting to happen now, which is about a data centre is faster to build or faster to come online than a wind farm, am I right? If that's your question?

Ms FINLAY - Yes.

Dr HEPWORTH - That is true, but I think that there are a couple of different things. One is that we can look at what's the interim? And there might be an interim period where a data centre is buying certificates from existing renewable energy developers - sorry, existing renewable energy projects, but then there needs to be a very time-limited period before they have to demonstrate that they are contracting from a new project that wouldn't have otherwise been built. We think that once you hit that period, there should be requirements on the data centre to demonstrate that they've met that new threshold. There are things that you could do as the Tasmanian government, or the feds could do, around connection agreements, which limits the ramping up of a data centre. A data centre doesn't go from zero to 100 per cent capacity overnight; it typically ramps up. There are different jurisdictions around the world that basically say you get *x* amount of capacity on the grid at the beginning and then, to ramp up to higher levels of demand, you basically need to demonstrate that you brought on those renewables. That allows that pipeline to, I guess, catch up on all of that work. So, all of these –

CHAIR - Did you say that was internationally?

Dr HEPWORTH - Yeah, I'll have to take it on notice which jurisdictions -

CHAIR - Can you point us to an example of that? You can always send it to us later, but it would be helpful to have an example of where that is in place and where it has been demonstrated to have made a difference.

Dr HEPWORTH - Yep.

Ms FINLAY - I'm also interested in a clarifying question on that. Nationally, the rate of new generation is faster than in Tasmania. There is a lot of frustrated capital waiting to land in Tasmania. That might physically be possible on the mainland, but in Tasmania we have a number of proposed projects in the pipeline, so I'm interested in - you mentioned the timing, the gap between certificates from an existing renewable generator and then having a limited period of time before they can demonstrate certificates from a new generation that wouldn't otherwise have been built. Can you just speak a little bit more to the time?

Dr HEPWORTH - Yes. We have called for consistent regulations across the country. We don't want to set this as a race to the bottom. We want to set minimum standards across the federation, basically. So, that is something that will need to be looked at with new projects. It

could be that they're bringing in stuff across the NEM. I would need to actually have a look at that. It's probably a question that I need to take on notice, but we would be calling for consistent regulation across the country on this. I would suggest that if, say, data centres are in Tasmania and are required to sign PPAs with Tasmanian projects, that would assist some of those timelines of getting to a financial investment decision if those requirements were put. Obviously, I don't run markets and I'm not a renewable energy developer, but it's probably a question to ask them: what would they need in terms of those PPAs to speed up time to market?

Ms FINLAY - Thank you. My question was more about - you mentioned being able to get existing renewable versus demonstrating commitment to new, and you mentioned a limited time gap. I wondered whether you had contemplation around that period of time.

Dr HEPWORTH - I think we're looking at no more than three years in the federal consultations and the documents to the feds. I haven't looked at it specifically for Tasmania, but we've been working to three years. Obviously, we'd like to see that reduced below that, but three years seems a feasible amount at a federal level.

CHAIR - Can I just go back to your earlier comments? There's a couple of areas I want to go to. One is around you talking about the reduced generation from Hydro, and in your submission you've got various charts that show that. One of the explanations we've had that may attribute some of that reduction in the generation of hydro and wind in Tasmania is the behind-the-meter generation that's not actually captured anywhere. Others see this as an opportunity to provide greater energy into the system behind the meter to free up some for use for industry, whether it's major industry or whether it's new industry load. What do you understand about that?

Dr HEPWORTH - I don't check on those specifics around the percentages of behind-the-meter generation in Tassie specifically, so I don't have figures on that. I can say that as the CEPU and the ETU, we have both supported the rollout of more behind-the-meter generation. We were instrumental in advocating for what became the cheaper home battery scheme at a federal level, and we're now seeing the success of that in bringing down and really soaking up that excess power in the middle of the day. We've seen the success of that at a household level in terms of, I guess, reducing the issues of curtailment that we were seeing in the NEM. We would see that as a really important thing to keep doing in Tasmania. We've also seen the impact that has had on household bills and the ability for people to really maximise the solar they've got on their rooftops. Australia has some of the best - that scheme that has been rolled out, whether it's household solar and batteries, has moved at a pace that's unseen around the world.

There is the other point that we're advocating for, which I think is that missing middle, where we still need to unlock all of those industrial rooftops. We're not really seeing that same rollout of generation on industrial rooftops.

What your question points out to is that we need everything, we're going to need everything. We are looking to electrify an entire economy. That includes our cars, our industries, et cetera. We're not going to do it just on hydro, just on large-scale wind. We need basically to do it with every mechanism that we have available to us. That's why we've been engaging across all of those things.

CHAIR - Yeah, I appreciate your point there. From the government perspective, we've already talked about Hydro and their challenging financial situation. Would it be a better use of government's time and energy, and potential resources to promote and support the rollout of industry rooftop solar and decent battery storage in those areas where they've got big rooftops. Farms could do the same. They've got plenty of barns and sheds. That's already land that's utilised; it's not like it's building one out in a paddock somewhere. Do you think we should be focusing more on this to really build this up?

Dr HEPWORTH - Look, I'm not a network designer and that's probably a little bit beyond where my expertise is. I think, given what our knowledge is, that would be a question of, 'What are the use cases, what is the type and the profile of generation that is required?'. An aluminium smelter probably cannot be powered just by industrial or household roof solar. It requires a degree of security and stability around firming and storage that cannot be provided through those mechanisms. It is how all these things interact together, which I think requires that modelling approach of the interactions between all of those different elements and how they come together.

CHAIR - It's pretty clear to me that when you invest in those sort of things, that removing effectively from the grid, a lot of it, that the investment required in the transmission and distribution network is less. We need to take a whole look at this, don't we? Not just look at things in isolation, but look at how the whole thing's interconnected?

Dr HEPWORTH - Yes, that's correct. I think we have, if you look at some of the ISP numbers - and I don't have them to hand, you've seen a reduction in the number of kilometres nationally that's required for transmission because of a lot of this more distributed solar coming online. What that means in terms of decision-making in Tasmania is probably that it requires a level of modelling that I don't have capability to do as the ETU, but I do agree with you that we require that network-based approach.

Mr HISCUTT - Regarding that industry rooftop solar conversation, do you think the main reason why that hasn't had a lot of uptake is the capital expense and lack of incentive? Or is it the fact that it doesn't produce the total amount that a company requires? Rooftop solar has obviously taken quite significant uptake. What do you think are the barriers for that industry solar uptake?

Dr HEPWORTH - There are other people at the Smart Energy Council that know this stuff better than me. I think there are issues of incentives. There are also issues around the size of installation and how it connects to the grid. There are also issues that other people know better than me around how you connect into the grid and what are the threshold sizes of those connections. But I'd recommend that there are other people like Smart Energy Council and others that are better, kind of posed, to speak to those issues. I know that this is a problem that lots of people have been trying to tease out, is what is that interaction between those? Part of it is incentives that cap out at a certain level, the ways that these kind of medium-sized installations are treated as power plants or not under the rules. It's a number of these factors that, altogether, is a larger piece of work than we've done.

Mr HISCUTT - Ownership as well, I guess, because a lot of people have a business that's rented inside someone else's shed, as opposed to your house, which is quite often owned by yourself with those solar things, too. So, there's probably a few issues there.

Dr HEPWORTH - Yes, there is. And we've been battling on that other question of what to do around renters in households and their access to solar.

CHAIR - They're not insurmountable problems. They just need a focus on them, don't they?

Dr HEPWORTH - That's right.

CHAIR - Can I go to another area? In your submission you talk about Hydro Tasmania and TasNetworks' legislated mandate show that their GBE governance arrangements require them to pay dividend and tax equivalents and guarantee fees to the state, and to earn a commercial rate of return, which is a fundamentally different institutional design to the one Tasmania relied upon to build its industrial base. Do you want to speak a bit more to that? We know they have a 90 per cent after profit dividend policy, which is pretty substantial. How do you see that should be, because that would require a change to their ministerial charter and their statement of expectations and, notionally, the corporate plans?

Dr HEPWORTH - Maybe if I give a very specific example around some of this, rather than percentages of dividends and things like that. It would be a better requirement that Hydro Tas acts in the public interest and can make decisions based on the public interest in Tasmania around how it sets power prices for different industries, how it sets power prices for households, rather than straight commercial decisions.

I think the example that is most immediate to mind for a bunch of us, both the ETU, CPU and other unions, is around what's been happening at Bell Bay around the industry trying to get power from Hydro Tasmania versus Firmus, for example. And the negotiations that have been happening in parallel there, where you have heavy industry and users that have high demand but have different levels of price sensitivity, where I would argue that AI data centres have limited price sensitivity in terms of the price that they can afford to pay for power, as opposed to an aluminium smelter.

Now, under the current model, my understanding is that Hydro Tas just has to contract with the user that can pay the highest amount of money. But if they do that and you have these other high-demand users that cannot access power at the rate that they require to be internationally competitive, that this might see a loss of industry from Tasmania. This isn't just a Tasmanian issue. We've been working very closely with the federal and New South Wales government on the Tomago deal and what was required to save the Tomago Aluminium smelter. What's emerged from that is these industries require cheaper power than what the market can provide at this point in time and what is basically a commercial rate of return. The government, because it's got better access and lower debt capital, can lower the price, and the McKell Institute did some figures on what it would take to lower the price. They also pointed to other jurisdictions around the world and the fact that if you look just at aluminium, all other comparative jurisdictions subsidised in some way the energy price of their industries to make sure that these industries remain competitive.

What we've been talking about in that submission is less the specific figures around those dividends but more the principles of allowing Hydro Tas to be able to do that contracting for the overall public benefit of Tasmania, to retain these large employers that are also taxpayers, in the state and to continue to employ Tasmanian workers. That's really what we've been talking about. Now, there is already the community service obligation (CSO) under the Act, so that

would enable some of this to happen. That's really the engagement that we've been doing most immediately around Bell Bay and Nyrstar - us, the AWU and others, just to protect these industries in Tasmania.

CHAIR - That led me perfectly to the next question. If this was treated as a CSO, as opposed to a secret deal, do you think there'd be greater acceptance broadly, because it would be reported differently? It would be reported transparently in the budget papers. Well, it should be, as a CSO. It should also appear, obviously, in Hydro's financial statements.

Dr HEPWORTH - I think what it does is it shifts us to something that becomes less of a single deal and into more of a structural solution for all Tasmanian industries. We would probably say that the lack of support that we're seeing around the country is where it seems to be just happening as, like, a single bailout, as opposed to a solution. When we've done polling on these types of solutions, there is a lot of community support for government to support industries, including by subsidising their power. What people want to see is that this is not a single bailout but is something that is a structural solution, where we can see a long-term future for the community. Part of that, we think, is about linking that energy build-out to ongoing industries so they're not just seeing money going for a power deal, but they can see that that's the new renewable generation that is being built from that government money that is then being onsold to business, that is then creating those workers. I think the CSO does set up a view in the community that this is a long-term solution for community benefit, and that helps build out that support.

CHAIR - Yes, I think we heard from TMEC, the Tasmanian Minerals & Energy Council, that a five-year deal is inadequate, in terms of length of time, for any major industry to have that certainty. What's your view on that?

Dr HEPWORTH - Yes, we'd say that that's what we're seeing with a lot of industries. What that points to is there's just a bit of a gap difference, is that industry wants to be able to show that 10, 15, 20-year power deal, that they've secured that power for that length of time at a price that leads them to be competitive. Which is possibly different to the length of time that it's willing to contract with renewable energy developers. So, there's this gap that we're seeing between what your private wind and solar developers need to get online, the types of contracts that, say, industry is willing to sign with a renewable energy developer, but then also the length of contract that they require to remain competitive. The role of an entity like Hydro Tas is really to kind of look at the length of contract that all of these different entities need. They become that intermediary between all of these entities and can basically sign the contracts at the length that those entities need. That's effectively in New South Wales, and it's a similar model that we'd like to see here in Tasmania.

CHAIR - I am particularly interested in the whole interconnection with the whole of our government businesses and the expectation about what they do or don't do in all of this. We did hear from TMEC the benefit of having a major industrial that employs a lot of people in a range of skilled jobs, and the need for certainty in that. But where we've got, and you touched on this a bit, Katie, the tension between what Hydro is expected to deliver and what the expectations are, which are a little bit nebulous, actually, and what the industry needs when - it seems to me part of the reason for the five-year contract was that until Marinus is built, and we know what that landscape will look like then, because there's a lot of ships to go across the strait in that time, what happens then if it's cost us a whole heap more than we expected and

Hydro is under enormous pressure, we've had a super El Niño or whatever? There's so many variables here, so where's that sweet spot? There's so many competing demands here.

Dr HEPWORTH - I mean, it goes to the risks of losing these industries. I think once they're gone, they can't be brought back. That is why we've fought around the country. These are good jobs and they're ongoing jobs. They really act as these anchors we're seeing in Tasmanian communities, so there really is that need to protect them. We have done this in the past, and I know that there is a lot of change going on at the moment, but this isn't an accident of design. Our Tasmanian industries, our industries around Australia, follow those cheap power deals, and there are power deals that lasted for decades. So, I think that is a requirement. Also, some of these things are - renewable energy developers are also talking about needing that 20-year horizon on their power deals to be able to get to financial investment decisions. So, we're talking about these long timeframes that are required.

We know we're going to need a lot more energy as well. I know Marinus will change things and we know that there is a lot of change happening, but the one thing that we are secure about is that the need for power is not going to go down. The need for power is only going to keep going up. We need to secure the - you know, two years ago, a few years ago, we didn't know about the data centre demand and how big it would be. These things are only going to keep going up. So we can be secure that we are just, like, this build-out is not a problem; that we just need to keep doing and keep following through, and keep contracting.

Ms OGILVIE - Thank you, Katie. My name is Madeleine Ogilvie. I don't think we've met before, but I really enjoyed your contribution. You mentioned the visits to the States. I've done those as well through my former ministry, particularly Silicon Valley, Mountain View, those guys in and around northern California. I'm interested if you could share a little bit more about your discoveries in relation to - sorry, I will say where I'm trying to get to. I'm really interested in the apprenticeship opportunities. I'm from the telco sector myself and have been on that 30-year journey since pre-internet. But I do see, particularly as Telstra-saturated, a new opportunity for the kids to get these digital economy sort of jobs and training. I've been asking a lot of people, but it sounds to me like you've been doing some thinking about this, and I'd love to hear more to see how we can support that.

Dr HEPWORTH - Yeah, thanks for the question. There's a lot of talk about risk and data centres, and we wanted to really look at what the opportunities are as much as anything else. Our meetings were focused on skills. Obviously, the US has bigger data centres and is a lot further down this train than we are. What we've seen in the US is that there is no lack of a capacity to pay by these data centre operators. Google alone has invested $50 million in building new training capacity in partnership with our sibling union over there, the IBEW, and together they are building out industry training centres to train in the critical trades that are required. So, we know they can do it and we're seeing others, like Meta, doing the same thing. It is our preference that those training centres are not run as - that they're industry, so they run as a partnership between our electrical contracting peaks, so NECA and the MEA and the Union ourselves, but in collaboration with government so we get this greater coordination. A lot of our meetings were about that, and also that we're seeing those apprenticeships come through and also that there are opportunities around a couple of different trades.

In terms of what we are asking for, I think there was an earlier question around the length of jobs and what that meant in terms of both the length of an electrical apprenticeship but also the nature of ongoing jobs. One of the things that we've been calling for is, in addition to, I

guess, that investment in training capacity that the employment of apprentices might take place through group training organisations. For those that don't know what a group training organisation is, it's effectively like a labour-hire agency for apprentices. That then is able to get apprentices hosted to different employers. That could be to Firmus for the 18 months of the Firmus build and then into housing projects, and means that these apprentices will move in and out of data centre construction, but also in and out of other parts of the economy. That could be housing, that could be other industrial uses, et cetera, which means that benefit of growing these apprentices is also then shared amongst the economy. You talked about telco -

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CHAIR - Sorry, Katie, we had a little bit of a drop out there.

Dr HEPWORTH - I was just saying that in terms of the telco sector, the model that we're talking about is something that we have learnt from the public sector. Whether it's telcos or rail or other sectors where apprentices can't get the full suite of experience that they need for their apprenticeship, that we've always had models where they get seconded out for a couple of months to get that suite of skills up. We want to take that model but do it in a way that allows data centres really to become an anchor employer for apprentices, but then provide apprentices out to the rest of the economy, particularly housing, because we see this is real direct that that is a huge priority for government and where we struggle to get apprentices more than probably other sectors.

Mr HISCUTT - Just circling back a little bit, one of the conversations that's been had is about new AI data centres investing in or signing up new power generation, and the conversation we had previously about the fact that the data centre is able to be built a lot earlier than the power generation. An agreement can be reached to do that and sign up for a purchasing agreement or potentially even capital investment. What are the risks, or how do you see the risks if, for either capital collapse or planning reasons, that the power production can't go ahead and how that would then affect the ongoing nature of power in Tasmania?

Dr HEPWORTH - This has been raised as an issue around data centres basically saying if they can't - it's been raised to us by data centres that if the renewable energy project doesn't go ahead, will they still be able to energise at that point. I think that's why in some of our federal consultations we've added in this idea of a ramp-up, which allows for that monitoring of the impact on the overall grid and allows -

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CHAIR - Start again.

Dr HEPWORTH - That's okay. On the capital collapse question, I think that part of that is that these data centres are not going to be reliant on single projects, so one point of failure won't be the all of them; that's not going to mean that they've got no new energy coming in. I think part of why we've looked at things like managing the ramp-up and that data centres need to show that they've hit particular thresholds of bringing their own generation before they can ramp up more is really to identify early where you've had situations where they've committed to bringing on power and it hasn't come on, and to mitigate the risk on the overall power network and the power grid from that not coming online.

We don't see that data centres will only be able to contract with a single project because part of it is not just about bringing online the correct number of megawatts for their demand but also demonstrating that they can have megawatts across the day. They wouldn't be able to do it just from a solar farm, as an example, because they wouldn't be matching generation at later times of day. So, they would necessarily have to be contracting with multiple projects, which means if one goes out, you're still meeting enough generation and they've got some capacity to try and match, to find new generation when those examples.

Mr HISCUTT - I guess if the distribution is happening through a central point, if one data centre did wind farms and the other does solar, it's not necessarily that one new data centre or company would have to invest in different areas as long as the ecosystem balances out, is probably more important?

Dr HEPWORTH - I understand the point you're making. I think, and this is a live discussion at the moment federally, the approach that's been taken is each data centre - and they're not going to have to trace each electron from the data centre. That's not how this works. But that they are purchasing certificates that show matching against set time periods, so it won't be at the level of granularity of the NEM. That is impractical. It will probably be a couple of time periods a day, and they need to show that they have contracts that match different time periods. That is so that you don't have to have this other layer within the network that is doing that. That means it's on each data centre, really, to show that they can at least have renewables that span their day, rather than suddenly realising that -

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Ms FINLAY - Does that work in Tasmania though, with our scale of new projects?

Dr HEPWORTH - Sorry?

CHAIR - We just lost you again, sorry.

Dr HEPWORTH - Yes, that's okay. What did you hear up to?

Ms FINLAY - I'm interested in the scale of that in Tasmania in terms of the limited number of projects in the pipeline. We've got Firmus as a current proponent and up to six others that are interested in large-load developments in Tasmania. Of course, they're not all going to come off, but there's a number of players. It's the first time I've put my mind to that contracting across a number of projects. In terms of the projects getting FID in Tassie, they're going to need certainty for much more than pieces. Sort of like weaving together a tapestry. How do you see that working in Tasmania?

Dr HEPWORTH - I think this is a live question around what jurisdiction they're allowed to contract in, whether or not they're going to have to show that all of that contracting has to come from the same jurisdiction; i.e. are they just signing PPAs for Tasmanian renewable energy generation, whether it's hydro, solar or wind. Whether they're just signing with Tasmanian projects or whether they can sign up with projects that would import through Marinus and the rest of the NEM. I think that is a live question at the moment in terms of that network design. And it's not just a Tasmanian issue, it's can Queensland data centres contract with NSW ones to meet those requirements that are made?

What you're pointing to is that is probably, given the nature of Tasmania, a very live question to be answered as part of that broader data centre expectation engagement. It is one that I don't have an answer to at the moment, but can also come back with some thoughts later.

CHAIR - If you have any further thoughts, we would really appreciate your thoughts on that because it is one of the questions that we're grappling with, I guess. We are out of time. We thank you for your appearance today and apologise for some of the connection problems. Thank you for your persistence with that.

Dr HEPWORTH - It's all right, and I appreciate the ability to do it remotely. I'm based out of Perth but we're all in Adelaide, including the Tassie groups, this week.

CHAIR - At least the time difference is not quite so bad.

Dr HEPWORTH - That's right. So, I appreciate being able to do it remotely. Thanks very much.

CHAIR - Thank you.

The witness withdrew.

The Committee suspended from 11.05 a.m. to 11.14 a.m.

Australian Aluminium Council Ltd

CHAIR - We appreciate you appearing before the Committee today. I understand you've been sent some information already from the Secretary to assist with the process. This hearing is a public hearing. Everything that you say will be covered by parliamentary privilege while you're before the Committee. That may not extend beyond the Committee. The hearing is public, is being transcribed and broadcast, and if there is anything of a confidential nature you wish to share with the Committee, you can make that request to the Committee and the Committee would consider that. Do you have any other any questions before we commence on any of those matters?

Ms JOHNSON - No, that's fine, thank you.

Ms MARGHANITA JOHNSON, CHIEF EXECUTIVE OFFICER, AUSTRALIAN ALUMINIUM COUNCIL LTD, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED via TEAMS

CHAIR - I invite you to introduce yourself and then speak to your submission. We appreciate it's quite detailed, so it would be really helpful to go through some parts of it, and particularly focused on our more narrow Terms of Reference, particularly in relation to major industrials and their energy requirements and the role of our government businesses in all of that. Could you introduce yourself and then make some opening comments? We'd appreciate that.

Ms JOHNSON - Thank you. For the purposes of *Hansard*, my name is Marghanita Johnson and I'm the CEO of the Australian Aluminium Council. Thank you Chair and Committee members for the opportunity to appear before this Joint Select Committee today. I'm appearing on behalf of the Australian Aluminium Council. We are the peak body representing Australia's integrated bauxite, alumina and aluminium industry in Australia. We provide a unified voice across the value chain, working with governments, industry and communities to support a resilient, competitive, sustainable sector that underpins Australia's economic strength, industrial capability -

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Ms JOHNSON - our industry generates more than $14 billion in export earnings, contributes around $18 billion to Australia's GDP, directly employs more than 21,000 people and supports a further 55,000 Australians, predominantly in the regions.

This inquiry comes at an important time for both Tasmania and Australia's industrial future. Since we lodged our submission, Bell Bay Aluminium has now secured a power arrangement and support agreements that carry them through until the end of 2031, and the council welcomes this outcome. It provides important certainty for one of Australia's most important manufacturing assets, which supports directly more than 550 skilled jobs in northern Tasmania and contributes over $250 million annually to the Tasmanian economy. It will also reinforce Bell Bay's role as the cornerstone of Tasmania's industrial base.

The Bell Bay announcement demonstrates what can be achieved when governments and industry work together to strategically support significant industries during this energy

transition. Established more than 70 years ago, it was Australia's first aluminium smelter and the first in the Southern Hemisphere. Bell Bay has long been a part of Australia's sovereign and industrial capability. Today it has secured its place in Australia's industrial future so it can continue to supply both domestic and international customers who are seeking secure and reliable aluminium supply chains.

However, Bell Bay should not be viewed in isolation. Rather, it highlights a broader challenge facing Australian industry: around the world, governments are actively backing strategic manufacturing sectors through energy support, industrial policy and investment incentives. Australian aluminium producers are competing not only with global companies, but increasingly with foreign governments. Reliable and competitively priced energy remains the single most important factor in the long-term viability of aluminium production. Aluminium smelters are not simply large energy users, they are major exporters, long-term regional employers and some of the most sophisticated demand-side assets in the electricity system. They deliver economic, social and system benefits that extend well beyond the electricity they consume.

As Australia manages growing demand from emerging industries, including data centres as well as other key industrial facilities, energy planning must recognise the strategic value of existing industries that already deliver this substantial employment, export and regional development outcome. My key message today is that the Bell Bay agreement provides an example of how targeted government leadership can support industrial competitiveness. The challenge now for Tasmania and Australia is to build on that success with long-term energy and industry policy settings that maintain our strength, sovereign capability and position Australia as a trusted supplier in an increasingly competitive global market. I look forward to assisting you with any discussions you may have.

Ms FINLAY - Thank you, Margie, for the submission, and for your overview just now. I'm really interested in the - and I also thank you for your diplomatic characterisation of governments strategically working together. I'll just put that on the record. I'm interested in the nature of a five-year agreement. I'm wondering, for the benefit of the Committee and the report that we present, if you can talk to certainty around investment. But, if you could, paint a picture for our report and for the Committee around the nature of Bell Bay Aluminium and major industrials. They're often characterised as old, dirty, out of historical plants, but I'm wondering if you can talk about the importance of Bell Bay Aluminium not only in a Tasmanian but in a global context, and the nature of the investment, the technology, and the innovation that happens there, and the challenge and the nature of that five-year agreement in that.

Ms JOHNSON - So, I will obviously talk to what I can, noting that I don't work for Bell Bay Aluminium, so I'm not privy to any commercial-in-confidence arrangements. I will talk, I guess, at an industry level, in terms of how things work in the sector and where things fit together. Noting your rather long question, I will try and come back to the various elements.

Ms FINLAY - Sorry.

Ms JOHNSON - No, that's alright, I was going to say, and if I forget, please feel free to remind me. So, first of all, in terms of - so, yes, Bell Bay is 71 years old, just turned 71 in September this year.

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CHAIR - You were just talking about Bell Bay being 71 years old.

Ms JOHNSON - Yes. So, Bell Bay is 71 years old. It was built following World War II because Australia didn't have sovereign supply of aluminium in World War II, and that was a position it didn't want to get into. So, while it's 71 years old - and if you've been to Bell Bay and been in the canteen, you might note that some of the buildings at Bell Bay are older. The infrastructure that actually runs the smelter: the working parts, the potlines, the carbon anode baking furnace, the transmission areas - those are not 71 years old. Those are all much newer.

As you walk around Bell Bay, and I most recently visited in May, yes, some of the buildings are older. The canteen facilities and so forth have been modernised inside. I would say we don't think there's a 71-year-old oven in the canteen these days. But the facilities, the sheds and so forth are older, but there's a lot of new investment. Smelters are very capital intensive, and, if you actually went and looked at the individual part of the smelter that makes aluminium, which we call the cells or potlines, depending on the actual facility, those would be less than five years old. They are constantly turning over. So, yes, the outside might look older, but things like the transmission infrastructure, the carbon baking furnace and the potlines, as well as the cast house are all much newer. In fact, it was only this year that Bell Bay commissioned a new casting line that lets them cast, I'm going to say off the top of my head, 23kg ingots. But they've just commissioned a new casting line that lets them cast even bigger ingots to supply to the market.

As I've said, while it may be 71 years old, that's the age of some of the buildings and the duration of the total longevity of the smelter. It is not a reflection of how old it is. Equally, smelters are - in response to your question about being dirty - I guess smelters produce primarily their main process emission is carbon dioxide, and, while carbon dioxide does have global warming implications, that's because of the consumption of carbon anodes. In fact, it doesn't have local impacts in the same way, and carbon anodes is something where we are working as a global industry through Rio Tinto, who does own Bell Bay Aluminium, to actually work out how do we eliminate those carbon anodes in the longer term. The long-term plan would be to replace those.

In terms of five years, I think the point of your question, if I can infer, is 'How do you make investments? We're a big multinational - we're not a big multinational - our members are big multinationals. How do they make investments with a five-year timeline?'

Smelters prefer the longest possible timeframe, so, five years is challenging, but it is much less challenging than the one-year time frame that Bell Bay had only a year ago when there was that contract extension. I would also say that it's a challenging time for Australia's energy transition and, so, the five years needs to be looked at. Commensurate with that, there's a lot else going on and in the world of uncertainty, maybe five years is the most certainty that could be given.

Equally, five years can buy time for you to actually form a view about a longer-term contract that might take place beyond 2031. Now I'm not in a position to comment on that. I'm not involved in any commercial negotiations, but previously Bell Bay has had five-year power deals before, and those five-year power deals have sometimes then been followed by 10-year power deals. As long as you've always got a rolling power deal, you can actually set yourself up for investment and for longer term.

Ms FINLAY - Thank you.

Mr HISCUTT - Thank you. Casey Hiscutt here. One question, obviously with the Bell Bay situation, the power bill was an integral part to that, and Tasmania is in a unique position, the power is supplied from the government as a GBE. Elsewhere in Australia I feel that pressure on the power agreement to be such a strong part of that negotiation would not be put on a private company to deal with that instead of having federal or state government support come in from that side. Do you think that changes the dynamic of those conversations significantly that the private market gets affected?

CHAIR - Did you hear that question, Margie?

Ms JOHNSON - I think I've got the gist of the question, which was you were wondering whether it was the same in other jurisdictions given GBE ownership in Tasmania.

Mr HISCUTT - Yes, basically versus the power they supplied to other plants across Australia by private entities, not necessarily government entities.

Ms JOHNSON - There are four smelters in Australia. All four smelters in Australia were originally set up under state-owned assets around the country. And there's a long history of partnership between the aluminium industry and governments. Essentially when the industry's foundation, 1955 for Bell Bay, but mostly sort of the '60s and '70s for the other smelters, they were all originally built with government support from government-owned power stations. Over time, some states have sold those but not all. For example, in Queensland, and most of the power assets, I should say, both in terms of generation and also transmission are in fact still owned by the Queensland government. Every state is different and every state is unique. And what I would say is more unique about Tasmania has been the fact that it is Hydro assets, rather than the fact that they are government owned. The contracts in Victoria and NSW - they don't own the transmission or the generation in those states. They are with private entities, but for example in Queensland, where we have a smelter, the state still owns the transmission. You will note as well, I'm sure, that in Queensland and in New South Wales, we have also seen some significant support for the continued operation of those smelters through the energy transition from both their federal and state governments. So, every state is different, but the connection between aluminium and governments is a constant not only in Australia but also globally.

Mr HISCUTT - I guess the question was around, I guess with Vic and New South Wales, are there energy agreements at a - obviously at a competitive rate for that scale, but are they at below-market rate, as is evidenced here in Tasmania?

Ms JOHNSON - So, I cannot comment on the actual price paid by any smelter. What I would say is the amount of energy that is consumed by these smelters is very large. We consume 12 per cent of the electricity on Australia's east coast across the four smelters. That's 12 per cent on average. Now, that obviously varies depending on how much of it - but it is very, very, very large. The amount we are paying for electricity is commensurate with that scale and the role that the smelters play in terms of providing a number of other system benefits. The best analogy is, as a customer connected, you know, a household-type connection, you are buying the equivalent of a packet of potato chips. Your 50-gram packet of chips has got potato in it, but that's not really the key ingredient. The key cost in getting it all to you is the packaging, the flavouring, the cutting, all of that other stuff that's gone into making it. Whereas what a

smelter buys is a tonne a day of potatoes delivered to the front door every day, and we're using those potatoes in bulk at 3 a.m. in a way in which households are not. So, the price you pay for the tonne of potatoes for your 50-gram packet of chips is not going to be the same as what we pay to have a tonne dropped off at the front -

CHAIR - That's a good analogy, yeah.

Ms FINLAY - That's a good analogy.

Mr HISCUTT - I guess the question was more about the difference between private versus –

CHAIR - Can I just follow up with that, then Casey with - oh, she's frozen again.

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I might follow up with a question, Margie, along similar sort of lines: you talked about the jurisdictions providing financial support for major industrials like this, and one of the things that's been a criticism here in Tasmania is the lack of transparency around this. I think generally people, by and large, don't have a problem with supporting industry like this - it's the lack of transparency around the arrangement. I'm not asking for commercially sensitive information to be released, but what I am asking for is: how do we best reflect that support? Should it be a community service obligation, because we're asking a government entity, a government business here, to give a concession when they're required to be commercially sustainable. And are there other jurisdictions that provide support in a way that we could perhaps look at as a more transparent and open process, without disclosing commercially sensitive deals?

Ms JOHNSON - So, one of the challenges I have for you is if I look at who are the global competitors that we could look at. Sixty per cent of the world's aluminium is manufactured in China. If I look at who are the other major energy producers, the other biggest ones are Russia, India, Canada, the Middle East. Canada is probably the country, of those that I listed, that is most comparable to Australia in terms of systems. And I'm not going to give you a detailed analysis of the Quebec government compared to the Tasmanian government in terms of their obligations, but it is the most comparable, and they provide hydro to their smelters, and they provide it at government-assisted rates. Those are not public; the process behind that is not publicly transparent, so the most comparable situation we have is not very transparent. I would say for the bulk of who else is in the top 10 aluminium producers, noting that Australia is No. 7 and, as I said, noting that China is 60 per cent, so the largest, then Russia, India, the Gulf states have been the primary others. It is not transparent, on average, as to how this works and how government support typically works across the sectors. The closest I can point you towards in terms of transparency is the OECD do a series of reports looking at distortions in international markets, including the aluminium value chain, but generally, one of the challenges the industry faces is these are commercial-in-confidence arrangements and are not disclosed publicly.

CHAIR - In terms of the most recent - I know you can't speak directly to any of the details here, but we know for a fact that the major industrials in Tasmania have power purchase agreements that are at a lower rate - the whole potato explanation was very helpful - for a very good reason. It seemed to me that what we got to with the most recent agreement was Hydro saying, 'Well, this is as far as we you can go. We're already offering you a discounted price'. And then it required the government - federal and state - to step into the space differently. So,

above and beyond that sort of set 'this is what we can tolerate' price and still meet our obligations to our shareholders, as Hydro, and then the additional bit on top, how transparent should that be? That's the extra piece here that doesn't appear to be - well, maybe it will be reported. It's a bit hard to know. How should that be dealt with?

Ms JOHNSON - I don't know, so I can't disclose any commercial arrangements because I'm not privy to them, as you would not want me to be. If they're commercial-in-confidence, that applies to me as well as everybody else. I think what has been made public is that there is a $200 million set of support agreements for Bell Bay from the federal and state governments. What is also very public is the contribution that Bell Bay or other major industrials make to the state. I understand that people want transparency, but I would argue that at a point, what does that transparency get you? Even if you knew the price we paid per megawatt hour, that wouldn't reflect what we actually do with the electricity for even for us to be able to use it on site. We run our own transformer yard; we have our own power switch yard. We don't take electricity in the same way as everyone else. In some ways, the transparency would potentially just increase the number of questions about why, you know, Bell Bay is getting this price when in fact it's not comparable to the way in which electricity is delivered to any other user in the state.

I understand that taxpayers want to know, but to me it's the money that is on the public record that has been offered by the federal and state governments to help make that support arrangement, and it's how that compares to the socio-economic contribution of the smelter to the state - but also the very important role that the smelter plays in the electricity network and maintaining the viability of the electricity. Some of that is quite hard to quantify and may vary year on year in terms of what are the needs of the electricity sector - do vary over time - and what does the smelter offer does vary over time, depending on what the electricity sector needs.

Ms FINLAY - Have you done any work across the four smelters of listing and describing the variety of different tasks that need to be done to the raw energy that comes in so that the community understands - also the different services that you might offer at different amounts in different years? Has there been a project on describing that better for the community, so they understand how it's different? Because the potato chip analogy, I love, and the 'tonnes of raw potatoes', and I think that even for ministers, might I say, let alone members of parliament, stakeholders, or the community, it's not well understood.

CHAIR - If I could just add to the top of that -

Ms JOHNSON - No, it's complex. Yes.

CHAIR - This probably feeds into this a little bit, what capacity does the smelter have in load shedding or reducing load - that's the thing to help stabilise the network? That comes with a value; it also comes with a cost to the business, potentially.

Ms JOHNSON - Yes. As an industry association that represents all four smelters, we have tried to quantify that to the extent we can, noting that most smelters, for competitive reasons, can't share data with each other because they are competitors in the market. All three other smelters are joint ventures. Even though Rio Tinto is the majority shareholder of Tomago and Boyne, there are a range of other joint venture partners in both those assets. There are limits even on what the four smelters can share. Appended to our submission was a report, which was the first time in my knowledge having worked in the sector for nearly 30 years, that the smelters have actually ever tried to document, to your question, what we actually offer in terms of that,

and noting that each smelter is in fact different in terms of what is that system level benefit that it can offer. So the report that was appended does quantify, but only at an aggregated level per megawatt hour, what is that demand response value, what is that system service value.

I would also say the needs of each grid are quite different. Tasmania, which has a lot of hydro, is not impacted by coal retirements in the same way as Victoria, New South Wales and Queensland. I'm not going to say it's not impacted at all; it is, because of the interconnectors. It's also an opportunity for Tasmania, but it's not impacted in the same way. Similarly, the cell design at Bell Bay being smaller cells because of the age of that facility, so literally the pot where we make the aluminium - I say pot like this, sorry for holding up my hands, it's actually about the same size as a shipping container. It's bigger than that - but the pot where we make it, it has different properties to, say, the potlines at Tomago, in terms of what it can do, in terms of interruptability, demand response, flexibility. Tomago, given its physical location and its capability and the higher degree of variable renewable and the higher degree of cold closures that have taken place in New South Wales, Tomago, given a whole pile of things, has offered a lot more interruptability than - and that's on the public record, in terms of how much it's offered - compared to some of the other smelters. It's very hard to collectively articulate that story. We've done our best, noting the very strong competitiveness issues we have between our members.

Ms FINLAY - Sure. And I'm going to say something light-hearted now. I don't actually mean this. I'm just going to say - the way you've responded is very complex. I suppose my question was more about, I wonder if there's a little collection of potato chip analogies, where those things are described in a way that makes sense to the everyday person, including myself. It's sort of like - the potato chip, there's a picture that you create around that and a relativity, and maybe it's a task for each of the individual sites, but I think the public narrative around the power negotiations in Tasmania would have been vastly different if there were little word pictures and narratives around what it actually means to receive and then use power onsite in Bell Bay and what it means to the community - and what it means if it's not there anymore, and what does that mean to the power system? Just little, simple -

CHAIR - Maybe synthesising down; there’s some amazing detail -

Ms FINLAY - Even that's a bit overwhelming.

CHAIR - in the report from Rennie - to explain it to a 12-year-old.

Ms JOHNSON - Yep. No look, appreciate the feedback, certainly that's something -

Ms OGILVIE - They probably even know it, 12-year-olds.

Ms JOHNSON - Yeah, to take to our communications committee. As you can imagine, we are the largest and most sophisticated energy consumer in the country. We have tried to use that - the main purpose of that report was to help inform policy what we have particularly looked at - and federal and state policy. So 12-year-olds weren't the market for that one, but we appreciate there might need to be a different marketing product for that. The main purpose of that was we have, as the very largest energy consumers in the country - in every state we operate in, we're the largest energy consumers and largest in the NEM. Often people looked at some of the challenges that we were bringing to the table and sort of said, 'Well, that's your fault because you are the biggest energy consumer'. In fact, it's not a question that it was our fault because

we're the biggest consumer. The issue is actually that we were the canary in the coal mine who could see some of these challenges before other major industrials, and even before households. So, as a household now, an increasing share of your bill is distribution costs, and a decreasing share is wholesale prices. As wholesale prices moderate and go down, if we don't fix transmission and distribution networks, then your household price will not go down.

The main purpose of that report was to say, 'How do we quantify what we offer today?' But also use it as an insight in a window into the future, so as the canary in the coal mine, we can say what needs to be fixed in the next 10 years, so that maybe we don't need to be sitting here having these challenging discussions in 10 years' time because the energy transition will have actually helped make improvements to the energy system that impacts us all.

Ms FINLAY - I think that is one of my biggest worries, and your communications committee, I would welcome this. In two years', time we're going to be in exactly the same situation in Tasmania with Bell Bay re-entering negotiations into the five-year deal. Nyrstar down here, different, they're going to be entering this.

I think the simplistic narrative is always here's a big bad company with the gun to the head of the Tasmanian Treasury trying to get everything for nothing. That's sort of the negative narrative to it, so how do we prepare the community for the next conversation that is going to happen not very far down the line before that transition has resolved in 10 years' time? We're going to hit that again beforehand. How do we help public understanding of the role of these negotiations and the benefits to Tasmania?

Ms JOHNSON - Obviously it's a national association. I can take that to my communications committee and I will do. Whether it's a Tasmania-specific or sort of a national thing, how we do and how we articulate what smelters do, and it may need to be tailored slightly as to your point site by site, but I will take that feedback on board and take it back to our very small but agile team and see what we can do with it.

CHAIR - If I could ask one follow up to that in some respects. Focusing on Bell Bay Aluminium for the moment specifically, does Marinus Link make competitively priced electricity easier or harder to obtain, in your view?

Ms JOHNSON - Again, noting I am not the person doing the commercial negotiations, I would say you probably don't know until you build it as to whether or not it will ultimately make the difference. I say that in the context that there are so many other changes happening in the NEM on the mainland that what the system Marinus is ultimately going to connect to is not 100 per cent clear at this point.

Equally, transmission, of which Marinus is a type, is one of the things we're going to need a lot more of. How do we strategically as a country use the collective variable resources but also the collective firming energy that we have of which Hydro Tasmania is a very important part? Transmission has never been more important than it has in the decentralised grid that we are moving towards. I think Marinus Link is a good thing because I think most transmission is a good thing because we're going to need it. Does it make it hard or easier for Bell Bay Aluminium? I don't know is the honest answer. We don't look at the economics of individual assets. That's down to their owners to look at.

CHAIR - That is probably why we only have a five-year deal.

Ms OGILVIE - Really interesting. Thank you so much for sharing all of that with us and particularly I'm interested in the history of why we have it, which is really good to know.

I am wondering whether, as the peak organisation, you could shed some light on the sector and perhaps even Bell Bay Aluminium's, if you know it, approach to AI use itself and productivity improvements that perhaps we're seeing with that.

Ms JOHNSON - I can speak to the sector generally, not specifically to Bell Bay other than I'm sure that they are adopting in a similar way to what other smelters are. We are very resource intensive, so we employ a lot of people at a site like Bell Bay, and we want to keep employing a lot of people, but we want to keep employing people doing the best-quality work that we can. We are also an industry that was a very early adopter of technology. So, we use very advanced control systems to control the amount of electricity we use and to control all of those things. Where we are seeing the use of AI is particularly in - which is the best use of it obviously - things like repetitive tasks. Where humans tend to make mistakes, when they do repetitive tasks, where can we replace those? Things like delivering things by crane, where can we use programmable technologies to actually be able to do that?

We also see a lot of safety applications for it. Again, one of my members, not Bell Bay, but I know that the examples are in parallel. So, how do we - where we have a near miss at a site and we realise that, in fact, it could have been a terrible incident, but it wasn't, and perhaps it was to do with a very specific piece of equipment or a type of, where we've moved a piece of grating from a floor. How do we go through and analyse every single procedure that we have to look for where those things are? How do we use AI to actually do that? That task manually might have taken four years, and we would have had people exposed to that risk across not just that business, but the industry. How do we go through and at that incredible level actually learn from those near misses and make everybody safer the whole time?

So, I would say that those are the main areas that we're looking at - is how do we replace manual tasks, and how do we make things safer, more efficient, faster - would be the main uses of AI that we're seeing so far - noting that there's, as all of us are facing, a lot more to come.

CHAIR - This is just a bit of a kite-flying exercise - this one for you. But if the Tasmanian government could make three policy changes, or even just one or two, to secure competitively priced electricity for major industrials, but also protect households and smaller businesses, what changes do you think they should make, or could make?

Ms JOHNSON - So some of them are changes that need to be made at a national policy level, given the integration of the systems, but some of them are integrated between, given the way in which our national electricity laws between state and federal. So, one is value those system-level benefits. So first of all, we know that different users in the grid operate very differently and offer a range of other things. We actually need to think, really, what is that full-system benefit and understand that. Noting that that is a dynamic benefit over time, that where we can offer a different range of services, but also the grids need a different range of services. But I think valuing that; if that was actually valued in a way in which it could be monetised by companies, then maybe they don't need to come, or the size of what they need to come and ask governments for would be different, because there would actually be a set of market rules that reflected that full range of system-level benefits that are offered by major industrials.

CHAIR - Is there any work going on nationally, like AEMC would be doing some of that probably, if they are?

Ms JOHNSON - Yes, so look, there have been trials to do that. There's a thing called the wholesale, I'm going to get the acronym wrong, but anyway, there is a way in which you can be - it is so complex and it doesn't recognise the fact that as energy consumers, our main job is making aluminium, and how we participate in the electricity market is not in the same way as a generator does.

The trouble with most of our electricity laws is they've been written in a way that treats us like a reverse generator and, in fact, that's not our job. Our job is making aluminium, and participating in the electricity market is something we do where it has benefits to us.

What I would say is, my companies like to make money. That's what companies do. They make money and deliver value to their shareholders. So, if you give us a clear articulated set of rules that work for us, we will work out how to maximise the value. To date that has not happened. There's been attempts through the AEMC and various other planning things, but they haven't quite hit them up. They are still ongoing following the Nelson review, which was the federal review of the NEM. There are still changes that we are in discussion with the governments around now.

Another big one around what else couldn't governments do is transmission and grid access. So, as discussed with Marinus Link - and to the comment before - I don't actually - I think that uncertainty is a challenge in terms of transmission but how do you actually - how does Tasmania, and the whole of Australia, actually plan better for its transmission and grid access? We haven't fundamentally changed the rules around investment and pricing for grid access since the NEM was set up, which was more than 20 years ago now. We've started looking at the reforms that are needed for generation, but we haven't really started looking at the reforms fully for transmission. It's difficult and messy because every state is different. To the question earlier, some states own their own transmission infrastructure, some states don't. But, if we don't fundamentally undertake those reforms, then the price that you pay for electricity will go up at every level - whether that's households, whether that's small business, whether that's large business - because the cost of getting electrons to you won't change; in fact, it will increase over time. And we need to think about how we use new large loads that are coming into our system. For example, data centres; how do we actually use those to help support that transmission change that is needed in Australia? Where are they positioned, where makes sense for those new large loads to go to actually make sure that we have the right tariff structures in place for more price-sensitive loads like households and major industrials?

CHAIR - If you just flip it a bit and say, perhaps, what Tasmania shouldn't do in some of this and thinking about that. But, should there be a policy response? What shouldn't they do in a policy response or what should they - whichever way you want to respond. What policy response to emerging large-scale load, as you've just been talking about - the data centres et cetera - presents the greatest risk to Tasmania's major industrials' electricity prices and energy security? From your perspective - you've been in it a long time, or the industry has - so, what shouldn't we do in Tasmania to make it any worse?

Ms JOHNSON - I think you just want to think really carefully. So, data centres are currently fairly mobile. So, unlike a smelter that is, it is where it is, the existing smelter, data centres are relatively mobile, they are more flexible in their scale - so they're big, but you can

have varying scales of them - and also, they are less price sensitive at the moment than major industrials in terms of their ability to pay the price. So, I think you want to think really strategically. We are definitely not saying, and our report does not say, you know, 'Smelters good, data centres bad.' They are different.

What you actually want to do is think about where these new sources of demand - and in the future it might be something else that we all haven't thought of yet that's not data centres - but, actually where do you put these? Where are there points in the grid that actually need more demand to help provide support and help pay, perhaps, the new transmission infrastructure that's going in? Where are the right places to put data centres? Rather than having the point of view that's often reflected through the media of: this is bad, this is good; you know, it tends to be very polarising on good and bad. They're not good and bad, they're just different, and how do we actually use that point of difference to our national strategic advantage in the same way we do for smelters?

CHAIR - We've heard from Firmus, who are proposing the three data centres in Tasmania, that they would bring online new variable renewable energy on island. The narrative's changed a little bit around that. But, should the Tasmanian government be taking a much more comprehensive view of this? Because, if we're going to put, say they do either construct it themselves - unlikely - or engage with those other private entities who might, isn't location critical here, too, in terms of not having to build a whole new lot of transmission?

Ms JOHNSON - Absolutely, so the less transmission you can build the better, but we will need some new transmission. So, how can those locations of both the generation and the load be best matched to maximise the system-level benefit for all users, not just data centres?

Ms FINLAY - Can I just ask a clarifying question there - is this an existing body of work that you've - are you suggesting this is a body of work or is something that's happening at the moment - where should they be located.

Ms JOHNSON - This is one of the findings of our report, which found that this is something that governments need to do. In terms of where should they be located, we haven't got to the detail. As the Aluminium Council, we're not going to tell governments where they should or shouldn't do it, but we think at the moment, transmission and grid access is something which is not being adequately tackled by federal or state policymakers.

Ms FINLAY - Okay, thank you.

CHAIR - I can't recall if you answered the question that Janie put to you - and maybe this is part of the same story of using analogies that we can all appreciate - but have you undertaken a cost-benefit analysis comparison of retaining Bell Bay against the counterfact of its closure? Do we know what that would look like in terms of our energy structure? Then, obviously, there's the employment and all the downstream matters.

Ms JOHNSON - For Bell Bay specifically, no, we have not, because we're a national association; we don't look at the impacts of individual facilities - that would be up to Bell Bay and Rio Tinto whether or not they've done that. Certainly, in terms of how you can run the Australian electricity system without 12 per cent of the load, it would be very challenging, and that is something that we have looked at, as well as what obviously what our socio-economic contribution is to the nation. And the more unquantifiable parts around - going back to why it's

so important that we had Bell Bay start in the beginning - if, as a country, you want to make aluminium, that is very important for your national sovereignty and security, but also some of our key trading partners don't have the capability to make aluminium. So, how are we also ensuring that some of our key allies are provided with that aluminium in a fairly uncertain geopolitical world?

Ms FINLAY - I wonder whether there's a potato chip analogy of what happens if 12 per cent of the load disappears, because it's catastrophic to the network, right? That would be a useful comms piece of work.

Ms JOHNSON - Yes, and we're always trying to work out how to best communicate these things to a range of stakeholders. It's not easy. What I would also say is how the NEM would've survived with that loss of load has varied over time and will continue to vary over time, and that makes the communications task even more challenging.

CHAIR - Well, thanks very much, Margie, for persisting with us with those few hiccups along the way. If you have something that your comms team comes up with, the Committee would be really happy to receive that at a later time, but we do appreciate your contribution and the extensive work that's obviously being done in this space, and for participating in our inquiry.

Ms JOHNSON - Thank you. It probably won't be for some time that we get to that, just simply through resource constraints, but it will definitely go on the to-do list. Thank you, and thank you for your time.

CHAIR - Thank you very much.

The witness withdrew.

The Committee suspended from 12.02 p.m. to 12.15 p.m.

Aurora Energy

CHAIR - Thank you, Nigel and your team, for appearing before the Energy Matters Committee again. We appreciate you have been before. We have narrowed our focus a bit, as you'd be aware, and we do appreciate the updated submission you've provided, and also the copy that you provided to the other committee looking at AI data centres. Our remit is a bit broader than the data centres, obviously. It's around energy for major industrials, et cetera.

This is a public hearing and we know that you have made a request to provide some evidence in camera, and the Committee has already resolved to do so. When we get to the point where you'd like to provide that in-camera evidence, make that request and the Committee will then change the process and stop the broadcast, et cetera, and if there's anyone else in the room, we'll ask them to leave at that point.

Everything you say is covered by parliamentary privilege. That may not extend beyond the committee hearing. The public session will be broadcast and the whole session will be transcribed, but there will be separate *Hansards* kept of both the public and the private session for that, and we'll only publish the public session, without consent to do otherwise.

Mr CLARK - That's fine.

CHAIR - Do you have any questions before we commence?

Mr CLARK - No, that's fine.

CHAIR - If not, I'll ask you to take the statutory declaration just in front of you and ask your other members of the team to do so as well. Then if you could introduce your team, their titles, and provide some opening comments to support your submission. Thank you.

Mr NIGEL JULIAN CLARK, CHIEF EXECUTIVE OFFICER, **Mr OLIVER COUSLAND**, COMPANY SECRETARY/GENERAL COUNSEL, AND **Ms ELISABETH FLETT**, HEAD OF LEGAL, AURORA ENERGY, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - Thank you. Over to you Nigel.

Mr CLARK - I will introduce the team: Nigel Clark, CEO at Aurora. I've been there about four years now. Oli Cousland -

Mr COUSLAND - General Counsel/Company Secretary.

Ms FLETT - Elizabeth Flett, Head of Legal.

CHAIR - Thank you. Do you want to speak to your submission further, Nigel?

Mr CLARK - No, we're just happy to take the questions. I think it was pretty self-explanatory. Happy to build on last time. We obviously covered a lot of ground on MIs and broader supply, so happy to answer whatever we can today.

CHAIR - Okay. In your submission you're talking about risk mitigation measures:

> Aurora Energy has a highly rigorous board-approved credit risk assessment process. This process is followed and applied consistently to any contractual arrangements involving a large energy user. Where necessary, Aurora may seek a credit security arrangement to ensure that the risks associated with retailing large loads and the relevant payment terms are appropriately managed.

Now, we know that you have the three-year contact with Firmus. We know that Firmus was intending to float and have an IPO out there twice now, and neither have succeeded. So, whether it's on Firmus or anybody else, how do you ensure - I'm not saying that they haven't got money right now; I'm just saying they were expecting to raise a whole heap more. How do you ensure that they have a good credit rating that you can rely on?

Mr CLARK - For every major industrial or C&I customer, we do a credit assessment so that we'll look at payment history, it'll look at their latest financial positions, publicly available reports and credit security reports we can get from credit agencies. Inevitably, if we seek credit support, as we have done with Firmus, they have submitted a bank guarantee to us for their opening position of energy usage in the three-year contract, and then that will increase as their energy usage ramps up. So, we would have basically, when we take credit support, cover a worst-case scenario, which is circa 90 days where, effectively, what you're dealing with is the failure of a business to pay a bill, and then work through procedures to disconnect them. That process with Firmus is no different to any others and we've received the first bank guarantee from them supporting their load.

CHAIR - The publicly available information you refer to, their prospectus, I don't imagine, was out at that point. It certainly took a while to see the light of day.

Mr CLARK - No, the prospectus wouldn't have been a factor back then. We would look at, where we can, sourcing financial statements. Sometimes it's publicly available if it's a publicly listed company. At times, if it's a private company, we'll try and seek financial statements from them as well. It's basically a variety of sources of information that you would seek to assess the creditworthiness. Obviously some companies are very creditworthy, so we don't seek any financial support at all.

Mr COUSLAND - In terms of the ongoing - I think your question was if things change?

CHAIR - Well, it was initially, but also if things change.

Mr COUSLAND - So, initially, and then down the track if we have provisions in the contract to review the security arrangements based on deterioration in financial or standing of the company that we're contracting with. We do have ongoing protections to review that position down the track.

Mr CLARK - That could go both ways, I should point out. If a company improves, then we can lessen credit support as well.

CHAIR - In terms of that, are there particular points in the three-year contract where that occurs? Or are there things that would trigger that? Is there a standard, like, every six months or every 12 months? I mean, three years is not a long time.

Mr CLARK - No. For major customers, we would, I would argue, have a rolling perspective where we're reviewing the company's financial position. And if we were to form a view that it either improved or deteriorated, then we have the ability to take action with the customer.

CHAIR - With the most recent events, where the IPO was unsuccessful, has that triggered a review?

Mr CLARK - No, we have a rock-solid bank guarantee that will cover, basically, a chunk of the three-year contract.

Ms FINLAY - Ninety days in three years, from what you said earlier.

Mr CLARK - It's a 90-day logic, yes, that we apply. So, it has not triggered a review on our part. We have a rock-solid bank guarantee, and that will devalue or increase as they increase the load. It hasn't triggered a review on our part, no.

CHAIR - What would it take, then, to trigger a review? I don't know if you watched ABC News last night. Things aren't look so good in the tech sector. There's been a lot of falls, some quite significant - CoreWeave. I don't know much about them, but.

Mr CLARK - Things that would trigger a review would be failing to make a payment, which has not been the experience with Firmus; failure for a company to pay its debts. None of those events have occurred with Firmus. All that's simply happened is they haven't got a float away. But as far as their underlyings with us, they have not failed in any payments. And as I said, we have a bank guarantee so we have a rock-solid security support.

Ms FINLAY - Can I just ask two questions about that? In terms of that rock-solid guarantee, you mentioned 90 days earlier and then you said that that was how it's considered. But you don't have 90 days of cover. What time period of cover do you have over the three years?

Mr CLARK - We have 90 days of cover.

Ms FINLAY - That's all you have? It's 90 days.

Mr CLARK - That's what our logic works from, where you work backwards as to the point of disconnection for a customer.

Ms FINLAY - What happens in the unfortunate circumstance where the project at St Leonards doesn't complete and they don't enter into the contract, so their current research site. I know you've got an agreement there, and then for this expansion. What happens if that doesn't actually get to commissioning with the agreement? What are the triggers in the agreement?

Mr CLARK - I think as we outlined last time, there's a contract in place for three years for that one site. A highly unlikely situation given where the build's at and our observations of

the site. But if, for whatever reason, it didn't start, then obviously, as we outlined last time to the Committee, we would not be supplying energy and we would forgo that margin.

Ms FINLAY - Are there costs to the business for not fulfilling that contract?

CHAIR - Penalties?

Ms FINLAY - Penalties?

Mr CLARK - No. Not on that three-year deal, no.

Ms FINLAY - There are no penalties in the agreement?

Mr CLARK - No.

Mr BAYLEY - When does the energy start to flow?

Mr CLARK - We believe they are on track for Q1, 2027.

Mr BAYLEY - The agreement was signed in March 2026, a three-year deal for 104 megawatts and a couple of weeks later - we went through this last time, you put out a joint media release with Firmus to announce it, after Firmus had been on ABC Radio to effectively announce it. Pretty much subsequently, Firmus went on its global roadshow to start raising the capital that it needs to build this and other data centres. Why was the deal signed when it was, and why for only three years?

Mr CLARK - Once again I would refer to our commentary last time. The deal was signed then because they came and asked for an energy supply deal. We sought the supply of energy, we were able to do an agreement to source that energy from Hydro Tasmania. So, the deal was done. It was a three-year deal at their request because, as we outlined last time, they sought pricing for five and three. They chose three, so the deal was executed.

Mr BAYLEY - Was it signed so that Firmus could go on its roadshow with a deal in its back pocket for energy for this facility?

Mr CLARK - No, we would have absolutely no insight as to what Firmus are planning with roadshows, IPOs or anything else. They came to us for a supply deal, a retail contract, which is reasonable for any industrial customer to do. We sourced the energy. As to whether we could source the energy, Hydro Tasmania were able to facilitate that supply, and a retail agreement was struck.

Mr BAYLEY - What role did Paul Grzinic play in arranging the power deal? He was a long-term Aurora employee, for 21 years, and as of June has worked for Firmus, and we'll be hearing from him later. What role did he have in arranging that power deal?

Mr CLARK - He was one of the core team that bring together such a deal. So, it involves our wholesale team, it involves our legal team, it involves myself. It's a variety of people that come together to agree on a deal of that size.

Mr BAYLEY - And Paul was involved?

Mr CLARK - Yes, he was.

Mr BAYLEY - Who signs off on the deal, ultimately? You as CEO, or the board?

Mr CLARK - No. Myself, up to certain limits, and then if there's certain credit questions or whatever, it may go to the board for approval. But primarily -

Mr BAYLEY - And in this case, with this agreement?

Mr CLARK - Yeah, from memory we took the credit position that we were seeking from Firmus to the board, and so that was that was taken through to them.

Mr BAYLEY - Ahead of the March signing, obviously?

Mr CLARK - Yeah. I mean, before we can obviously execute a contract, we would clear that with the board.

Mr BAYLEY - What sort of thresholds for declaring a conflict of interest between the Aurora board and a customer with a deal such as Firmus, what's the threshold for a conflict of interest there? Even if, for example, there were business dealings or some kind of interactions in the past between Aurora board members and others involved in this agreement. Would you expect them to be declared?

Mr CLARK - Absolutely. We have policies that cover conflicts of interest and the like. This is no different.

Mr BAYLEY - Was any declared in this context and in relation to this agreement?

Mr CLARK - No, there wasn't. There was no conflict of interest.

Mr BAYLEY - Nothing was declared by anybody?

Mr CLARK - No.

CHAIR - No related party disclosures?

Mr CLARK - No.

Mr BAYLEY - So, if someone on the Aurora board has previous business dealings with or sat on other boards with Nick Curtis, who was the founding chairman of Firmus, would Aurora consider that to be a conflict of interest that needs declaring?

Mr COUSLAND - I don't think that would satisfy the test of being a material personal interest in a matter where you've had a previous working relationship with someone that's not current. We wouldn't consider that material.

Ms OGILVIE - May I ask just on the same topic, have you published somewhere where we could look at how you assess conflicts of interest? Is there a policy that's available?

Mr COUSLAND - We do have a policy. I just need to double-check if it's externally faced or internal.

CHAIR - Would you be able to provide a copy to the Committee even if it is externally facing. That way we know we've got the current one.

Ms FINLAY - Last time you were before the Committee, I asked some questions around how far progressed you are with inquiries on other energy deals for large-load data centres or AI infrastructure. Are you progressed with any further agreements with Firmus and/or any other interested parties in Tasmania around data centres and AI infrastructure?

Mr CLARK - To the best of my knowledge, we have not had any discussions with any other proponents of data centres in Tasmania. As far as Firmus, we're not in negotiations, but we've certainly had occasional ongoing discussions with them, trying to keep abreast of what they're seeking to do in Tasmania. But there's no active negotiations at the moment.

Ms FINLAY - Would it be of interest to Aurora to enter into similar deals for the other sites that Firmus has in Tasmania?

Mr CLARK - Obviously, for the benefit of Tasmania, we would seek to be the retail fronting face end for any further Firmus expansions in the state. If we can benefit Aurora, which ultimately benefits the state, that's what we'll seek to do.

Ms FINLAY - There's been a clear statement of expectations around new generation being provided for new load with AI infrastructure. This agreement hasn't required new generation to execute this agreement. Have you had any instructions requiring that any future contracts or agreements are subject to new generation arrangements?

Mr CLARK - No, we've had no instructions of any form.

Ms FINLAY - So, you'd be free to enter into an agreement with Firmus, or another entity with a power agreement, without consideration for where the generation is situated, or new generation is built?

Mr CLARK - Look, we're highly aware of the statement of intent of the state government in regards to data centres. And then you've got the federal position being resolved as well at the moment. Obviously, we would be mindful of what our obligations are under those arrangements.

Ms FINLAY - I don't think any of those come with an obligation though, do they? There's no mandatory requirements. My question is, are you free to enter into energy agreements with large data centre or AI infrastructure proponents for an energy contract at this point in time?

Mr CLARK - We can enter into retail service agreements if we can source energy and bring that arrangement together with the data centre. But with any large industrial - but obviously we would be mindful that, as would our board, of if the statement of intent from the state government is for such loads to be backed with new generation, and we would be very mindful of what our obligations are under that process.

Ms FINLAY - What's the current status of conversations between yourself and the board about ensuring that that's considered in any future contracts?

Mr CLARK - As I said, we are in no active negotiations at the moment, so there's been no discussions with the board in regards to that.

Ms FINLAY - But between yourself and the board, preparing a policy position that would say, if you are approached and you're going down the process of entering into a contract, what level of requirement, in the conversations between yourself and the board, is there that you would consider that the generation is new and on-island?

Mr CLARK - I think it really comes back to that same question about what the supply source is in the first instance. We aren't a generator, as you know. We are just simply a retailer, we're limited to being only a retailer. So, many of the things you're alluding to with generation is not our bailiwick. We can't participate in generation in the state.

Ms FINLAY - I'm unclear then, when your answer is 'It's not my bailiwick', or 'We'd be mindful to the expectations'. I suppose what I'm trying to get clearly here is, are you free to enter into an agreement that has no consideration to generation? Or is there a board conversation that you're having, or an internal conversation that you're having about any approach that you have to enter into a new contract, that you will consider that the new generation is new to current requirements and built on-island?

Mr CLARK - We are not subject to anything that would prevent us entering into a retail agreement if we can source energy.

CHAIR - Even if it's from the mainland, a mainland generator?

Mr CLARK - It could be that. I mean, if you fast forward five years and let's say you've got a Marinus Link in play; we could source generation from a Victorian generator. We could buy SRAs and we could supply a Tasmanian load onshore. The depth of supply liquidity is going to grow, as a result of Marinus, for instance. So yeah, it's not just a Tasmanian relationship.

Ms FINLAY - Have you asked the Energy Minister or has the Energy Minister had conversations with you about his expectations on this? Or have you asked him for clarification around his expectations of you, given that the state has delivered these draft expectations, or the expectations that -

Mr CLARK - No, we've not had any specific discussions with the minister on this, no.

Ms FINLAY - No, you haven't sought clarification, or they haven't opened up a conversation with you?

Mr CLARK - No, we haven't sought clarification.

Ms FINLAY - That would seem weird, do you think, that you've got an existing contract - and this is not a reflection on you. I think it is weird that there's a statewide conversation where the government is asking Tasmanians to trust them about what expectations are being set for AI infrastructure, that there is a current contract in place for an AI

infrastructure, and you're free to enter into new contracts, and no one's having a conversation about it.

Mr CLARK - Well, as I said, we're not in any active negotiations at the moment for either expanded Firmus load or any other new data centres, so it hasn't brought on any discussions with the minister.

Ms FINLAY - Would you commit to the Committee today that, in the event that you are approached to enter into a new agreement, that you would start that conversation and seek clarification from the Energy minister about your expectations?

Mr CLARK - I'm not sure, on the committal process that we'd come into today. I mean, obviously, we are a retailer. We've got a clear statement of corporate intent. We would operate within the guidelines and the boundaries that we operate within. I think that's all we can commit to. We have a pretty clear mandate as to what we're here to do for the state, and that is to try and create as lower energy costs as we can for the state, to contribute strong dividend flows and, in our case, community vulnerable customer support. So, nothing in that realm would change.

Ms FINLAY - Are you required to provide information to the Energy Minister or to the Treasurer about your intention to enter into a contract with a large-load database or AI infrastructure proponent?

Mr CLARK - No, I don't think we're under any obligation to have to consult with the Minister.

Ms FINLAY - You could completely and independently enter into agreements without the Minister's knowledge and without the Government's knowledge in terms of timing of having those conversations?

Mr CLARK - Primarily, as a retailer, that's what happens. That's our business model.

Mr BAYLEY - Does the notion of every contract for a data centre bringing on additional renewable energy generation and that being delivered through the power purchase agreements, does that present challenges to you? Assuming this is confirmed in a set of expectations from this government, how would you give effect to that?

Mr CLARK - I think as we outlined last time, because of our ability of only being a retailer, we don't have generation and we don't generally enter into long-term power purchase agreements. Any supply agreements for a data centre will typically either come from Hydro Tasmania or some other proponent. We are not in a position to take on those liabilities or power purchase agreements, or generation. As I said, it's not in our mandate to be able to enter into a generation type or build generation aspects.

Mr BAYLEY - So, Aurora, as the provider of the energy, or the retailer, you'd struggle to be able to give effect to that expectation? Is that what you're saying?

Mr CLARK - The expectation of a data centre proponent and the generation source, that would be between that proponent and the relevant government authorities. It's not us.

Mr BAYLEY - Yes, but I'm asking you. You are a relevant government authority, a GBE. You have a contract. You're the only one with a contract with a data centre at the moment, so I guess it's a relevant question. If that contract was to be extended or there were other contracts put in place, does delivering on the government's expectations present you challenges?

Mr CLARK - At the time that contract was put in place, none of those obligations or statements existed. It predates that.

Mr BAYLEY - I appreciate that. My question is you're not in a position to be able to deliver on those expectations if a contract to supply power was delivered through Aurora? That's what I'm hearing you say.

Mr CLARK - I would come back to the point again that we are simply the conduit between the supply and the end customer as a retailer. That would be the primary role. We do not get into the dictating of where the energy source comes from. Ours is to source that energy supply and that, obviously, has to be developed by the proponent and generators. If they can't source the energy then, obviously, they're not going to progress through retail.

Mr BAYLEY - If you can't deliver on that expectation as a retailer, would you agree that they should be firmed up somehow, whether it's in legislation or some other format -

CHAIR – In the Ministerial statement of expectations.

Mr BAYLEY - A statement of expectations, whatever. But should it be firmed up so that it can be delivered, the expectations actually can be met?

Mr CLARK - I think that's driving into, I suppose, areas of State Growth and broader policy, and that's not our domain. At the end of the day, if a statement, if a government has a statement of intent of marrying up new generation with that load, that's up to them to look through what would be the appropriate instruments or policies that they would need to bring that into fruition. That's not an Aurora call.

Mr BAYLEY - It sounds like it would make it easier for Aurora if it was really clear though, and the expectations were actually mandated and legislated, or in some other way enforceable?

Mr CLARK - Not necessarily, because I come back to the point that, as a retailer, it's the sourcing of the energy and meeting those obligations to the retailer as being the front for that site. The mechanics of the generation being matched to the new demand, that's really for other agencies to work through, not Aurora.

CHAIR - Can I just perhaps clarify here. Am I hearing, Nigel, that, if another AI data centre load was seeking approval in the state, it would be a matter for that approval process that they be required, for example, to bring on an amount of new renewable energy and that would have to occur before they could enter into a power purchase agreement with anybody - I understand what you're saying, the position you're in. I get that. But we're hearing mixed messages here. If you're in a position where you're looking to enter into a new purchase agreement or retail services agreement without any guidance, how are you meeting the expectations of a government who may have a policy on this?

Mr COUSLAND - The minister has written to us with the, you know, encouraging us to consider the state, the expectations as we -

Ms FINLAY - So, although I asked have you met with the minister, you have had correspondence from the minister, and this has been discussed with the minister? Are you now telling me that that's correct?

Mr CLARK - No, I haven't had any discussions with the minister.

CHAIR - Can you provide a copy of the correspondence that you received from the minister?

Mr COUSLAND - Yeah.

Ms FINLAY - You can table that?

Mr CLARK - We'll take it.

Ms OGILVIE - Chair, still seeking the call.

CHAIR - Sorry?

Ms OGILVIE - Still seeking the call.

Ms FINLAY - I'm interested in the reference to this letter.

CHAIR - I will go to Madeleine in a minute and Casey after Madeleine. Can I just clarify at what point of the process was the retail services agreement entered into with Firmus for the St Leonards site? At what stage of that development did that occur?

Mr CLARK - From recollection, it was back in March, I think, that we entered into that agreement.

CHAIR - So, they had a completed DA, they were starting construction, all those things, before they came seeking a retail services agreement?

Mr CLARK - We would have to check detail as to whether they'd started construction at that site. I'm not sure. I mean, once again, to be honest, it's irrelevant to a degree in that the retail service agreement picks up that you are going to supply energy from a contractual date forward, so.

CHAIR - The reason I ask, I know they have approvals at various stages for two other centres in Tasmania, so I'm just trying to understand when you would reasonably expect them to be looking to enter into retail services agreements for their supply of energy.

Mr CLARK - Well, I think first of all the premise of will it be another retail service agreement is questionable because it could potentially take various contract forms. So, I wouldn't make the assumption that another RSA-type arrangement would cover other sites. I think it, as Firmus has publicly said they were intent on building new generation in the state

to support their expansion plans, I don't believe that it would be an RSA-type agreement that would carry forward on other sites.

Ms FINLAY - Can we go back to this letter?

CHAIR - I'll go to Madeleine first.

Ms OGILVIE - Yes, sorry, I have been waiting a while.

Ms FINLAY - A clarifying question cut you off from what you were going to say.

Ms OGILVIE - I'm interested in the contracting process. It's great to have you here. I understand but I don't come at it from the energy sector, so please excuse me if I have some '101' questions. I do come from the telco sector, which is structured similarly: wholesale, retail, et cetera. In your contracting process, I was pleased to hear you talk about the due diligence you do with these major new users, which is good. You've done all the, I think you said corporate, the checks on their finances, et cetera, and there's been no defaults or bill missed payments or any of that, so that's good. In your contract, in a standard-form contract, what would be the dispute resolution processes that you go through should there be a problem? I haven't seen one but I'm sure it's a standard form. Are there rights to terminate or do you have to have adjudication? How does it work?

Ms FLETT - It's a fairly standard commercial position around dispute resolution and rights to terminate for default, et cetera, so nothing particularly stand-out in that regard that's sector-specific.

Ms OGILVIE - So, one of the things that I wonder about, we had some evidence this morning, is that, obviously, we don't want to be switching businesses off. I think this is probably an energy sector question. It's almost like trying to switch water off. You would have to deal with that with some sensitivity, no doubt. So, how do you normally manage things if something did go awry?

Mr CLARK - The legal contract gives us various rights through to cancellation and disconnection, so not dissimilar. We've obviously had some of these challenges in recent years with the likes of Liberty Bell Bay and others, so it is a sensitive issue, absolutely. We would have protocols that we have to work through. There're legal obligations that we have to meet before we could ever disconnect the site. And that's working on the basis that you can actually disconnect the site. Some sites, from safety reasons point of views, you can't just disconnect. Yes, these are the things that, as an electricity retailer, that you are dealing with constantly. Disconnection is obviously a last resort and never nice to get to.

Ms OGILVIE - Do you build contingency into your pricing for these issues?

Mr CLARK - That's effectively the credit support. That is your contingency that you basically build in a period of time that if things do turn for the worse, that you have some coverage until the point that you can disconnect. That's the whole basis of the credit support that's really important.

Mr HISCUTT - It was about 120-megawatt agreement at St Leonards? Was that about right?

Mr CLARK - Somewhere around there.

Mr HISCUTT - Is that something you just go to Hydro and say, 'Can we have this?' - 'Yes', or is that a difficult process? I guess the question is, if a similar amount was requested by any other new major industrial that might want to come to Tasmania, would you be able to find that again? What was the process to actually -

Mr CLARK - No, I think as we outlined last time, any sort of entity can come to us and request that we try and provide supply and pricing. We can only do that if we can source it. So, in the case of, could we do it again?, I have absolutely no idea. It would depend on whether Hydro or any other generator was willing to step up and provide us that volume and price.

Mr HISCUTT - And that is simply going out to your market to say, 'Can anyone provide this?'.

Mr CLARK - Correct.

Mr HISCUTT - They say yes or no; you go back to your customer and say, 'Yes, we can' or 'can't', depending on the question?

Mr CLARK - If it's a volume we can't source, then you don't get past step one.

Ms FINLAY - How broadly can you source energy for contracts like that?

Mr CLARK - Up to now, in the current environment, it's historically we source from within Tasmania and within Tasmania only because we have not had an inter-regional capability. And, to be honest, to this point it's still somewhat limited with the Basslink volume. So, fundamentally, it's within Tasmania that we can source supply.

Ms FINLAY - Okay, thank you. I just want to go back. The purpose of asking the question about communications between yourself and the minister was just to understand how connected those conversations are between the expectations of the minister and the operations of Aurora. Could I just ask that again? Has there been communication, written, meeting or any other way, between yourself and the minister around expectations for AI infrastructure?

Mr CLARK - Yes, my apologies. There was a letter in June. I can't see any reason why we wouldn't give that to the Committee. It was at a point in time where, basically, the government are flagging that they are going to create a statement of expectations and also the federal work going on with data centres. So, I don't think there's anything controversial in that. But I didn't specifically have any discussions with the minister following that letter.

Ms FINLAY - It's just for information? It doesn't provide any sort of guidance around how you might enter into agreements? It wasn't the nature of the letter?

Mr CLARK - No. Just reading it now. As I said, I apologise that I had forgotten about this. It's really giving us a heads-up that they were going to create a statement of expectations, they were looking at that, and also the work being done at a national level.

CHAIR - Commitment to start thinking.

Ms FINLAY - To the best of your memories, that's been the only engagement, proactive engagement from the minister or from you to the minister around this issue?

Mr CLARK - Yes, I can't think of any other communications. Giles, can you think of anything else? Giles was just saying the letter coming was mentioned at post board because we made detailed discussions around this.

Mr BAYLEY - You mentioned that power to the St Leonards site under the 104-megawatt contract would start to flow, the expectation is quarter 1, 2027. You also mentioned that's what you hope. Is that set in the contract as to when it starts to get delivered or just when they're ready?

Mr CLARK - No. I mean, the contract had a start date, but there was always the understanding that, like any greenfield site, there can be a delay.

Mr BAYLEY - You mentioned also that they hadn't missed any payments yet. Presumably they haven't made any payments under this contract?

Mr CLARK - No, but, as we outlined last time, we've had about a five-year relationship with them on their other thing -

Mr BAYLEY - With their existing facility?

Mr CLARK - So, we've never had any payment history problems.

Mr BAYLEY - Your submission to us identifies that the capacity to pay is one of the most important factors that Aurora looks at. And your submission to the AI inquiry highlighted, and you mentioned it before, that Aurora has got a board-approved, highly rigorous credit risk assessment process. Are you able to provide the Committee with a copy of that process? I know you won't be able to provide us one that you did for Firmus, but just the framework?

Mr COUSLAND - We've got a policy document, credit risk policy, that would be commercially sensitive. We might -

CHAIR - Could you review it?

Mr COUSLAND - have a look at it and see.

CHAIR - We'll write to you with that and the other things.

Mr CLARK - Yes, there may just be some sensitivity on that publicly.

CHAIR - Well, we can receive things in camera. I know you do want to give some evidence in camera. Is it a pressing one now or -

Ms OGILVIE - Or we can do it after.

CHAIR - If we get time.

Ms OGILVIE - A general one, on AI.

Mr CLARK - We haven't got anything specific in camera unless you have there.

CHAIR - Oh, you haven't? Well, we'll keep going, if that's all right.

Mr CLARK - Not at this point. We've been happy to answer up to this point.

Mr BAYLEY - So, you're going to review it and take that on notice?

Mr CLARK - Yes, we will

Mr BAYLEY - Thank you.

Ms OGILVIE - I'm interested, sort of taking on the other side of the spectrum, the benefits of AI use, et cetera, and I've been asking a lot of different groups through these sessions. What is your organisation's approach to its use of AI and innovation and how, if at all, it's helping and how you're managing that?

Mr CLARK - Sure. Like most organisations, it's certainly becoming part of our everyday process. We have a Microsoft environment. We use Copilot heavily and increasingly heavily in many positive ways. We've also got some pilot projects on the way at the moment where we're using AI to develop models to help us with life support compliance. We've taken some quite interesting approaches on how we think we're going to be able to use it to improve our customer service and compliance regime, particularly on the issue of life support, where you don't want to get it wrong. It's certainly part of our business. We see it will be a bigger part of our business going forward.

But, having said that, we're very conscious of having the right controls and environment. We, for instance, operate within our own ecosystem using Copilot, so we have some pretty strict controls around, obviously, confidential information and the like. But we will continue to look for purpose-orientated projects that make sense. Obviously they come at a cost, so it's just not an open chequebook. A lot of companies are spending very large amounts of money on AI and starting to question the benefit they're getting. For us, we are not a high-profit entity, so we need to be quite controlled and guarded in how we use it. But it's proving very positive.

Ms FINLAY - Given the community interest and the federal and state publication of their statement of expectations, and following conversations like this, do you think you'd make the choice to proactively engage with the minister about his expectations? Or are you clear that that's not necessary and that you are - and I appreciate that you've given me the answers already that you are free to enter into those agreements. But do you think it would be useful to actively engage with the minister about clarifying their expectations on you as a retail business?

Mr CLARK - We would probably start with the basis that we would believe that the supply provider which, if it turns out, let's say, it's Hydro Tasmania, we believe that those appropriate discussions would be occurring between Hydro Tasmania, the proponent and the minister. Once again, I think we are at the back end of the process.

Ms FINLAY - Out of interest, what percentage of your agreements are with Hydro? Is it 100 per cent?

Mr CLARK - Yes, it would be 100 per cent at this point.

Ms FINLAY - Have there been historical periods in the past where it's not been 100 per cent with Hydro? I'm just curious as to what would it be?

Mr CLARK - Well, going back in time, I think Aurora was given Bell Bay power station at one point before my time.

CHAIR - I was here at that time.

Mr CLARK - In recent times, it's primarily Hydro but as I said, I -

Ms FINLAY - I assumed that before and I didn't want to ask the question, the dumb question, like are you all with Hydro?

Mr CLARK - Having said that, Basslink's now regulated. We can buy SRAs and we can do edging on the mainland. We are moving to put ourself in a position to be able to do that.

Ms FINLAY - Yes, okay. But to this stage, that hasn't happened yet?

Mr CLARK - At this stage, it hasn't happened of any volume, no.

Ms FINLAY - Do you imagine that's a three, six months, 12- to 24-month horizon of being able to do something like that?

Mr CLARK - The first step is testing out processes and seeing how the SRA processes work. We have to be sure that economically it would make sense. And SRAs, without boring you with the detail, are not a firm hedge, so it would be quite a departure for us to take from the mainland. So no, I don't think in the next year or two it's going to be a significant part. Marinus Link, I think it changes at that point in time.

CHAIR - Nigel, going back to the statement of expectation, or whatever the government is calling it, it is, as I understand, to be a public process asking for input into this. This could have significant impact on any policy decision, particularly if it's legislated or regulated, or whatever, to require you to act a certain way. Are you going to engage in that process and put in some sort of submission to the process?

Mr CLARK - We have chosen not to submit into that process. We had, obviously, at officer level they talk about all sorts of things with federal policy going on and the like, but we haven't submitted into that. But, obviously, if we as a retailer ended up with obligations - I mean there is certain legal paths that you could see at a state or a federal level where one could put an obligation on a retailer, but up to this point in time that doesn't seem to be where it's heading. But obviously, if retailers had obligations put on them, then we would have to fulfil those obligations, obey the law.

CHAIR - I know you are a step down the chain of this, but the government have made statements and Firmus made commitments that have since changed a little bit, but that they would build new variable renewable energy on-island. And that was then mooted as that might be one of the expectations that would be put in place. The government also said they weren't

going to make them mandatory at that stage, but there's still a lot of water to go under bridge on that. If there's a decision that comes up that the entity, the new data centre, or whatever, will and should, or must bring on new energy, does that mean then that one would expect they would purchase it directly from them and not come to you? But if they say, 'Well, we've helped establish this new wind farm but we're still going to buy our energy from Aurora,' or they say, 'Well, actually we're going to get it from outside the state entirely', then there'll be no contract with you. Is that why you don't believe there's an obligation for you here? I'm just trying to understand how it works, because the Government are making certain announcements. You're in this position where you have limited control or even input into it, but it could impact the way you can go about your business.

Mr CLARK - That's a big question on a number of fronts. How Firmus go about building their energy supply could be a variety of ways. They could be a proponent on a PPA and get Hydro to top up the mismatch. They could come to Hydro and say, 'You do the whole lot for us; you do the PPAs, you do the top-up'. It could end up like an MID where they have a direct energy supply agreement with Hydro and then they simply need a retailer to bring that to market. Highly unlikely to be an RSA, as I said, for that volume of what they're talking about. I mean, it could go a number of ways, and obviously we're not privy to what Firmus and Hydro or other proponents - as you said, Firmus aren't just limited to dealing with Hydro Tasmania; they could deal independently with proponents. So, we're not privy to that detail.

CHAIR - Just to clarify, I think you said this earlier, but you haven't had any discussions with any other major or significant new load coming into the state, or likely to?

Mr CLARK - No, not to my recollection, certainly not in the last 12 months or since we last met with you. We've not had discussions with anyone.

Mr BAYLEY - Can I ask if there is a limit to -

Ms FINLAY - That's what my question was going to be.

Mr BAYLEY - Oh, was it? So, 104 megawatts, that's a lot. Firmus has got a couple of other bigger ones. Is there a limit to Aurora where you draw a line or a ceiling on what you will contract to a semi-major industrial, let's call them?

Mr CLARK - No, in theory there's no limit. But there's a variety of types of contracts. Obviously, you've got to have the supply. But if you think about the history of Tasmania, you've got Bell Bay Aluminium, which we have nothing to do with. You then have three MIs, which was a phrase that developed out of specific arrangements of that customer doing a deal with Hydro Tasmania, and we're the retailer. And then there's ones where we just retail front end in so -

Ms FINLAY - So, it's only capacity to secure the supply as the limit?

Mr CLARK - We have no limits on us from the - I mean, we've got our prudential requirements and credit policies. But no, there's no limit on us in growing Aurora to whatever size we can. And there's no guarantee that Aurora is necessarily the retailer that will end up being the retailer for Firmus.

Mr BAYLEY - No, no, but there's nothing that rules it out, I guess.

Mr CLARK - We will fight hard to try and be that and bring benefit to the state, but they have choice.

Mr BAYLEY - So you would fight hard in the market to try to supply Firmus with the contracts for its three data-centre developments?

Mr CLARK - Absolutely. Part of our mandate is to obviously -

CHAIR - For the right price?

Mr CLARK - If we can cover the risks and make a positive margin, then that ultimately, 90 per cent of that dividend flows back to the state. So, we are obviously motivated to try and do what we can to help Tasmania economically.

Mr BAYLEY - But they're not in serious negotiations with you about it yet?

Mr CLARK - We're in no negotiations with Firmus, no. And to pick up a point you raised earlier, they've not come to us and asked for an RSA-type deal for their other two sites. Just to be really clear, it was just that one site only.

Ms FINLAY - In a regular retail environment, you can test your ceiling of price by what's happening in the market around you, but this is a bit extraordinary. How do you know you're charging enough in terms of a premium for them getting the benefit?

Mr CLARK - We've got to hedge it. We have the visibility of the price. We can't make a price to a customer without - we can weekly hedge prices from Hydro Tasmania, we can go and ask for special - like if a volume or a contract length is a bit weird or different, we can - so we have to know that we can cover the risk with a price of *x* and make a margin.

Ms FINLAY - Sure. Actually, sorry, the question was upside down. I believe that it's possible that we could be extracting a premium for our valuable renewable energy in Tasmania because they're here for that purpose. They don't have to be here. We don't need them to be here to use the capacity for AI and that sort of thing. They're choosing to be here. How do we know that we're - not charging enough to cover yourself, but charging enough to the benefit of Tasmanians? How do we know when you've hit that peak retail price that they'd be willing to pay?

Mr CLARK - I think as we explained last time, that question is really a Hydro question that could be answered from the generation side, that we can't answer that question. What we can answer is a retail perspective and, as we answered last time in the Committee, the margin on this particular three-year deal was way more significant than margins on other comparable MIDs.

Ms FINLAY - Yes, that's the question. Retail environments normally allow you to test how high the ceiling is on that margin, but you're not really in a position to do that with this. How do you know you've tested the margin?

Mr CLARK -No, no. We explained last time, when you say 'test', we'll look to make as much margin as practical as a retailer. That's our role.

Ms FINLAY - I get that. What I'm saying is, how do you know if you could not have extracted more?

CHAIR - We do need to wrap it up. We're out of time. So, thanks very much for your time today. There are a few things we'll write to you about just following up. That'd be really great.

Mr CLARK - No problem. Thank you.

The witnesses withdrew.

The Committee suspended from 1.03 p.m. to 1.30 p.m.

Firmus Technologies

CHAIR - Thank you, Paul, for appearing before the Energy Matters Committee. We know we have heard from Firmus previously and now you're here as their representative. This is a public hearing. Everything you say is covered by parliamentary privilege. That may not extend beyond the Committee hearing. If there are matters of a confidential nature you wish to share with the Committee, you'll need to make that request and the Committee would then consider that. It is public otherwise. It's being broadcast and transcribed and will form part of the parliamentary records for our Committee. Do you have any questions before we start?

Mr GRZINIC - No.

CHAIR - I'll invite you to take the statutory declaration there and then introduce yourself. Do you wish to make some opening comments about where Firmus is at now?

Mr GRZINIC - Yeah, a few comments I'll make.

CHAIR - That'd be great. Thanks very much.

Mr PAUL GRZINIC, GENERAL MANAGER, ENERGY, FIRMUS TECHNOLOGIES, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

Mr GRZINIC - I'm Paul Grzinic. I'm the General Manager of Energy at Firmus. I have over 20 years of wholesale energy industry experience across generation, retail and household markets. I've been in with Firmus since June 2029 [sic]. For transparency, prior to that I was with Aurora Energy as a manager of wholesale and commercial energy, for around 20 years approximately.

Firmus is progressing our commercial negotiations with Hydro Tasmania and, as Hydro has publicly stated, these negotiations are ongoing. In that context, I won't be discussing specific terms or aspects associated with those negotiations to not prejudice any of those outcomes at this hearing.

We support both the draft federal and Tasmanian guidelines and statement of expectations in full relating to data centres. With regards to that, we intend to follow our energy policy that preceded any of those guidelines in any capacity to the full extent. There has been some recent media reporting that is blatantly incorrect, asserting that we may not be fulfilling those obligations in Tasmania. That is not correct. That error -

Mr BAYLEY - Do you mean building on-island?

Mr GRZINIC - Yes, that's correct.

Mr BAYLEY - Can you just explain that a little bit more?

CHAIR - We can get into that.

Mr GRZINIC - That related to a draft - I'm sorry, our submission to the federal AI inquiry where a covering supporting appendix letter from Oxford Economics was attached to

our submission. That, in error, referred to a previous draft of the final letter that we approved. The approved letter is being submitted to the Tasmanian AI inquiry from Oxford Economics. That was an error, and that was an interpretation from Oxford Economics on their assumption of how our policy would be applied. We corrected that with them, saying, 'No, it isn't and why it is a site-specific requirement and that's clear in our policy'. That was corrected and doesn't change any of their sort of assessment. But all of our energy will be developed and procured on-island in Tasmania. There will be no developments interstate to support our Tasmania load.

In that context, with regards to our energy policy, just to reiterate what those commitments are, it is: we will underwrite at least two megawatts of new renewable generation for every megawatt of our load in Tasmania; we will seek no subsidy from the Tasmanian government; we will fund any network cost augmentations, so no costs directly pass through or attributable to other customers, be them small customers or other industrial customers in Tasmania.

In that context, I think there's the other part with regards to networking in particular: that our load, when it comes into the grid, where we're funding that augmentation, will increase the utilisation of the transmission network. That should have downward pressure and downward effects immediately as our load comes on to customer prices with regards to transmission prices.

What hasn't been broadly discussed at any point is that unlike other MI customers in Tasmania, with regards to Marinus, we were not seeking or asking for any non-pass-through of those costs. Tasmania will incur 25 per cent of the cost attributable to Marinus, as you well know, with the MIs not incurring any of those costs, is my understanding. We will incur - so our load will be a significant contributor to defraying a lot of those costs that will otherwise go to the remaining customers, be they mass market and C&I and industrial customers. We're seeking some additional information on clarifying the quantum of that through the government and TasNetworks, noting that they are projections at this point, but our load, should it be realised at sort of 440 meg, will constitute around 30 per cent of those costs that would otherwise go to mum-and-dad customers we will take on board, and that's a real saving. That means that those costs will be lower than they otherwise would be for those customers.

Happy to take any questions.

CHAIR - Just to clarify, Paul, you said you'd underwrite two megawatts for each load. When does that commitment start from? Is that after this three-year period?

Mr GRZINIC - I won't talk to you specifically of the contract; I was talking some generalities to help - so, yeah, our intent is for 100 per cent of our load, including our Launceston facility, is to underwrite renewable developments that will fully offset our usage. That would be a suite of assets. It won't be one project, it would be a range of projects, to meet those requirements. On top of that, it would include some firming aspects at additional cost to Hydro for firming, which is redistributing that energy, that variable energy, to make sure it matches the time use of our load over time.

CHAIR - So, to fully offset, assuming that you - and the conversation's been around new variable renewable energy. That's still the conversation, yeah?

Mr GRZINIC - Yeah, it will be a - I can't talk to specific assets. We hope to, as soon as we can finalise an agreement, if we finalise an agreement with Hydro Tasmania, to share more of that. But it will be new renewable energy assets. It will all be renewable. And there's a firming component in that in. How you can attribute that firming and the assets needed to firm that, whether that's existing hydro or BESSs, that's being worked through.

CHAIR - Or what?

Mr GRZINIC - Battery energy storage or those other technologies. I'm not saying that they are included; I'm saying those assets we're still working through with Hydro, and Hydro has a process underway as well around that, so we don't want to prejudice those discussions.

CHAIR - Are diesel generators part of the picture?

Mr GRZINIC - Diesel generators are a backup supply for our facilities, just like hospitals have diesel backup generators, mines have diesel backup generation. These are backup generation. Our intent, with regards to any aspects of how we meet our load, is to first and foremost build out the energy grid to make sure that it is as reliable and buy supply from that.

The second tranche of how we treat that is our loads are quite flexible. We intend to be a scheduled load in the NEM, just like large generators. That's unlike many other loads that operate. How that means is we will bid in, like a generator, into the NEMDE dispatch engine with AEMO, and that means we'll have to ramp up and down to make sure that the system remains secure.

CHAIR - How quickly can you ramp up and down?

Mr GRZINIC - Obviously, we are in inverter-based loads. There are new rule changes, so we can do that in less than a second type speed of our ramping. The issue we have is, with inverter-based loads, we can ramp too fast. So, we have to meet those ramping requirements with regards to AEMO, and there's new rule changes coming in place to ensure that we can provide those services.

CHAIR - When you look at the new renewable that you're committing to, wind, for example, has a 40 per cent capacity rating, solar certainly not 100 per cent. When you say you're going to fully offset the energy requirements of your facilities, if you're relying on those sorts of sources, surely you'll need to deliver more than what you're using?

Mr GRZINIC - That's exactly right, and that's why our policy states at least two times. Now, that will depend on - the reason our policy says at least two times, it doesn't say it's exactly 2.8, is because this is an Australian policy that we will apply across all of the jurisdictions in which we intend to operate. Now, the capacity factor varies depending on the suite of assets that we underwrite. If you took a solar plant in Tasmania, the capacity factor is below 30 per cent, but the wind is around 40-45 per cent. If you were to apply this in New South Wales, the capacity factor for wind is far lower - it's in the 30s - and solar is far greater.

And it depends on the suite of assets. Do we contract all solar in Tasmania? If we were to do that, it'd be a very low-capacity factor. It'd be like a four times ratio. So, hence our policy is designed to be at least two times, and we will apply that as needed in the relevant jurisdiction

based on the characteristics of that jurisdiction. In Tasmania you would expect that, like I said, it will be suboptimal for solar, given the yield is quite low, and the yield for solar is inverse to the critical demand periods of the grid, being that we are heating-driven state with regards to peak demand, which occurs in June. At 6.00 a.m. in June each year is, generally, the peak demand period in Tasmania. Solar is inefficient.

CHAIR - What's the timeline for announcements around this?

Mr GRZINIC - Yes, look, I'd like to be able to announce it next week, but, yes, we're subject to negotiations.

CHAIR - But I'm asking you when we can expect it.

Mr GRZINIC - Yes, consistent with what Hydro's communicated, that they intend to make a decision by the end of this calendar year, and that is where the current position stands.

Mr BAYLEY - Taking away from the specifics around energy, but more just the projects more broadly, the IPO has obviously failed, and there's now a new bid to raise capital funding, $4 billion of capital funding for Firmus. I guess the question on a lot of people's lips is whether the Tasmanian sites, all three proposals, are fully funded already or whether they are to be funded as part of this $4 billion capital raise?

Mr GRZINIC - Yes, so with regards to the offer in general, yes, look, we'll continue to pursue raising capital, as we have recently through private markets, and consider public markets in the future. With regards to the Tasmanian sites, the Launceston site is obviously fully funded. The Wesley Vale stage 1 is also fully funded. With regards to the other sites, obviously they're still subject to DA. So, in any case, irrespective of the IPO, we're still subject to pursuing and raising capital for those in any regard is still subject to the DAs proceeding. There is a current process underway, so, I can't really make any comment with regards to those.

Mr BAYLEY - Just to confirm, St Leonard's fully funded, stage 1 of Wesley Vale fully funded.

Mr GRZINIC - Correct.

Mr BAYLEY - The balance is still subject to funding and subject to a range of other things, including the DAs.

Mr GRZINIC - Yes, that's exactly right. And DA is an important trigger for us to progress the funding components.

Ms FINLAY - I've got a couple of questions, but this one isn't one of them. Stage 1 at Wesley Vale, is that the 50 megawatts, or have you got additional stages proposed at Wesley Vale?

Mr GRZINIC - No, there's only the two stages there at Wesley Vale, which is the 26 megawatt, and the additional 26 mega -

Ms FINLAY - I was just checking whether the complete package was public at the moment was stage 1 or not. Thank you. In terms of the agreements that are likely to be

announced by Hydro before the end of the year, and your commitment that generation is new renewable generation on-island, are you party to the generation agreements, or is that responsibility passed through Hydro that they meet your expectations about the generation being new and on-island?

Mr GRZINIC - Yes, so, like I said, I can't talk to the specifics. I can talk to our preference and the range of options. Our preference is very much that we contract with Hydro, and I can talk to why that is specifically. And that doesn't have to be the case. We could go three options: We could go and contract directly with solar or wind developers but, ultimately, we need to firm that energy up and make sure that that gets redistributed, that energy back. Now, there's a requirement with regards to the federal statement of expectations. There's a pending rule change that will occur with regards to the firming of data-centre load, and that should be published in the next month, that we need to ensure that we have sufficient firming arrangements in place. Just contracting renewal developments directly is insufficient. So, in Tasmania the preference is to obviously contract with Hydro for that firming.

Now, we don't want to just go and contract; we want to make sure this is the right outcome for us, for Hydro Tasmania, that that suite of assets is optimised with their generation fleet and works well with that to get the best outcome that manages energy supply for us, but also energy security for the Tasmanian grid. If we were to contract directly with four solar farms, as I mentioned earlier, that would be a sub-optimal outcome potentially for Hydro because they actually probably best need a different suite of assets that is optimised with the hydro system.

Ms FINLAY - Sorry, just to clarify that, I'm not necessarily concerned with that. What I'm concerned with is, how do you make sure that your expectations are met, that new generation is new to current and on-island? I'm not interested in the details of the commercial agreement, but you contracting to Hydro, is there an expectation, a legal instrument, between you and Hydro?

Mr GRZINIC - Yes, there is, a hundred per cent, and that's what I was going to get to. We could do that separately. Our preference to go to Hydro is to make sure that they go on contract with them, and it's got to be additional, and it's a requirement on them to supply us, you need to go and underwrite new generation that meets our requirements, that is traceable back to us, that we will underwrite and fund, and then they can also provide that firming service in addition to those projects.

Ms FINLAY - So, you'll have a legal instrument with them that expects that?

Mr GRZINIC - Yes, that is correct.

Ms FINLAY - Okay, thank you, that is my clarification. So, we can be assured that any announcement happens via Hydro before the end of the year will be for new generation on-island?

Mr GRZINIC - Correct, that is the intent.

Ms FINLAY - Well, not the intent. I'm interested in commitments beyond intent. I'm interested that there is a legal instrument that requires that.

Mr GRZINIC - There will be. When I refer to intent, I don't have an agreement. If the agreement proceeds on the basis, it will hundred per cent reflect that Hydro has a requirement to underwrite new generation equivalent to our energy policy and ensure that those projects get built and developed to support our load.

Ms FINLAY - My second question is more tricky, I think. I'm interested that when load connects to the network that the generation is available on-island. What is the timing sequence that will be provisioned in a potential agreement between you being able to add new load to the network and generation is available to balance that? How do you see that timing play out? What's the ramping-up agreement or process? And how are Tasmanians going to be assured that there is a balancing in the system and there's not just a commitment that maybe there will be generation built and 10 years later something happens, there's actually a stepping up in the system?

Mr GRZINIC - While I can't talk to specifics, I can refer to the comments made by Hydro with regards to ensuring that they balance the requirements of energy security in the state when they're considering the negotiation for our contract. You can read into that that obviously that is a key component of the sequencing between our load and when renewables come on-island. That's something that needs to be taken into account with regards to which asset types get built faster and the trade-off between the efficiency and cost of some assets versus other assets that might be cheaper that take far longer to get to market. That's something that, where those issues exist, that's something that Firmus will take on. If there's additional costs to get generation built far quicker, then that's something that we will take on and accept, and not pass through or take any risk back to Hydro.

Ms FINLAY - What would be the greatest amount of time that you would see is reasonable to bring on the new generation?

Mr GRZINIC - I'm not involved with the specifics of what Hydro's process with regards to those proponents and where they are, but our preference would be obviously to have proponents that are more progressed in their planning and approval, so those projects that are more progressed. Solar -

CHAIR - So, they may not be new projects then; they may be ones that are already on foot?

Mr GRZINIC - They won't have an ongoing agreement and being constructed.

Mr HISCUTT - Can we define 'new'? What does ‘new’ mean?

Mr GRZINIC - Not built.

CHAIR - So, not built like Whaleback Ridge, Robbins Island, the Northern Midlands Solar Farm? All of those are not built.

Ms FINLAY - Geilston Battery Park?

Mr GRZINIC - None of them are proceeding.

Mr HISCUTT - They are considered new?

Mr GRZINIC - They are new. I think the federal definition in other jurisdictions, from what we've experienced, is they haven't reached financial investment decision. They don't have an agreement to underwrite their developments and they're not bankable and, therefore, they can't proceed to be developed.

Ms FINLAY - So, can I just go back to the question about timing and sequencing? Have you established a framework of expectations between yourself and Hydro about how long is too long to bring on agreed generation? So, for them going out to source that generation to deliver it to you, meeting your needs of it being new and on-island?

One of the concerns that I'm hearing in the community is that the agreements might be made and your load will enter the network and then, you know, gas is running pretty hard at the moment, there's all sorts of things going on. How long is that acceptable for?

Mr GRZINIC - Like I said, I can't talk to the framework included in the agreement at this stage. But I can reassert that, as Hydro has communicated, they are critical factors that they will have to consider with regards to presenting Firmus an offer for that generation. And we're happy to be fully transparent on that as soon as the deals can be announced in explaining how those terms, and I expect Hydro will be -

CHAIR - Can I just make a point here that in the whole-of-state business case, the Hydro modelling that was in that, and other modelling that was in it, the stacking up, the FID, was predicated on 800 new megawatts of renewable energy on-island. So, there is an expectation in the minds of me and others in the community that 800 megawatts is things like the Northern Midlands Solar Farm, Whaleback Ridge and potentially Robbins Island, all the ones that haven't been constructed yet. Will we be able to see that the 800 megawatts that will be delivered plus whatever is being underwritten for your load -

Mr GRZINIC - Yeah, I can't talk to the 800 megawatts. I can talk to, we will be developing load, enough generation circa, if you look at plus, around 1000 megawatts of new generation for that.

With regards to other load that might have been referenced in business cases, one of the challenges, and obviously it's in the remit is a lot of these renewable projects won't get up, and the reason these projects don't get developed is there's not a sufficient offtaker willing to pay the price to develop that energy. A wind farm project requires around $100 a megawatt hour. Now, that's non-firm energy. So, you add firming with that, the cost that a customer or someone has to pay to underwrite that, for a bank to underwrite that, is a long-term agreement sufficient to fund 100, for that to take that offtake. To suggest that Marinus in itself, just building Marinus or the North West Transmission line, will, all of a sudden, these projects will just proceed, is misleading and disingenuous to sort of imply that it is -

CHAIR - I'm not surprised by that one bit.

Mr GRZINIC - No, what is still required is a customer offtake arrangement, be it either with a customer such as us who is willing to pay the full cost and not seek any subsidy, or it is to have one of the GBEs or someone underwrite that to secure that, which presents a risk that they can't get that money back and sell that energy back through the market. And in our instance where we're funding that generation, it presents no risk back to the GBEs that would, or Hydro

in this instance. We will take that risk on long enough to make sure that these projects are bankable and get developed.

Mr HISCUTT - Thanks so far for the presentation you've given. When you say you're going to underwrite these renewable energy projects, what does that actually look like? How much of a contribution would you expect that to be?

Mr GRZINIC - We will pay the full cost; 100 per cent of the cost that those proponents need will be reflected in our price that we pay Hydro, and Hydro -

Mr HISCUTT - No, sorry, on the actual - is there any capital investment in the projects to get them up, or you're just saying that you'll provide the capacity to buy from them? Will you actually -

Mr GRZINIC - Yes, we will buy them and that will make the projects bankable that they'll be able to finance in full and do get developed.

CHAIR - So you won't build it?

Mr GRZINIC - No.

Mr HISCUTT - Or contribute towards building? That's not the intention?

Mr GRZINIC - No, but this is the normal framework for corporate PPAs that exist across -

Mr HISCUTT - No, no. Just understanding what when it talks about 'contribute' -

Mr BAYLEY - You do use the language 'build' sometimes.

Mr GRZINIC - Yeah, we'll underwrite the build. I mean this is a normal mechanism within the NEM of, and this is completely consistent -

CHAIR - The language is important here, Paul, because there's been a lot of misunderstandings in the community about what it actually means, so if we can be really clear about what we're saying.

Mr HISCUTT - The comment was made about 'contribution towards', I think was a statement made in the opening, and maybe I misheard it so that's fine. But that was just for me to understand that it's not an actual capital investment; it's just to say, 'We will definitely buy your power, therefore that gives you the business case for you to be able to do that'?

Mr GRZINIC - Hundred per cent agree, and that will make the projects bankable, and this is a normal framework within - it's generally how all generation gets developed, through underwriting agreements in that regard.

Ms OGILVIE - A slightly different question. I'm really interested in your background and knowledge of the electricity sector: what use is Firmus itself is making of AI to ensure that its electricity use is as efficient as possible? How do you address that?

Mr GRZINIC - Yeah. So, probably not so much AI in general, but like we said is we, our R&D facility and our, with what we started in Tasmania many years ago, and if we can back then build and operate flexibly in the Tasmanian grid, which has some of the largest challenges to operate, given the Hydro nature and the highly 100 per cent renewable nature of the grid, means that we have built, over time, technology that's very efficient with regards to its PUE and efficiency. But also, as I mentioned earlier, we intend to operate as a scheduled load, like a generator, and provide services to the market that many other loads generally can't provide, and be flexible in that regard. That allows us to be more flexible with regards to some of our customers as well with demand response. So, during periods of peak demand, our load will be able to reduce, and we'll manage that through our customer contracts, by being efficient in our use of our software design for our compute. But whilst we may reduce load at this period, we can offset that with increased customer outcomes in other periods for efficiency in that regard.

Ms FINLAY - What are the instruments that are used to assure Tasmanians that the generation is renewable and on-island? I know the electrons will flow anywhere, but is it the generation certificates? Are there other instruments? What are the instruments that give certainty to Tasmania?

Mr GRZINIC - So, with regards to, that really sits with more - there's multiple frameworks. There's the federal government requirement, which sets a minimum buffer that everyone has to achieve. The intent of that, while still draft and a bit fluid in finalisation because it isn't in legislation at this stage, is that that will be done through LGCs and REGOs, which are renewable generation certificates. The LGC mechanism or LRET legislation expires in 2030, and that acknowledges the LGCs, you can make - a renewable proponent can make either an LGC or a REGO up until 2030. After 2030, the LGC mechanisms will fall away and the REGO mechanism will extend further on.

CHAIR - It's not worth much right now.

Mr GRZINIC - REGOs, fortunately for Tasmania, will also recognise below-baseline generation the LGCs otherwise wouldn't recognise, which is a benefit to Tasmania as well. That is the mechanism that will be used. We'll need to make sure that all of our generation acquire sufficient REGOs effectively and equip those on an annualised basis to meet our full load of requirements.

Mr BAYLEY - They don't reference being on-island though, do they? How are we reassured that it is on-island?

Mr GRZINIC - My understanding in the federal legislation is the renewal energy requirement is a state-specific requirement, albeit it's not finalised yet.

CHAIR - Is that the current rule?

Mr GRZINIC -That is my understanding of what the position was landed on, but that's yet to be finalised.

Mr BAYLEY - Because you said earlier that your policy was site-specific, but forgive me, and please take it on notice, but I don't think it is. I can't see any reference here, and it basically says, for the purpose of this commitment, a new-build renewable project means a

NEM-connected renewable generation project that's not reached. So, obviously, that could be connected anywhere.

Mr GRZINIC - It does. Yeah, the policy does reference projects and site-specific requirements.

Mr BAYLEY - Sorry?

Mr GRZINIC - The policy does reference project and site-specific. I'm happy to point it out.

Mr BAYLEY - Okay, maybe offline we can do that. Can I ask about the energy infrastructure, then, given the IPO and the funding challenges, and the need to still raise more money. Is all of the connection, the electricity infrastructure, funded as well as part of the St Leonards and the Wesley Vale projects?

Mr GRZINIC - Yes.

Mr BAYLEY - What are they worth in total?

Mr GRZINIC - I won't talk to specific commercial matters of funding. That's commercial-in-confidence.

Mr BAYLEY - Right. But they are?

Mr GRZINIC - Yeah, but they're fully funded by us.

Mr BAYLEY - But they're not for Bell Bay, for Long Reach, yet?

Mr GRZINIC - No, so we've committed to - and I think TasNetworks may have referenced. But yeah, there are some studies and early works that were fully funded and paid for those.

Mr BAYLEY - When it comes to Bell Bay, I'm really interested in the notion of the generators. Firmus is obviously appealing the approval, or told the EPA one thing in relation to generator use, and now it's appealing the conditions that were put on it. Can you talk us through why that is? What is the problem there? What's the disconnect between what you told the EPA during the approvals process and what is now going to be sought via the appeal?

Mr GRZINIC - There's an active appeal in progress for that, so I can't speak to that. There's a process underway, so I can't have specific regard to that. With regards to diesel generation in general, we can talk to reference the fact that, look, as I mentioned earlier, other facilities have backup generation in the form of diesel in the state, such as hospitals, mines and many other industrial facilities. The backup generation is about a backup generation for instances that may occur that require that.

Mr BAYLEY - Does that include powering down to help stabilise the grid? There's a lot in here about being able to reduce your load to assist the network and avoid spikes and the like. Will diesel generators fill that void?

Mr GRZINIC - No. So, our, and I'll get to, as I mentioned earlier and started on, is that our intent is to build the grid out in the first instance. It is a renewable grid and just like we'll invest in, say, wind and solar projects, and even hydro itself –

Mr BAYLEY - To be fair, you won't invest in them; you'll purchase power from them.

Mr GRZINIC - Yes, but we'll underwrite. Like, semantics in many ways.

Mr BAYLEY - We'll, I don't know that it is, to be honest. I think most people would think if you're investing in a project, you're putting capital expenditure into the project. And that's why -

Mr GRZINIC -We'll underwrite the development, and pay for those projects, and I'll clarify again: we will pay the full cost to those projects to underwrite their development, to make them bankable and financeable.

Mr BAYLEY - What do you mean by full costs? What are full costs?

Mr GRZINIC - The full costs that those projects require to make them bankable and get developed and financeable to reach financial investment decision.

Mr BAYLEY - So, you'll sign a deal with Hydro -

Mr GRZINIC - Yes.

Mr BAYLEY - with a commitment that it will purchase power from those entities, those developments?

Mr GRZINIC - That's right, and the costs that we pay Hydro will take into account the costs that they require to develop those projects.

Mr BAYLEY - Not capital, though? I mean, you see it as semantics, but I think this is important for those of us that are trying to understand this system and understand some of the commitments that Firmus has made because, to be frank, it's been a bit of a moveable feast. You're not investing capital in the developments; you're paying a power purchase agreement. So, what are the full costs? What do you mean by the full costs? It's a fair commercial rate for the power? Plus?

Mr GRZINIC - Yeah. So, just to clarify for one point, our position hasn't changed from day one. The commentary around it potentially has. But our position has been the very same since day one. We will underwrite the full cost -

Mr BAYLEY - So -

Mr GRZINIC - If I can just finish. We will underwrite the full cost - our preference is to do it via Hydro - to pay the full cost that they require to build and develop the underwriting of that. That will allow them to raise the capital through their banking and et cetera to reach financial investment decision to proceed in developing that project that otherwise wouldn't occur. When with regards I say 'the cost', effectively it works through to a megawatt-hour cost, the full cost. As I referenced earlier, the cost to generally develop wind will vary depending on

capacity factors of projects, but around $100 a megawatt hour will be required to develop it. We will pay that cost.

Ms FINLAY - The full cost of the power?

Mr GRZINIC - Yes, and the power - the offtake agreement, the power times the term of that agreement will provide them the surety that they can build and develop, and go to a bank and -

Mr BAYLEY - Well, it might, depending on the size of the wind farm, depending on how much money they want to raise.

Mr GRZINIC - What I'm saying to you is we will pay that full cost to make sure that that happens.

Mr HISCUTT - When you say that is a two-for-one which you're doing - and sorry if I've not understood this very well, does that essentially mean that you will be paying twice a commercial rate because you're going to allow for enough for them to - sorry, how do I word this better? If you are going to underwrite twice as much as you're going to use, and you're saying that you will pay whatever the rate is required for them to get underwriting, that means that they need to make twice as much as you need. So, does that mean that you will pay twice the commercial rate for that power?

Mr GRZINIC - No, we'll pay - I can clarify. I think the reference you're talking to is, like, when we say two for one. So, for 444 megawatts, if you look at, say, as Ruth mentioned earlier, a wind farm has a capacity factor of around 40 per cent. So, a 1000-megawatt wind farm only produces, on average, 400 megawatts. Our load is 400 megawatts. So, to get the equivalent amount of REGOs for our load, we need to underwrite around 1000 megawatts of wind, if we were to do wind as an example.

Mr HISCUTT - Does that mean, therefore, if you're underwriting 1000 megawatts by paying enough that they need to be able to produce 1000 megawatts -

Ms LOVELL - Entering into an agreement for 1000 megawatts? Is that what you mean?

Mr GRZINIC - A 1000 megawatts - we're entering an agreement of the offtake for the 1000 megawatts. They will produce 400 megawatts on average and we will pay for that 400 megawatts a rate on a megawatt-hour basis.

Mr HISCUTT - Which allows them to make 1000 total but -

Mr GRZINIC - Build, develop the 1000 megawatts.

CHAIR - But it won't deliver 1000 megawatts.

Mr GRZINIC - 1000 megawatts is the capacity, megawatt hours -

Mr HISCUTT - So, you're really only delivering what they'll be able to produce one-to-one, but -

Mr GRZINIC - Yes, hundred per cent.

Mr HISCUTT - But the capacity is two to one?

Ms FINLAY - But Tasmania doesn't end up with any extra megawatts in the system for anything else, because it will all need to be used by Firmus to operate.

Mr HISCUTT - That's a separate, but yes.

CHAIR - Can I just clarify something you said, Paul. I know you don't want to talk commercial, but you did mention wind, solar and potentially hydro. Does that mean we may see the new Tarraleah development and potentially Cethana being part of that deal?

Mr GRZINIC - I can't talk to any specifics of the projects, but obviously we have a requirement to be able to firm that energy and pay. That's where Tasmania is in a very advantageous position compared to most other states in that we will be paying, as Janie referenced many times, that hydro premium for this valuable resource. That is the part that hydro, that firming component, we'll pay on top of the cost for those projects. We'll pay this additional amount that - we'll allow Hydro that premium to redistribute that energy. And unlike the other states, that means that it will provide additional returns back to government to fund greater returns from Hydro to fund other initiatives and services for the state. That firming component is quite an important part. That is a key factor of why our preference is to contract with Hydro, because we need those firming aspects to meet the federal requirement to demonstrate that we can provide this energy on a firm basis.

CHAIR - Can you quantify how many megawatts of hydro firming capacity you'll need or expect to require during the contract period?

Mr GRZINIC - It doesn't necessarily work in - it'll be subject to the suite of those assets, so it's not a specific volume of firming. It's around ensuring that our supply is available and can be firmed up and redistributed. At any one point, it could be a large amount for all intents and purposes. There could be - we're using 444 megs, as an example. That's our peak demand. There might be with, let's just say it was a wind project of 1000 megawatts, which it simply isn't because it's not possible -

CHAIR - Let's just make it simple because -

Mr GRZINIC - Yes, there's a time when there is 1000 megawatts of that available. Even then, so there's an additional amount that Hydro therefore can trade and realise value from over and above at that point of time. But there's going to be other times when wind is low, solar is low, potentially, that there's only 200 megawatts of that available. So therefore, in those instances, that's where hydro makes up that shortfall. But at other times, they're getting any excess and at other times, they're short. Redistributing that is that component.

CHAIR - I'll go back to my question then. Do you have any idea how much firming capacity you'll need?

Mr GRZINIC - It's effectively our load, with regards to our 400 megawatts. If there's no wind and solar available at any one point -

Ms FINLAY - It needs to be provided from somewhere.

Mr GRZINIC - It's got to be provided. And that's that service that we pay for.

Mr BAYLEY - Do you know what it'll cost to underwrite the development of that 880 megawatts or 1000 megawatts?

Mr GRZINIC - No, I can't. They're into that. And, look, we're happy to be transparent with regards to, at the end of this agreement, if we can share and what can we share, but it will be the full cost. What I can say is that Hydro has a rate card that they publish weekly. I think it has the current FY31 rate at around $106, which is a firm, flat contract. That is insufficient and will be significantly higher than that amount.

Ms OGILVIE - I'm really interested in the mechanisms by which, or the framework, probably happening nationally, but you'll be able to confirm, by which you're able to effectively book projects against the commitment to do the 100 per cent renewable projects positioning. So, without going too far in the commercials, you would be in conversation with Hydro about projects. How is that going to be reported up through the food chain, vertically integrated financing, although because I just don't understand how the pricing bit works. Is it Firmus's commitment to purchase at a certain price that funds that particular project? And you would want to see - there might be some sort of reporting mechanism that links you to that project and its delivery. Will that be made public? Is that your intention? So, there will be a dashboard or?

Mr GRZINIC - With regards to that component - and this is a normal, this contract framework, is a standard, really, corporate PPA framework that many energy customers use with regards to underwriting renewable developments to ensure that they receive - and how that becomes traceable is that they receive the LGCs or REGOs, as I mentioned earlier. So, in this arrangement, our intent is to meet the national requirements. We need to equip REGOs or LGCs. So, where we would underwrite a project, either directly or through Hydro, we are quite clear that we need access to the LGCs and offtake associated with those projects to ensure that we can equip those, either equip directly or through a retailer, if we chose to use a retailer, to meet those requirements and there'll be a requirement to report on an ongoing basis.

Ms OGILVIE - This will be part of an annual reporting?

Mr GRZINIC - Yeah, and our commitment with our policy is to report all of those at least on an annualised basis. I understand that with regards to the statement, the Tasmania statement, there may be a quarterly requirement.

Ms FINLAY - I'm just going to quickly take the conversation somewhere else. As I understand it, the scale required of the CPUs - let's just use St Leonards as an example - are ginormous. I have always been interested in the energy side of things, but in terms of the energy required to run those and all of the wiring and infrastructure, and the amount of flow going in, they're going to have a hum. What have been the limits on the acceptable noise coming out of the scale of the facility at St Leonards? It's situated beside the North Esk River that flows into the valley. What sort of modelling has been done on the noise awareness, from a human's audible level, to what distance from St Leonards?

Mr GRZINIC - I'd have to take that question on notice. Happy to be transparent. Happy to take that on notice.

Mr BAYLEY - Can I ask a quick question about jobs? Obviously the major industrials have got heaps of jobs at the moment. The CEO has identified that I think it's 0.5 jobs per megawatt in each facility. I'm not sure that completely translates across in terms of what's on the website. But can you be really clear in terms of exactly how many jobs will be created at each site and what they will be?

Mr GRZINIC - I can't go to exactly each site, that specific, but the reference to 0.5 is correct. It will be around 200 jobs overall on average. That's just direct jobs at that facility. That excludes other jobs such as myself and those, and -

Mr BAYLEY - Sorry, that's just direct site-based jobs?

Mr GRZINIC - For that site. With regards to direct site, there'll be a range. People still question this number, but you have to remember these are quite large facilities and a range of data halls and they're 24-hour operations. If you break that number down and look at it over, say, four or five halls on a 24-hour basis, that's sort of like five or six to seven staff per hall per shift, which really isn't a large number at all. To say that, where others question those is yes, they are sort of real numbers in that regard. That avoids the flow-on effect jobs across - I suppose the other word that quite often gets referred to here is the ecosystem of the industry. I think the reality is this is a new industry and there will be that ecosystem and additional jobs. And we'll be publishing our Oxford Economics report shortly that goes to those broader sort of jobs impacts.

But going to my point earlier, that also excludes other types of jobs that, say, for example, my job. We've got our head of technology who's been based in Singapore. He's moving back to Hobart. These are really good jobs, and they're jobs that are more aspirational type jobs. And that's a great story - that these jobs otherwise don't get developed in this state, and that's a really good news story. Those jobs as well, Firmus is great in that we have offices where we operate. We're not concentrating our jobs in our head office. We have our jobs, being flexible.

Mr BAYLEY - Will some jobs in the head office in Singapore, for example, be tapped in and be managing local facilities here?

Mr GRZINIC - Yeah, we have our global operations centre that manages all of our facilities. But like I said -

Mr BAYLEY - Where's that? That'll be in Singapore?

Mr GRZINIC - That's in Singapore, that's always been in Singapore. We also have our site-specific operations as well. As I mentioned, our head of engineering is intending on moving back here. They're great jobs, and a lot of people talk to the nature of these jobs. These aren't necessarily IT jobs. I think one of the great stories is we've got an ex-forestry worker who lost his job and we said, 'Yeah, come in, you can be a service technician'. These are sort of manual labour jobs, but they're well-paying jobs. We have ex-Liberty workers, we have smelter workers. And we have one of our ex-forestry service techs; he's gone globally and trained all of our global, in Singapore, all our - and that's a great story of redeployment from one industry

to a different, more future-oriented industry, and then really going and training all our staff across the globe, and that's a good news outcome here.

Mr BAYLEY - And the submarine Bernacchi-1 cable, can you tell us how that works? It's going to have a 60-terabit capacity, as I understand it. How much does Firmus use, and is that exclusively reserved for Firmus? How does that work?

Mr GRZINIC - Might need to take that on notice, but my understanding is that we don't contract that full capacity. So, where someone else comes along and wants to contract on a commercial basis with the operators of that facility, that can occur. And that's a great outcome for the state because the state hasn't had to underwrite it and taxpayers don't have to underwrite it. That's a really good news story, again.

Ms OGILVIE - It increases capacity on-island, which is good.

Mr GRZINIC - Yeah, exactly.

Ms OGILVIE - Net benefit.

CHAIR - Thank you very much, Paul. We appreciate your appearance before the Committee today. There was one thing we're going to ask you about on notice. We'll write to you with that -

Mr GRZINIC - With regards to the noise aspects? Yeah, write to us on that. Happy to clarify that. Not a problem.

CHAIR - Thank you very much.

The witness withdrew.

The Committee adjourned at 2.16 p.m.