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THE JOINT SELECT COMMITTEE ON ENERGY MATTERS MET IN COMMITTEE ROOM 1, PARLIAMENT HOUSE, ON TUESDAY 11 FEBRUARY 2024.

The committee met at 9.01 a.m.

CHAIR (Ms Forrest) - Welcome, Simon, to the public hearing for the Energy Matters Committee. We appreciate your submission and taking the time to appear before the committee. For your knowledge, everything you say while you're before the committee is covered by parliamentary privilege that may not extend beyond the hearing. We can't actually ask you - I think you're not in this state, are you? Are you in the state?

Mr TALBOT - I'm in Launceston, yes.

CHAIR - You are, right. In that case -

Mr SIMON TALBOT, CHIEF EXECUTIVE OFFICER, ABEL ENERGY WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED VIA WEBEX.

CHAIR - If there is anything of a confidential nature you wish to share with the committee, you can make that request and the committee would consider that. Otherwise it's all public. It is being transcribed and we are being broadcast at the moment as well. We've got an hour with you and we appreciate the opportunity to hear further about the project up at Bell Bay and to speak further to your submission, and have questions for you beyond that. I'll leave it to you to speak to your submission and raise any other matters that you wish to.

Mr TALBOT - Thanks, Ruth. There'll be a couple of areas I'll be a bit aloof around and that's simply because we're currently doing capital raise. We're in an investor sort of lockout period, which is actually a very good thing in terms of Tasmanian projects having an investor interest. As a background, what are we doing and why are we doing it? The background is we're producing green methanol, which is a drop-in fuel replacement for diesel.

As I say to many Tasmanian stakeholders, Tasmania's energy position is one of the envies of the world. However, when we buy a good or a service, 90 plus per cent of the time it comes via shipping or aviation, which run on fossil fuels. If Tasmania wants to have a leadership position in the broader energy space, yes, what we're doing on-island is great, however, we do need to be cognisant of the fact we're at the very tail end of a very complex petrochemical supply chain that is going to face significant uncertainties over the next 30 years.

However, wouldn't it be wonderful if we were able to produce advanced manufacturing back in Tasmania at scale and be able to produce a drop-in replacement for fossil fuels. That's what we're doing. We're producing 360,000 tonnes per year - that's 360 million litres, 360,000 million litres, sorry, of fuel per year. That, with minimal modification, can be put into large shipping vessels. Across the globe, the largest shipping companies, the CMAs, the Maersks, the Evergreens, are doing mass ship conversions to green methanol in a hard-to-abate sector that uses a lot of fossil fuels.

Tasmania is a maritime state - what a wonderful position we're in to achieve, frankly, Southern Hemisphere leadership on? Why Tasmania? Why did we pick Tasmania and what

makes Bell Bay so special? We started this journey close to five years ago, and we looked globally. There is an architecture to success in terms of green methanol manufacturing globally. That architecture is that you need water. You need abundant water resources. You need abundant biomass resources, sustainable biomass, certified biomass. You need access to a port and you need a renewable energy grid. It's as simple as that.

You put those four elements together and you've got a globally competitive advanced manufacturing base. So, as I said, we looked at 14 or 15 sites across Asia Pacific, Australia, New Zealand, and Bell Bay came out fundamentally on top. The other beauty about the Bell Bay site being the old power station was that it was already connected to a 300 megawatts grid and that's exactly how much energy we need. Ironically, it was the backup, fossil fuel power station for Tasmania that produced 300 megawatts of energy and now becomes an advanced manufacturing export, a defossilised fuel site that uses 300 megawatts electricity.

We purchased the site approximately 18 months ago, really exciting from a parochial Tasmanian perspective, with over 100 guys onsite doing the demolition works as we speak. Those demolition activities and decontamination activities continue throughout this year. And towards the back end of this year, and early next year, we start looking at detailed engineering works. So, from a Tassie perspective, it's a substantial investment, close to 2 billion of real engineering capital works. The broader project is 500 ongoing jobs now and 1500 construction jobs.

I want to touch on the broader project because we are reliant on around 2.1 billion of new energy development. As you would all be well aware, new energy developments in Tasmania haven't had an illustrious last four or five years in terms of those achieving financial close. So we have to work very carefully with our energy partners, particularly in the north-east, to make sure we're all moving together in one work stream. This is where, frankly, a whole-team Tassie approach is required - Premier's Office through to GBEs through to all forms of politics where we say, 'look this is of state significant intergenerationally, significant manufacturing in northern Tasmania'. We need to make sure that our wind, solar, battery and green methanol manufacturing are all working together, but are all moving forward from an energy perspective in alignment. As an example, if a wind farm drops out, our whole project goes on hold because Hydro doesn't necessarily have the available electrons to enable us to start up et cetera. So, one project capitalises over $4 billion of investment and 500 ongoing jobs for over 30 years and it only takes one of those sequences to fall out and everything's under jeopardy.

Ruth, the last piece I would add is that this is the right project for Tasmania and the right energy use. We have completed extensive community and social engagement to make sure that West Tamar, East Tamar, north, south, people from all backgrounds, understand the basics of green methanol. Why Tasmania? We've received resounding feedback and one of those bits of feedback I think is very important for this committee and that is producing electrons or producing renewable energy and sending it through to the mainland. Tasmanians don't quite get that. What's in it for me? What's in it for us? Is that just going back to Treasury? Where are the jobs? When we've been able to sit there with our wind and solar partners and say we're producing an e-fuel to replace diesel and bring advanced manufacturing back to northern Tasmania with chemical engineering jobs and operator tradespeople jobs in the tens and hundreds, it changes the narrative and a sense of pride comes back. I think it's probably well worth noting that most of our other big industries in Tasmania really are circa 50 years old. I will not talk about individual companies, but it would be nice if we had a few of the next horizon of those next projects that our next generation of children need.

Ruth that's probably a very short, sharp summary. We will be using 2.1 terawatts circuit of energy per year, 20 per cent of Tasmania's current use, however, that's all perhaps incremental from new project developments. We'll advance conversations with three lead proponents to supply the energy we need and we're all working on integrated platform, which means that it's a win-win. It's complementary to the Tasmanian grid, complementary to Hydro's operations. In fact our operational act as a giant battery potentially putting pushing energy prices in Tasmania down.

CHAIR - If I can pick up on that last point. This claim is often made, as part of a pitch perhaps in some respects, that it'll push Tasmanian energy prices down. What modelling have you done or how can you demonstrate that that would be the case?

Mr TALBOT - Certainly some of our modelling is commercial in confidence. However, what we've done is we've actually - green methanol was made up of three main components: electrolyser, hydrogen production; gasification of your waste biomass for carbon; and methanol synthesis, which is the application of the hydrogen-carbon together that form a clean alcohol called methanol. Circa 90 per cent of our energy is on the electrolyser. It's a large machine that takes vast amounts of power coming to site.

With the electrolyser design, we're working with a German company called thyssenkrupp. They have made electrolysers for 50, 60, 70 years - they know what they're doing. We've designed an electrolyser that can be switched off within three minutes. That's cost us money, but it'll also make us money and make us complement the grid.

What that means is that if we get a spike in energy prices in Tasmania, we'll switch off that massive load of energy and that other energy, let's call it 200 megawatts, will be available to the grid. You have to think that, us not consuming during periods of peak demand and causing spikes and alleviating those spikes, is going to alleviate the total energy grid in Tasmania. That's certainly the way we're designing it. By the way, we don't want to produce - we're competing in a global market here and there's no benefit to us also producing green methanol at ultra-high energy pricing. That's the first one.

The second one is we're looking at a battery, a BESS, integrated into the network. That, again, is going to stabilise the whole Tasmanian energy grid. Again, if energy prices are spiking, we'll be able to sell electricity back into the grid and, again, alleviate the spike and smooth that process over. Very complementary. The basis of our design is 'energy prices high, we don't make green methanol; energy prices low, we make as much as we can.'

The other thing I would note, that is I think sort of a future potential, is the fact we're located right next to the Tamar Valley Power Station. Now, we produce syngas and green methanol. A number of those turbines can easily be retrofitted to run on green methanol or syngas produced, literally 50 metres away next door - adjacent.

Now, the reason I mentioned that is, if we wanted to evolve from natural gas operations or we wanted to have sovereign fuel security, one of our green methanol storage vessels can provide many weeks of energy for Tasmania. This is the scale we're talking about in terms of the green methanol we produce and the megajoule hours that that can provide.

In summary, it's very much stability to the grid and alleviating any price peaking. Frankly, we're designing with our energy partners more energy than we need, for obvious

reasons. We're running it - we want to sort of design 120 to130 per cent. That available additional energy will come back into the Tasmanian network as well, for consumers.

CHAIR - You talk about the importance of an integrated arrangement here with your wind and solar partners. Is the project contingent on those projects getting up?

Mr TALBOT - Yes, absolutely. We are locked at the hip. Weekly meetings - and we are sharing a lot of information around our design, our process, our time lines, their approval time lines. Yes, absolutely. We're very confident. We're aligned internally between, let's call it four substantial companies investing in Tasmania. Anything impacting the planning, the approvals of one of those companies, does present a risk to the Bell Bay green-methanol project.

CHAIR - I don't think it's in your submission from memory, but can you identify who those partners are?

Mr TALBOT - I can identify the fact that we are talking actively to Equis and ACEN. We're talking to a number of battery providers, we're talking to Recurrent, ib vogt. Whoever is operating in the north-east, we have an extensive relationship with that's very deep or we have an ongoing tender term sheet negotiation occurring. It's fair to say - I will not talk on behalf of those companies -

CHAIR - No, no.

Mr TALBOT - but it's fair to say that if we didn't exist, I'm not sure of the financial model for a number of those companies and their existence in Tasmania.

CHAIR - Okay.

Ms FINLAY - Thanks, Simon, for the update. It's great to see progress and layering up of those relationships and connections to make all of those elements successful.

Back at the beginning of your presentation, you talked about the four elements: water, biomass, the port, and renewable energy. I'm interested in the piece around water supply. I'm wondering how that is progressing?

Mr TALBOT - Yes, certainly. Apologies - one of the reasons that I couldn't be in Hobart is I have to fly to Sydney to present to ARENA - Advancing Renewables - for substantial federal government funding into the project, and that occurs today and tomorrow - which is exciting - which means that, again, we are pushing forward very aggressively and constructively on developing the project.

However, as a part of that, we received a very constructive letter from the Premier that outlines a number of elements of support from the Tasmanian government including Tas Irrigation, TasWater support.

We believe that the Bell Bay Hydrogen Hub lead proponent, which is a state-federal agreement, has funding to support, and make economically viable, the Tamar Irrigation Scheme. We're aware that the farmers didn't quite get to the threshold required to activate the scheme as it was. So, in fact, us being at the end of it taking 4000 megalitres per year potentially

makes the whole scheme work and potentially reduces - it would reduce - farm gate prices for farmers in terms of water per megajoule - sorry, megalitre.

We have been given assurances that that whole thing will come together ahead of our financial investment decision, which it needs to. In fact, of all those elements, it is probably the easiest, given Tasmania's abundant water supplies. The water we seek is not coming - is not detracting from hydroelectric generation. It's past the hydroelectric hydro-generation schemes and, therefore, is, frankly, going down the Tamar, literally. So, getting access to that is paramount.

If you - a number of projects in Tasmania, you questioned, 'what was ever their right to be here,' in terms of their competitive advantage, Jane, and good water pricing. Our water quality and our water pricing is substantially lower than our European and North American competitors set. Our biomass pricing and quality is substantially lower and better than our European and North American competitors set. If our energy price - which means if our energy pricing is on par, you have an advantageous position in the market to export from. So, you design a plant associated with that over a 30-year cycle and, therefore we need 30 years of water security, which we're hoping we'll promulgate over coming months as a part of that lead proponent announcement.

Ms FINLAY - Thank you. I'm wondering, Chair, can I have a follow-up question?

CHAIR - Yes. Just bring your microphone a little bit closer there, Janie.

Ms FINLAY - One of the other elements you talked about was the benefit to Tasmania around the real trades and engineering jobs as a result of the project. I'm wondering about the development pathway and your confidence in having the right number of people locally trained or locally progressing in their careers to be able to participate and get the benefit from that. Are you involved in that process at all?

Mr TALBOT - Yes. I'm on the board of Bell Bay Advanced Manufacturing Zone, as a disclosure, and one of the primacies of BBAMZ is to look at future workforce for the precinct, not just the green-methanol production.

Second of all, we've been quite transparent around our workforce mapping. We don't want to compete with our allied - we don't want to compete with the smelters, we don't want to steal jobs, et cetera, that there's no benefit in that.

And third, we're trying to build capability. So, in discussion with the TAFEs, we're supporting the renewable energy Certificate II or III - I forget the exact name of it - and then we'll build a green-methanol workstream within that. And then, we're hoping to build what's basically an electrical-plumbing trade, which is perfect for a chemical manufacturing facility - bit of electrics, bit of gasfitting, plumbing know-how.

These are highly skilled jobs. Chemical engineering stopped in Uni of Tas a few years ago, and we hear rumours that it's coming back and we're trying to support that.

Chemical engineering is the pinnacle of advanced manufacturing. When you get chemical engineering capability, you get the flow-on effects of real manufacturing, the civils and mechanicals and the structurals. No disrespect to our engineering fraternity, but at the peak

of it is the chemical engineers. If Tasmania doesn't have that, then it's very difficult for us to enter into first-world advanced manufacturing. That's what we need to keep reiterating.

So, we will build a capability. And again, if you look at a team Tassie perspective around that right to win, and I keep coming back to right to win and the right place, the right time. You've got the Australian Maritime College just up the road and we're producing a maritime fuel hull design, working with the world's biggest shipping companies. There's an amazing intersect there. Then down the road in the Launceston UTAS campus you've got the National Institute of Forest Products. There is an amazing amount of biomass underutilised. It's valuable; it should be utilised more.

As we say, the export market for woodchips is pretty brutal at the moment on the four big forestry companies in northern Tassie, and they need another area where they both get income from, but where we can value at, and align to brand Tasmania.

Jobs will come first and foremost in the chemical engineering space and then advanced operator trades. The third wave of jobs will come from our electrolysers coming from Germany. So, thyssenkrupp will send. We need to have local maintenance and repair capabilities. So, that will be embedded. The gasifier comes from Sun Gas in the U.S., so they'll bring a team over and they'll actually tender out a maintenance team and let's say with methanol synthesis. So, you see a whole new potential industry forming in Tasmania.

Near Burnie, Surrey Hills, HIF has a very similar operation for the very similar reasons, and it's the third operation in Tasmania, second one for us in Tasmania down south. So, what you can see here is if the first one goes ahead, you can then activate project 2 and 3. And, frankly, if you've got three green methanol projects in Tasmania, that's $12 billion-plus of investments, both engineering and renewable energy, and that's intergenerational economic stability for 30 years, et cetera. That's our next industry.

We've got to get the workforce right and we have to make sure that they can come on early, and that's one of the biggest risks of the project, making sure of that workforce modelling.

Mr BAYLEY - Thanks, Simon. Thanks for your submission. You talked about being joined at the hip for substantial new renewable energy projects, and obviously the power purchase agreements that go with that.

You talked about the community sentiment around on-island generation being utilised on-island - and hence, there being a lot more community acceptance for your kind of project. At the same time your submissions are effectively silent on Marinus Link. There's obviously a strong narrative around these new renewable projects needing Marinus Link to get up and to survive.

You talked about risk earlier. Is Marinus Link the final investment decision and the business case that's being developed and so forth - do you see Marinus Link as a significant sort of risk to the establishment of large-scale methanol in Tasmania and your project? Is it a competitor?

Mr TALBOT - We don't think it's a competitor. There is to a degree of first mover advantage which we're working, as I said, quite closely with those north-east renewable energy providers. They could either hold off and wait for Marinus or they can start working with us,

and we basically have a de-risk energy methanol production collaboration platform, which is what we've got.

So, we're not dependent on Marinus first and foremost, and that should not impact our financial investment decision.

However, if somebody has surplus solar in South Australia and Victoria that could come through Marinus during the day, and we could buy it for relatively cheap, we'd be mad not to put that into our future model. It's not in our model at the moment, but we think there is absolutely the ability. We're talking about global competitive bringing solar in through Marinus during the day from the mainland states. Yes, that is icing on the cake in terms of our operations. I have no doubt just as a background, you may have read a number of hydrogen projects closing around Australia not achieving getting into financial design, a number of ammonia projects not getting to the same stage. There are a whole bunch of engineering and chemical engineering complexities around why that occurs and there's potentially what I call a 'just capability' piece here, some of those technologies are a bit early.

The third derivative of hydrogen is green methanol, and around the world we're seeing 15, 16 plants in North America popping up as we speak - similar, slightly ahead of Bell Bay, some slightly behind. We're seeing 10 or 15 projects pop up in China. That's our competitor set. So at all times we have to assume that those projects will scale up, they'll get more and more efficient so when Marinus comes online, we need to make sure we're getting the best possible appropriate electron prices to make the green methanol molecule. So, yes, we do need it, but we're not at this point reliant on it.

Mr BAYLEY - Just to continue on that though - first-mover advantage. I completely understand that, but in your modelling and in your projecting going forward, do you see room for the two of you given the Marinus and ABEL Project Number 1 in Bell Bay - do you see the room for the two of you given the sort of suite of renewable energy projects that are on the table?

Mr TALBOT - Yes, definitely, we do. So, as I said, the only way for us to have a successful Northeast renewal community solution is to be transparent and operate a levelised platform of energy and methanol out and if Marinus comes in, we can't burn one of our long-term PPA partners or indeed a JV partner on the energy side. We need to talk to them about what Marinus can and can't do and we need to talk about an appropriate strategy of lower energy prices coming in. So, yeah, we'll have a first-mover advantage that's not relying on Marinus. Then we'll have a phase two where we need to include Marinus and get some upside from it.

We would potentially even be exporting through Marinus in extreme energy scenarios where we choose to stop green methanol production because it's national energy market has got a high price so we could export back through as well.

Mr BAYLEY - What about, just to follow on the relationship with Hydro, do you envisage striking a major power purchase agreement with Hydro or are you cognisant of their kind of generation capacity and lack of capacity there to assist and it will be opportunistic?

Mr TALBOT - I think that there will be certainly affirming products that will. We've got a draft firming product presented to us that we'll continue to negotiate. We haven't

progressed negotiations and engagements with Hydro for two reasons. One is just waiting for that charter to come through and hopefully some of the cultural changes of the charter board through to executive will occur and it's great to see Rachel being appointed and there's a whole lot of things coming together around our engagement with Hydro.

What will be of paramount importance with Hydro is the need to close the gap between an energy partner not quite hitting their design boilerplate date and us being available. So we might find a situation where we need Hydro to come in and go, 'all right we need to find 50 megawatts, 60 megawatts because solar farm X or wind farm Y isn't quite ready'. We'll be able to cover the gap for an agreed period of time at a commercial rate. That's pretty much normal practice across the globe for major industrial energy using organisations.

We're of the strong opinion - there are two situations. One is when we first started there were six or seven mega sized projects looking for energy in the state and, of course, Hydro had to go 'whoa, hang on guys. We can't pick winners. We have to operate according to the previous charter'. Yes, we can't go. You know, we need to just be very careful here as we stand now - three or four major projects similar size, even bigger, than the ABEL Energy Bell Bay project have dropped out, so I believe there is development energy and the discretion within Hydro. We do not look for any gifts or handouts. We look for commercial appropriate rates around a priority industry to get it up and running and not have it stagnant because it's reliant on another project that may not quite align in terms of approval time. So yes, we will engage much heavily with Hydro particularly if we are announced as lead proponent for the Bell Bay Hydrogen Hub. That creates a demand around the engagement with TasNetworks, Hydro, and TasPorts, which are all signatories to that agreement.

Mr BAYLEY - Thank you. Just one last one, sort of in the energy-use space. I'm really interested in the concept of demand flexibility. I can get it from a technological perspective, you can switch on and switch off and use that really quickly, but my head struggles to understand it from, I guess, a financial and a productivity perspective - how you can stand down staff and rapidly shift your workforce offsite or into another area. Could you just talk us through the practicalities of managing that demand flexibility, not from a technical perspective, but from a financial and an HR perspective?

Mr TALBOT - Great question. The majority of the workforce is actually in the gasification process. This is basically the largest footprint on site. The gasification process is feeding biomass into a very large pressurised chamber. You're not combusting, you're producing a syngas. The majority of the workforce is focused on the gasification and the methanol synthesis.

The electrolyser, whilst being the big energy user, is very much minimal labour requirements. The gasifier, we can't shut down. This uses approximately 5 per cent of the total energy volume, so it doesn't really matter what the energy prices are doing. It almost chugs along on its own steam because it produces the same heat, et cetera, so the gasifier will always be operational. And, we have additional hydrogen storage vessels. If you imagine the two ingredients, hydrogen and syngas carbon, we've increased the storage vessels so that - if there are high energy prices, we will just continue to produce the syngas and store it. The methanol synthesis is minimal energy, so you'll always be producing methanol. Low energy prices, we'll have - call it twice the hydrogen storage we need, so we can switch off the electrolyser.

The majority of the workforce will still be working under high energy scenarios. We're talking perhaps 10 to 15 per cent, maybe a swing shift, you would sort of drop off. Inversely, during low energy prices, that swing shift is going to come back on. Our HR modelling is going to work with shorter, sharper shifts, with the ability to bring overtime in, as required, based on - and AI, we're using a lot of AI now. It's quite fascinating what can be done on AI with - you basically put in energy pricing, biomass pricing, wind pricing, wind trajectory, solar trajectory, battery, NEM market - and it tells you, when to produce, when not to produce, what the forecast looks like. It's not perfect, but you can actually then use the AI technology to forward predict future shifts, shift rosters, and overtime et cetera.

The other key chunk of the workforce is biomass. If you're on a nice autumn or spring day in northern Tassie, you often see the smoke on the horizon. That can be residual biomass left in situ post-harvest that's not economically viable. That's burned. Sometimes it absolutely has to be burned from a fuel-load perspective. All of that can be harvested. It's a whole new revenue stream. We don't want structural timber and we don't want A-grade woodchips. We want the trunks, the branches, the leaves, the dirty material, the out-of-spec material. All of that we'll scoop up. There's a massive new workforce in biomass collection and preparation. That can occur 24/7/365 because it can be stockpiled. There are plenty of areas for stockpile around Bell Bay. There are four big companies doing it. As they do now, they stockpile for circa 50,000 tonnes of woodchips. They'll be able to operate regardless of energy pricing, and stockpile the biomass for us. We've considered it. It's not a massive impact, but it does require us to be flexible with the workforce.

Mr BAYLEY - Thanks, Simon. I will come back to the biomass element, but please move on.

CHAIR - I have questions on the biomass, yes. I might just start off with the biomass. You talked about some of the sources there, Simon, but what about - you talked about the woodchip market at the moment, particularly for some of the bigger producers - Forico, for example, which only operates in plantation. Is that where your target is, to secure the biomass from plantation? Is that suitable?

Mr TALBOT - Yes, certainly so. I have a saying in life, that the customer's always right. The customer wants FSC, PEFC certified plantation biomass only. They do not want structural timbers, rightly so. They do not want first-grade woodchips, unless - you can take first-grade woodchips. The EU regulations on this - they've been the masters of biomass for many years now, and EU regulations on this are extremely tight, as they should be, and require third-party auditing and certification, as does FSC and all those systems. It's called RED III certification out of the EU. The shipping companies buying the product will only deal with us if we produce according to that criteria and audit against it. That's all in the term sheets and offtake agreements. So yes, we are actively working with Reliance, Timberlands, Timberlink, Forico, in particular, on a new revenue stream - front-utilised biomass - and we are very confident that that industry will be buoyed by this project. And, at times this will be a bit of a lifeblood to them in terms of that additional 5 or 10 per cent revenue increase - profitable revenue increase under tough times with exports can mean the world of difference to those companies.

There are also two other work streams in terms of biomass, and the next one is agwaste. Between the four major processing plants in northern and north-west Tasmania, your Simplots, McCains, Costas, et cetera, there's around 110,000 tonnes of what we call straws and sort of waste potential biomass. That's an opportunity to be developed; we're not reliant on that, but,

again, you can see someone coming to us and going, 'if I pelletise or process that, will you buy it? Here's the price?' et cetera - so, you see these downstream industries occurring in true waste. A lot of this material actually goes to landfill and can't be utilised. And, every sawmill in Tasmania, we want the sawdust - again, underutilised; majority of it's not repurposed, et cetera - it's a wonderful resource.

There's a little bit of a - there's an interesting analogy that I make, particularly when we present to school and uni and TAFE students. One kilo of wood, or woody biomass equals one kilo of green methanol fuel, diesel replacement. Yes, you have water, hydrogen added to that, but it's a really interesting scenario that, you know, you take a kilo of Tassie biomass, sustainable, and you make a kilo of fossil-free fuel replacing diesel.

CHAIR - Just on a couple of other points, and we can always come back to the biomass matter. You talked about the importance of the renewable energy development in the state, and there's been - and you talked - there's a couple of parts to this question. You talked about how hydro, at one point - and it was in the media here - that we didn't have one electron to spare. Now, I disputed at the time because I thought, well, there are electrons to spare; we know there are. But what you indicated, there were a number of players who were in the market saying we want so many new megawatts, okay, for our business. Some of those have fallen away.

So, in that circumstance now, where you're still in the game - I'm not exactly sure which others are still in the game - but in any event, should Tasmania be more focused on looking - crowning our own additional renewable energy and attracting businesses to our state, and not have Marinus? I mean, we've got Basslink - for how much longer, who knows? But, would that be a better way to approach - like to say, 'well, let's look after ourselves; let's make our own energy on island renewable and attract the businesses here,' rather than have Marinus we can sell into the market?

Mr TALBOT - Yes, I think I've been publicly quoted as saying three or four generations of Tasmanians have ridden on the coattails of our grandparents who did the hydro schemes, and all of that weight of industry came because of that. I think there's absolute merit - we run the risk of - we'd either be a Nordic advanced manufacturing centre of excellence, focused on renewable energy, or we can be a welfare state where we sell our energy and we use it to prop up health and education systems. Now, we know which way one goes and which way the other goes, and I believe we're at the cusp; we need to actually start backing industry.

What does Tassie want to be known for? And we've gone through this wave of feeling - I grew up in Tassie, went away for 20 years, did the world thing, came back to run this project, so I'm not saying this naïvely, or from a non-parochial lens, but there's a real disconnect between what is brand Tassie and advanced manufacturing, and what is this skew towards, potentially, foodies and tourism. You only have to look at any European economy that's reliant on foodieism and tourism, which I love, it's great, it's beautiful, I love hiking, I love outdoors, et cetera, but it's pretty fragile in terms of employment, seasonality, currency, and infrastructure. The great economies have balanced both. Advanced manufacturing, fit-for-purpose with all those other nice lifestyle and livable elements.

So, absolutely, Ruth, I think we need to actually say, 'We want to have these future industries and this is what they look like, and we're going to invest in them.' That means we deploy our valuable resources into infrastructure that lasts 30 years and creates intergenerational employment opportunities. That hasn't happened enough and it needs to

happen a lot more very quickly. Otherwise, my fear is, if we failed, you can probably kiss goodbye to a lot of the other projects in Tasmania because I've spent two years getting investment into Tasmania. It doesn't have a great investment profile and we need to get big European and Japanese investment back in Tasmania, trusting Tasmania, trusting that their money is going to be well looked after. That's ultimately where it ends.

The answer is, we look forward to the charter being more flexible. We certainly believe there are available electrons. They need to be carefully redeployed and appropriately redeployed under commercial terms to enable future industries, rather than being sold into treasury coffers, frankly.

CHAIR - Just on that, I mean, you're very reliant - you're fully integrated, if you like, with new renewable energy. In your opinion, is something needed from the Tasmanian government to actually make sure the renewable energy expansion moves forward at the required pace to meet your requirements and potentially others - which includes transmission lines? If we look at HIF, one of their major challenges, there's no transmission between Hampshire and Burnie, for example.

Mr TALBOT - Second-hand information, I was told that if you're going to start a new project in Tassie that doesn't have a transmission line, it's a four to five year process before you can even - just to get the transmission line approved and developed.

I think the answer to your question, Ruth, is culture. There's absolutely regulatory - the GBEs need to follow certain regulatory guidelines, but culturally there needs to be a customers focus. I've said this quite a bit to any politician or leader that will listen is the fact that the GBEs need to go, 'Right, this is a state priority, it's a state strategy, 200 per cent renewable target. We need to deploy our best people in an appropriate way to help these projects be enabled'. I run plenty of businesses around the world, you know, 'Here's our vision, mission, strategy. You do this, you do this, you do this.' The risk is one of the GBEs fall out of line - forget the renewable energy providers, if one of the GBEs fall out of line, I'm reliant on the seven GBEs to make the project work.

Culturally, we need this alignment to be clinical and business-focused. It's good. I think you have TasNetworks Connect, which is flipping out a much more constructive engagement approach. That's great. That's pretty new. It's a bit of a bag of liquorice allsorts, what you get when you engage the GBEs. Some are customer-focused, some are not. That's got to change. Again, we can discuss energy matters, but GBEs matters as well, because one's the back end and one's the front end to make the manufacturing process in the middle work.

It is cultural change, getting things done quicker, absolutely. That can be as simple as staging gate processes around, 'Okay, GBE X, what's your approval process? Where're the time differences? What makes up those time differences? Is it really waiting for your board to meet once every two months? Well, I tell you what, this a $4 billion investment in Tasmania. Four times the size of the arena. Surely, we bring forward the board meeting, out of sessions'. - 'We don't do that.' These are live conversations that happen and you sit there going, 'I thought I was the customer investing in Tassie, but you can't have a board meeting to enable me to invest in your state', and on and on it can go.

We're very optimistic that if we present our project with our energy partners well, that one or two or three of these projects become the beacon for the Tasmanian economy from an

advanced manufacturing perspective and that the GBEs can case manage, put their best people on it. They can identify, streamline processes. Yes, the government's doing a whole lot of activity in this area. It does take time, but it also takes cultural passion within the GBEs to want to be different and change.

CHAIR - Yes, there is a body of work going on, I think, around the governance, which absolutely needed to happen from some of the GBEs that I've sat across the table from. But my question also was focused on - we've seen a number of proponents of particularly wind, but some solar, seem to take an extraordinary amount of time to get their projects either rejected or approved. Sometimes they possibly should be rejected, they're probably in the wrong place, whatever it is, but it seems to be going on and on with no certainty; no certainty for the community, no certainty for the proponent. You're reliant, as you said, joined at the hip with some of these new proposed renewable energy developers. Is there anything there the government needs to do? Part of it is related to GBEs like TasNetworks, for example, but part of it's the approval process. Do you have any views on that?

Mr TALBOT - The major projects approval process we went through, was offered to us so we've just gone through it in detail. I think that is quite a significant step forward. We didn't need to do it because we've got an old power site being flipped to a new power site for the George Town council reclaimed land. There's no EPBC (*Environment Protection and Biodiversity Conservation Act*), it can all follow straight development approvals. But having gone through the major development pathway, yes, it's early, it's new, not a lot of projects, but one of our wind proponents is enjoying going through that pathway. They're seeing the ability to meet the timelines that we sort of have and that they have. Yes, so I think it's early days, but that major approval process would appear to be working and would appear to be creating some of that cultural alignment to get this job done within 18 months sort of scenarios. So deadlines are great and - yes, 18 month timeline for approval and the major projects holds the state to account, which is great. That's what it should be.

CHAIR - There's still needs to be -

Mr TALBOT - Sorry, I think the process outside major project pathways is a lot more complex and has a lot more uncertainty, but I haven't been through that so I probably am not able to comment in detail on it.

Ms FINLAY - I wanted to go back to the conversation about firming and others, but you mentioned the GBE without being open to rescheduling board meetings. Are you open to sharing which GBE that was?

Mr TALBOT - It wasn't one. It was potentially multiple, you know, the executive meeting only meets here. One was an exec meeting and one was the board meeting.

Ms FINLAY - That’s appalling.

Mr TALBOT - To be fair, I can't recall which one it is and I wouldn't want to be put on the spot.

Ms FINLAY - No, that's fair, it was a cheeky question but worth asking. The issue of firming was raised before. I had someone share with me recently positivity around the connections that are being made in the north-east in terms of generation and load sort of

collocated - it's neat and it packages up nicely - but at the same time expressing a level of curiosity about the distance, the geographical distance between where your spinning reserve would be so back down at, say Poatina or somewhere and whether that causes any challenges that you're so geographically dense in one area and what that does in terms of opportunity risk. It was further shared with me that there potentially was a role for the Tamar Power Station to play a role in that.

I don't know whether that has been - I haven't asked you about this as it was only a recent conversation, but I don't know whether you've had any thinking about that or whether you can speak to that at all?

Mr TALBOT - Thanks, Janie. The batch, what we found - so this is a bit of an evolution to that - we found that solar wind and battery is really important for Tasmania for that reason. Batteries are absolutely central and maybe it's up to 48 hours of backup capacity. The battery alleviates the risk, you know, alleviates the geographic risk and so that'll be the first comment I'd make and the - sorry Janie, I forgot the second part of the question.

Ms FINLAY - It was just whether - I know you spoke a little earlier around the opportunity in terms of managing risk by potentially being able to fuel the power station immediately next door differently. But it was a different question, I suppose, it was raised, what if that became generally operational, could that actually provide that spinning reserve role and would that be a positive or not? It was just something that someone raised with me.

Mr TALBOT - I think there's absolutely a great opportunity to get people far brighter than me in the electrical engineering space to sit there and go, 'This is what the Bell Bay Power Fuels Able Energy Project does, and this is what the Tamar Valley Power Station does'. Where do they complement each other? Where do they potentially compete? Some of those turbines there are, you know, quite old, I've been told. So, they potentially need replacement or refurbishment. Before anything's done, let's have an open conversation around - well, what happens if you had a turbine there that ran on hydrogen, in the future, et cetera. One that's turbine that ran on green methanol?

I think there absolutely is a conversation, if you wanted to take Tasmania off natural gas - bang. I mean, if we're operational and Basslink went down, there's no Marinus, you know, you can see a scenario where we could easily be the backup supply for Tasmania. On site, there are three very substantive 50,000 tonne tanks storing green methanol. That storage on site next to your power station is unheard of in Tasmania. I said it's weeks and weeks of energy capability there. There is a piece for me around sovereign fuel risk. Absolutely, we could be the backup there. There's another piece around ultra-high energy pricing where we sell into the Tamar Valley Power Station and able to meet that need and drop that energy pricing and stabilise the grid.

We produce technically three combustible elements. We produce green methanol at the end. We produce syngas which turbines run on, and we produce hydrogen which new turbine technologies run on as well. So, there's got to be something there will be. Will we always be as cheap as natural gas? Probably not. But do we need to be? Not under peak energy loads.

That needs to be modelled. I'm not letting the team get distracted by it now, but we'd like to start, you know, sort of fertile conversations on it.

Ms FINLAY - For my technical benefit, you often refer to green methanol as a drop in fuel. You just mentioned if we wanted to transition out of gas, I think gas plays a role in Tasmania for a very long period of time based on our industrial needs. I wasn't necessarily recommending referring to that.

Does it need to be completely reimagined for that to happen? Or is it a drop in replacement opportunity?

Mr TALBOT - We are working actively with Tas Gas Solstice on the ability to look at some green methanol domestic solution sets, which some are actually quite progressed. You can actually blend, as I said, we make hydrogen, we make syngas, we produce surplus hydrogen. So, we're looking at blending hydrogen gas into LNG. We had Hitachi on sites from Japan. We've got the membrane filter technology to separate the natural gas, put into the pipeline, and then that filter technology can then separate the hydrogen into a smelter for a green aluminium product and separate the natural gas. All those elements, yes, are being looked at. Lots of transition opportunities, I think.

Ms FINLAY - That's fascinating. Thank you.

Mr EDMUNDS - Hi, Simon, my name is Luke Edmonds. On page 3 of your submission you talked about the target being to have built a project in commenced production of at least 300,000 tonnes per annum by 2028. I know the submission was only from a few months ago. I'm just interested in whether you think that target is within reach? Then perhaps, as a supplementary question, what risks are still in front of you? Again, back to what Ruth said, how you can be better supported by government, but also by the parliament?

Mr TALBOT - Thanks, Luke. If I'm producing late 2028, everything's gone perfect. I think it's probably 2029 to be transparent. We're looking at things at the moment. What has delayed that? Just investor appetite for Tasmania. It's actually taking us longer. It's not engineering or an input or an output component, it's just getting the investors comfortable investing in Tasmania. We thought it takes 6 to 9 months of taking 18 months, and without investors, you don't have a project. So that's been the delay.

However those investors are now in. It's of paramount importance that we don't have a delay, because you know you can see them going, 'Oh hang on, you convinced us to come to Tassie with our bank sheet, our bank balance, and now we've got delays'. We are having constructive conversations - Premier's Office, Energy minister, shadow, et cetera. We play a very transparent, open engagement process. We're saying it has to be a team Tassie approach. There can't be any more negative news on Tassie's investment appetite out there. We need bipartisan support for green methanol and future advanced manufacturing in Tasmania. This is an image thing, and thankfully that's occurred to date, people have been very supportive regardless of any political persuasions. We're very thankful for that.

We now need GBE alignment, I think. What else do we need - you mentioned, Luke, I think we need to go through a process being appropriately appointed lead proponent for the Bell Bay Hydrogen Hub. That aligns the GBEs in the Bell Bay area to have a service delivery. We'll ask for the A-Team from those GBEs to turn up to a weekly meeting and we'll actually just line it all up. Here are our deadlines, here's our energy partner deadlines, here's the intersect with GBEs, water, rail, road, ports, network, Hydro.

It's fairly - it sounds really complex, but people will have to attend the meeting and be accountable for hitting the milestones. If they don't hit the milestones, there should appropriately be a red line straight to the energy minister or the Premier's Office, to go, 'Priority projects, not hitting its straps, we need an intervention', et cetera. Or there should be someone in the room, potentially, very well-regarded, high-profile figure, chairing that meeting, where everyone has to be accountable. It's not all about us. There'll be four or five industry partners in the room. Something, so we're changed.

I think it's fair to say - this came from a conversation I had with a few old guys who worked on the hydro schemes. My grandfather's worked on hydro schemes as well. They challenged me and said, 'Look, when was the last billion-dollar commercial project in Tasmania?' I went, 'Huh'. I'm scratching my head, we're all trying to think. It's been a long time. We're not winning in that area. Let's have an honest conversation, say we're not winning with appropriate major advanced manufacturing projects. We need to change something to make sure that we are winning. When the first one comes, the second one comes, the third one comes. People have said to me that we're competing with HIF. No, we're not. Different water catchment, different energy catchment, different biomass catchment. We're the biggest cheerleaders - I'd love to see three or four green methanol projects in Tassie. We've just got to get the first one up to break through this investment barrier that we face and this cultural barrier of getting big projects done in Tassie.

CHAIR - Accountability's important.

Mr BAYLEY - Simon, on two of the major inputs, just quick clarification around water and biomass - on the waterfront you talked about being a major customer, and the federal state hydrogen hub. Do you see a role, or in your business plan, does ABEL make a contribution to the infrastructure element of delivering water to Bell Bay, or is your engagement in that space purely from an off-take perspective and an agreement around water purchase?

Mr TALBOT - Good question. I think there is a twofold answer. The first one would be that we'll pay the right commercial price to enable the scheme to work. I'm on a Tas Irrigation scheme disclosure in the north-west where I live, and it works. Government puts in a contribution, the farmers put in a contribution, et cetera. Thankfully, obviously, the legislation has been changed to allow industrial use. As an industrial operator, we'll pay a commercial rate that probably makes the whole scheme bankable, frankly. That's the first thing. If you came to me in 12 months' time and said, 'Look, we'd rather you guys made an infrastructure contribution', we'd be open to that conversation because we'd just ameliorate that across the life of the project. Either/or, we're happy to have that conversation. However, this is the investors' point of view - Tasmania said, 'We're open for business'. Here's a site, we tendered for the site, we purchased the site. They said, 'Here's renewable energy, here's water, here's infrastructure support'. We don't want to be too miserly and start taking things back. It comes back to that big investment in Tasmania - if we start sort of stepping back, 'Oh hang on guys, do they really want us there?'

The real risk is that speed's pretty important. We've got a sister project in Townsville, and identical - almost identical - and that project in Townsville - the Tassie project was five years in the making to get where it is. The Townsville project's been two years in the making. It's getting close to the Bell Bay project. The Queensland government released some land before Christmas. You know, that's what we're talking about. We're talking about speed to market approval processes.

And, you know, I don't like flying to Townsville from Launceston. It's not the greatest. I could probably be in Europe quicker. So, we're trying to get Tassie up first, et cetera, but we can't blink or have any more sequence failures.

Mr BAYLEY - Yes, understood. On that conversation, you said you're open to around a capital investment in the infrastructure. Are you saying your project is this far down the pathway to realisation, and those conversations aren't happening with government?

Mr TALBOT - I'm comfortable on the water one. I will want to see some good engineering design work, say sort of mid-year, like it's - there's sort of high-level commitments there on the water side, absolutely - high-level commitments.

I haven't gone through the Tas Irrigation business case, but I know - the sort of price we offered and the volumes, we must - I think it'll all work. I think it's literally just somebody put in some resources behind it to make it delivered.

But, the counterpoint is - and this came from a senior government official - the counterpoint is, 'Why don't you guys just do a desalination plant? ' and I said, 'Alright, we were promised water. We're 0.25 per cent of the Trevallyn Dam, so no impact whatsoever. A desal plant is 75 to 150 mil, but it's a five-year approval process, EPBC, saline wedge into the Tamar. It'll be our biggest impact by country mile'. All of a sudden, it's a dealbreaker.

Mr BAYLEY - Understood.

Mr TALBOT - Yes, whilst we have it -

Mr BAYLEY - Yes, thanks. And look, one last time, if I may -

CHAIR - We are out of time.

Mr BAYLEY - Just on biomass, I was just going to come back on that. You spoke about effectively the customer being king, and certification being required to talk a lot about plantation. Have you ruled out, and how do you lock that in, using native forest product?

Mr TALBOT - At this moment, native forest product is not a part of RED III standards or our term sheets for offtakers. So, it's not a consideration. And we don't - we've got 900,000 - we need 600,000 tonnes of wet biomass per annum. We've got 900,000 tonnes in signed term sheets of plantation FSC-certified biomass residues. I don't need to go anywhere else.

Mr BAYLEY - You don't need to go there, yes.

CHAIR - We might have to leave it; we've got another witness here. I'll pull it up. Thank you very much for your time, Simon. It is an interesting project, and yes, I watch with interest. Thank you for your time today.

Mr TALBOT - Thanks, Ruth. Thanks, committee.

THE WITNESS WITHDREW.

CHAIR - Welcome to the three of you to the public hearing for the Energy Matters Committee. This is a public hearing. It's being transcribed and recorded by Hansard; it's also being broadcast. So, the information you provide today will form our evidence base, and will potentially be reported on in our report.

Everything you say today is covered by parliamentary privilege. That may not extend once you leave the room, so just keep that in mind if you're speaking to others afterwards. If there's anything of a confidential nature you wish to share with the committee, you could make that request; otherwise, it's all public. But, indicate if there's something that you wish to discuss in private or in-camera.

We have your submission, and thank you for that, and also to the previous inquiry that was on foot before the election was called.

I will invite all three of you to take the statutory declaration there, as part of the formal proceedings before we commence. And then, I assume - Cam, you're the major spokesperson?

Mr NELSON - Correct.

CHAIR - If you would like to speak to your submission and add anything further. Are you happy with first names?

Witnesses - Yes.

CHAIR - Just to introduce our members - we've got Dean Harriss down the end, Craig Garland, Mark Shelton, Luke Edmunds, I'm Ruth Forrest the Chair, Janie Finlay and Vica Bayley. Thank you.

Mr CAM NELSON, CHIEF EXECUTIVE OFFICER, **Mr NICK SISSONS,** HEAD OF VIRTUAL POWER, AND **Mr LUC van DUINEN,** PRODUCT LEAD, VIRTUAL POWER, DAME, WERE CALLED, MADE THE STATUTORY DECLARATION, AND WERE EXAMINED.

CHAIR - You also might like to outline your various positions in the company too so we know where you're coming from, if you wouldn't mind.

Mr NELSON - Founder at DAME, and CEO of the business. I've got Luc, who's joined us today, who is our product lead for our Virtual Power Plant, and Nick Sissons, who's our Head of Energy. So, two very relevant people for this sort of committee to be able to lean on our experience.

CHAIR - Great. So, would you like to speak further to your submission or add anything to it? I mean, this is - it is an area that we don't have any technical knowledge in, so to speak. It is, you know, a complex industry, and I'd be interested to know more about how your business works.

It seems as when we did ask Hydro about you, they weren't too keen to talk too much because they see you as a competitor.

Mr NELSON - In some ways, yes.

CHAIR - Which is fine. I'd just be interested in you describing your business and how it fits into this.

Mr NELSON - Yes, in some ways you could see our industry as a little bit of competition. We started the business back in 2019, actually talking to Hydro Tasmania. Both Luc and Nick are ex-Hydro Tasmania employees, but have been involved in the energy industry for many years.

DAME, as a business, acts like a virtual power plant. We do use computers and we use load. But we're trying to then change or shift the use of power to match when there is excess or, you know, capacity inside of the grid, and then decrease the amount of power we consume when there is demand.

So, if it's a hot day and the air conditioners need to be on, that we can reduce our power and that power can then go to homes for air conditioning. Or if there is a need to produce heating, you know, in the reverse way, that the same sort of token - that we can respond within seconds to what the grid conditions are.

There are a number of developments taking place around the world around virtual power plants, so I can understand why Hydro Tasmania might look at us as a competitor. But one of the things that comes from virtual power plants is an increased efficiency in the delivery of power - from those generators like Hydro, but also wind and solar - that means that there's a lower cost of energy to all consumers by having somebody who provides grid stabilisation services, and provides that uptake of energy that would otherwise be wasted at certain times.

Hydro Tasmania is one of the companies that would benefit from being able to run their operating systems at efficient levels. Sometimes there isn't enough demand inside the state, and they actually have to decrease the amount of power that they're generating so it's not wasted - which we all understand, you know, you don't want to waste water for no reason. However, the efficiency that you gain from that water going through, means that you're generating less electrons per unit of water going through. There is an efficiency gain from having a company like DAME playing a role inside of the grid in Tasmania to consume power when it's free or available and then, you know, releasing that power back into the marketplace when it's required.

We've been on this journey since, probably about 2018 when we came up with the concept of playing this role as a virtual power plant inside of Tasmania. We had our first discussions with Hydro Tasmania in 2019. We purchased our first property off-site here in Tasmania in 2020 and a second one last year. We have two sites that we're developing already and we're in discussions for a third site at the moment in Tasmania.

All our developments have been here. That said, we do speak elsewhere around Australia with what is taking place in the energy transition and are trying to play a similar role. But we feel that Tasmania is best placed to be the battery of the nation and generate excess energy here that can be shifted to the mainland as an export product.

It doesn't come with any emissions or so forth in getting it out there, we don't have to worry about changing the port structure or the logistics of shipping energy away. Marinus in itself is the largest piece there and that is obviously a federally supported project that has been

earmarked to proceed. There is a pathway there for increased generation and transmission for Tasmania to be a revenue generating state on electricity.

CHAIR - Would DAME have a role then if Marinus was not built?

Mr NELSON - One of the things that we can do is we're location agnostic. If we were talking about a renewable generation project that needed transmission or Marinus to shift that energy across to the mainland, we can set up at that location or near to that location for a period of time to consume that energy. Then, when Marinus is implemented or the transmission to the main grid is established, we can then remove ourselves or scale down our operations on that site to an appropriate level. That means that the energy can go back into the grid or be transmitted across to the mainland.

CHAIR - The question, I guess, was more around - could Tasmania benefit from having the additional renewable energy developed on-island and be used on the island to attract business here? What's your view on that?

Mr NELSON - Absolutely. It is an ecosystem when we talk about electricity. There are benefits to not exporting it and there are benefits to exporting it. A lot of those decisions are outside of my pay grade and I come with a certain opinion.

If it wasn't being exported, we would be able to scale our business in Tasmania and be much larger here on-island. We are already looking at manufacturing our equipment here in Tasmania and we have done some manufacturing already on-island for our prototype or our first sites. Our second site, we're going to be increasing that manufacturing and assembling inside of the state, but we would look to set up more and more and are looking to set up more and more production and manufacturing facilities on the island.

If you weren't exporting it, our ability to scale here is not limited. We don't have the normal constraint that we have as an export market where you have to have a boat that will transport your export product away. We use the Internet to transport our packets so we can provide services to anywhere in the world as an export market.

CHAIR - It's a fairly energy intensive business. I mean Tasmania is probably, in some respects, not an ideal location temperature wise and things like that. Is that not an issue?

Mr NELSON - Temperature is good. One of the things is that, when it's energy intensive, the energy gets converted into compute power, but the byproduct is heat. Heat is what we have to manage and a lot of what we're learning to do inside of our business and becoming world class at is the efficient use of that energy.

While we use a certain amount of energy, data centres traditionally would use an extra 15 to 20 per cent of their energy, and these are the world class ones, use an extra 15 to 20 per cent of our energy cooling those computers down. We're looking at a target of around 2 to 3 per cent extra energy to cool them down. We do that through larger capital investment up-front, and that's the capital investment that we're looking to bring to Tasmania to do manufacturing of the equipment that keeps those computers cool, and does it in a highly efficient manner.

CHAIR - With some of the large proposed wind farms - let's talk about Whaleback Ridge, for example, which is potentially up to 400 turbines. That's what they spoke to us about, that's some time down the track, obviously, most of those things are. But if we were to produce a lot of additional renewable energy - the variable renewable energy - a lot of those are being proposed because Marinus Link is in the picture. Do we need Marinus Link if something like DAME is around to manage the ups and downs and flows, the variability of that energy?

Mr NELSON - DAME can be an off-take for a consumer of that energy for Whaleback Ridge. I think as a state there is a lot of benefit from having Marinus in place, to have redundancy or resiliency in what you can offer out. I say that as - if we were taking all of the load, that would be great for my business. But if you're looking at it from a state perspective, the resiliency to be able to export and import power provides the ability for not one entity like DAME or others to end up being too big for the state that - having somebody who has outsized impact upon the economics of the island.

CHAIR - You can obviously - well, I assume; I don't presume to know how it really works - but you could scale back - like if prices peaked, you could scale back? If demand suddenly increased, for some reason, you could drop back?

Mr NELSON - Correct. A nice analogy might be thinking of a dimmer switch on a light bulb. You can increase and decrease the amount of power that goes through the computers. You might have heard about overclocking a computer, where you get the best performance. You can also underclock a computer, which might not go as fast, but it's a lot more efficient. When we're doing those sorts of activities, we're losing efficiency when we're overclocking, but we're using more power inside of it. When underclocking, we're being more efficient in what we're generating. It's closer to going 120 kilometres an hour using a lot of petrol versus going at 60 kilometres an hour and using more efficient driving mechanisms. That fuel mix changes and your performance outload.

What we can do for something like Whaleback Ridge is do that in real time with their generation. At the moment, most renewables inside of the grid - and this is an AEMO forecast - is for around 30 per cent of those variable renewable energy generators, to have 30 per cent of their power not even sent into the grid. When you talk about people who are trying to get renewable projects greenlit, they have to go to an investment, like a banker or someone who has the finances, and they're saying, '30 per cent of our revenue will not even be realised,' which means the cost of the other 70 per cent increases. This is where, when we talk about having a real impact, if you can increase the generation of those projects by 30 per cent, the financial returns to the investor, to the generator, are much quicker. The penalties upon them of interest rates or financing that project decrease, and the cost of the deliverable energy reduces really quickly. That's where we think it's so important that we have this discussion around using energy to then free up energy. So, you're not trying to store it -

CHAIR - I'll ask one more, I'm sure there's others. If you were to outline a strategic direction for Tasmania in terms of our energy future, if you like, and how we as a state deal with, respond to, and be part of the energy transition, what would you describe as a strategic direction the state should have?

Mr NELSON - I think there is a lot of research that's been done around the world, but inside of Australia, inside of AEMO, in their integrated system plan. That ISP shows the cost of delivering electrons, the cost of storing electrons, or trying to build other types of things.

The cheapest electron that anybody can ever get, so the cheapest unit of energy, is the one that was generated and delivered straightaway. Trying to store energy increases the cost of that power. Now, there are times -

CHAIR - And transmitted. There are obviously losses and everything.

Mr NELSON - Yes, so that's probably the second piece that I'd get into around how the market reform on energy prices or how energy is priced, should be a closer reference to the energy that's being consumed and the cost to deliver that energy. So that, where you're transmitting a long period of time that people are having to pay for that and people who are using it locally, you know -

CHAIR - Marinus Link's a fairly long transmission line.

Mr NELSON - It is, but you also look at the technology they're using. They're using the DC, direct current, which means they're able to reduce the amount of losses that they have across that distance. Distance isn't, by itself, always equal, but you can work out exactly what the loss is. If it's 15 per cent or 20 per cent, you can work that out and factor that into the cost of energy that goes to somebody who's consuming, you know, us and others that consume power.

Mr EDMUNDS - Maybe just one supplementary on that, if that's all right. Where do you see DAME fitting into that. The bit in your submission where you talk about being a partner, not a parasite really leapt out to me. Could you just maybe elaborate a little bit more on where you see yourself fitting into that going forward?

Mr NELSON - We do use the 'partner, not parasite' motto, and that's like, when you walk into the room, how do you form a partnership that we can be working together in 25 years, not walk into the room and try to take something? That doesn't help anybody and it doesn't lead to a growing economy and a proper viable society. So, when we look at those sorts of interactions, we look at it and say, 'Right, how do we design our system to be compatible with a variable energy and the variable supply and demand that we have?' Asking mums and dads to change their operation at home of like, 'When do I turn on something or turn off something? Am I allowed to put on the dishwasher now? Can I wash my clothes now?' We can't expect that to just happen overnight or even necessarily happen. I don't think society really wants to have that sort of reach into their household asking them to say, 'You're not allowed to use power now.' We all appreciate that there are certain times of peak demand or when something has happened that we all come together and work together, but we would like to do that as our daily thing that we operate inside of the grid and have an automated response to be a partner with TasNetworks, be a partner with Hydro Tasmania, not a competitor and definitely not a parasite.

Ms FINLAY - Yes, that's interesting. I think, at a conceptual level, I get the idea of the business and the benefits of that for you as a business and seeing the opportunity investing where you can soak up or release excess or under delivery of energy and I hear you say that as an intermittent generation like a wind farm as it's developing in those early stages, you can provide a buffer and smooth out that process while it gets to peak performance.

I suppose the bit that I'm interested in is are you having PPAs directly with generators or would you be a customer through Hydro of generation? I'm not quite sure how that bit works and, therefore, other than helping the system, what's the economic driver to Tasmania? I get

the benefit to you as a business in the energy system because generally we talk as a measure on jobs and those sorts of things and this will be low in that area I imagine for the investment in the potential. Can you talk me through all those things? How it works not just for you as a business, but for us as Tasmanians, what's the benefit of the project in that way?

Mr NELSON - Yes. There's a few things in there. I think, if we looked maybe starting with the last one, jobs. We are going through an economic study, using our site in Georgetown that we've developed as a basis, to show what we do when it comes to jobs. But, we've had people who have finished - they've been let go from Liberty and Rio Bell Bay, and then they come and worked for us the very next day. So, our skill set of what we require for our businesses are old-school skills that we can bring straight into our site and get benefit and uplift in there.

The jobs, most of the spend of building these facilities is local works. We have an engineering group based out of Georgetown that has done all our manufacturing of our stainless steel pipework and moving the fluid around. We have local electrical engineers and electricians -

CHAIR - So, there's something to see physically at George Town already.

Mr NELSON - Yes. We've had people come through. I don't think people realise how much labour goes into it. If we're developing a site, we'll be looking at somewhere like 60 per cent of the cost going into the building costs, and they are literally building jobs that are going into the site.

Once we get it operational within, we still actually have operating expenses and operating costs, so we have maintenance staff. But then you will have all of the servicing that goes with electrical transmission, electrical distribution equipment on site, plus security - although it's sort of basic things, keeping the site weed free, it is wherever we set up a site, we end up having an ecosystem impact around there, an economy impact. It extends quite far. From George Town, we have a lot of people working from Launceston as well, coming up to George Town to work.

CHAIR - Why did you choose George Town? It's interesting, what was the benefit of that place?

Mr NELSON - When we started with DAME, we liked the concept of Tasmania and selected Tasmania as the ideal place to come because it had Hydro Tasmania, so it had hydro as a base load, but it was trying to become 'Battery of a Nation' with renewables and variable renewals, which was a particular thing that I was trying to challenge.

We figured that in George Town there was a couple of projects that hadn't got off the ground but were really promising. Solar projects up there that looked like they might be able to get up and one of them has since, and that is within a few hundred metres of our site. We picked it as a nice spot to be able to prove that what we were doing works inside the grid really well, inside of Tasmania really well. And it has the right blend of resources and skill around engineering for us to be able to deploy there.

It is a challenging business that we're in, but we have people who are exceptional - their background of working on challenging projects and coming up with success. And they've been essential for us to get the wings that we've needed to get at George Town.

There were a lot of factors in there. The other one that comes in is the potential constraints that happen inside of the grid, if major industrial ever falls over in Bell Bay we already have an understanding and a way to deliver inside of that workforce, and have a presence up there. So, we've been using that as our research and development site there. There's a lot of ongoing testing. We have an upgrade going on at the moment that means that we have got about 15 engineers on site working through that upgrade to the hydraulics.

CHAIR - Are they electrical engineers?

Mr NELSON - These are actual hydraulic and mechanical engineers. It's an engineering firm out of George Town that are on site, and it's all of their resources that are in doing that work.

Mr BAYLEY - Thanks for the submission. Obviously, with respect to your vision and experience and, I guess, a business, you know 30 per cent savings or 30 per cent greater efficiency with a wind farm and benefits within the grid. It begs the question, is it simply IP and the fact that you have some of the knowledge as to how to do this work and deliver these efficiencies that gives you a place in the market? Why aren't the generators themselves doing this work? The GBEs themselves and the government themselves utilising this kind of technology to deliver these kind of efficiencies? Why is it effectively a third-party startup that is having to identify this opportunity and deliver what sounds like some relatively profound efficiency gains for the network and for individual businesses?

Mr NELSON - It's probably the capital required to go into something like this. You're starting to then ask, you know, if it was Hydro Tasmania or TasNetworks, are you going to allocate $500 million to go and build out some data centres? Or are you going to stay in your core business of building electrical equipment or your core business of storing water and generating electricity from water? It doesn't preclude them from doing it. It becomes their mandate really from the government to say, 'Should we be getting into this industry?' It is a hard industry to enter into. It has been a large journey for us. There's a significant amount of IP that goes into it. We also form partnerships with private investors to bring the capital required for those jobs. We are looking at $500 million coming into the state.

Mr BAYLEY - In terms of the 'partner, not parasite' position that you put, I get that. How would you describe the conversation with government-owned businesses and state-owned companies in that context? Are they seeing you as partners yet? How are those conversations progressing?

Mr NELSON - It varies. Like everything. TasNetworks has really seen us as a partner. They have their own challenges - in the workforce, in being able to deliver inside of an efficient and timely enough constraint that works for us. We sign up a partnership with a commercial deal with an investment partner to deliver a data centre, then the clock's really on us to deliver that. We're talking about large international companies that are looking to implement data centres inside of Tasmania and they're looking for performance. So, that's something that is really important, for us to have a strong partnership with TasNetworks to deliver upon that. We certainly get stuck on some red tape at times on some things. Other things that they're working

really hard on to try to make sure that that is a success for both parties and that we drive together. We get a really good strong partnership there.

With Hydro Tasmania, that's probably been a bit more challenging, speaking frankly, on the journey there. I think Ruth mentioned before that we're seen as competitors, which is a bit, you know - it's a bit interesting. We have engaged with them proactively over the last six years to try to be partners. We have struggled, and there was a question before around PPAs, but we've struggled to be an offtaker for all, to sign a PPA, when we can't get guaranteed firming from Hydro Tasmania to be that offtaker. If you want to do Whaleback Ridge, and they need to have someone who is going to buy their power for that project to be investable by the financier. They'll be looking at, say, seven years to develop that site. We'll look at putting our money in, but again, there is somewhere between $500 and 750 million going in to develop a data centre. Then, if, for whatever reason, there is a delay of three or six months on the generation of the wind farm, we're unable to get power supply to us from Hydro Tasmania. So, we would be looking at sitting idle for that period of time.

Mr BAYLEY - What do you think is underlying that reluctance to sign a power purchase agreement? Is it availability of power or is it the competitor dynamic that they see?

Mr NELSON - I think some of it is competitor dynamic around - they have the ability to participate in all aspects of the market at the moment. We do, by us existing, it does make it more efficient for generators to be out there, so it does put some pressure on them. But, I think that sort of comes down to the challenge that Hydro Tasmania has - are they a for-profit organisation or are they for the lowest cost power for Tasmanians? Noting that industry has a different role in there versus Tasmanians versus businesses - private citizens' power prices versus industrial power prices will always be different, but they come with different components in there. There are some challenges, but they need - or we need clearer guidance from them around what they would like.

Mr BAYLEY - And what about government? Are you seeing government take positive steps to try to break down those barriers and facilitate conversations and partnership?

Mr NELSON - To be honest, we haven't - we spend more time, when we talk to government, more around the education aspect, around what it is that we do. We're not seeking handouts. We're not out there asking for money, or asking for things there -

Mr BAYLEY - I don't mean handouts. I just mean the policy support and some of the encouragement of what is at the end of the day a government business to engage in a different way.

Mr NELSON - Yes, but even on the policy, we're not asking for changes in policy. It really comes down to if Hydro Tasmania would enter into a PPA with us and talk about it, then that's a discussion to have. But we haven't even had that discussion with them for, I think, five years almost, four years.

Ms FINLAY - Despite effort?

Mr NELSON - We keep having interactions with them, but they've gone through some challenging times over the last four years. COVID made it harder for people to stay closer with those discussions. There's constant pressure on the state energy from pricing, but the jobs - It's

a balancing act that, as I said before, it's outside of my pay grade to say where they should or shouldn't -

CHAIR - Sorry to interrupt, if you see yourself as a customer, if you're seeking a power purchase agreement, does the new ministerial charter positively affect that? I mean we've - from our last witness, I'm not sure how long you were in the room for, but they were talking about some of the concerns around some of the governance and focus of some of our government businesses - they were dealing with six different ones, which is possibly not quite the extent that you are. But there's a call for review of the governance frameworks for government businesses, and part of that was on the back of a complete stuff-up with our berth delivery for a new ship and the behaviour of some GBEs around that period. So, it wasn't a reflection on the energy entities, but there has been a new - a revised charter. Does that impact your potential negotiations or are there other things that you need from either the government or from, in this case, Hydro being the relevant GBE, to have perhaps a more proactive response?

Mr NELSON - I think you start to come into a balance of where does energy - because energy is still a scarce resource. We can't just have anybody turning up and using power willy-nilly. It's where does energy go and why, and where does it fit into that road map for the state.

We don't think we're entitled to anything, but we do want to be part of that conversation around, 'Is there a role for us to play?' If there is not, in Tasmania, because there isn't energy or it deems that this industry isn't wanted in the state, then that's a decision from the government and from Hydro Tasmania to a degree that that means that we can shift our efforts somewhere else. But it's probably the clarity that we're after rather than anything else.

Mr BAYLEY - Have you got timelines on that? Sorry, just while we're on that. Are you champing at the bit for that decision and that sort of clarity?

Mr NELSON - We have always got ongoing commercial discussions with investment partners to develop sites. If you look at the speed at which the computer industry has moved over the last two-three years, but even the last six months, if you look at the way that AI is moving, there is a large need for data centres across the world.

Australia is targeted as a $115 billion digital ecosystem for us to tap into. That's like annualised revenue. We haven't even really scratched the surface on that yet. If we're going to do this as a nation and if we're going to do this and play a role as Tasmania, as part of that, then that needs to happen sooner rather than later. Otherwise, it's a zero-sum game. Other states will pick up the opportunity and move ahead.

CHAIR - I just want to be a devil's advocate on that for a minute, if I could. We've heard from other major energy use proponents and the general theme appears to be that, 'Well, we'll up our usage when the prices are low or negative,' which we know happens when there's a lot of excess variable renewable in Victoria and South Australia, 'and then we'll scale back when the price has spiked.' Now, if Marinus Link is built, there will be spikes. So, if everyone decides to down tools and withdraw the demand at the time when this price spikes that doesn't really compute. As I understand it, it has to be finely balanced. Surely, everyone can't be a winner here. What happens when the price spikes?

Mr NELSON - You're right in that the price will drive certain inputs. It is not that everything powers off and it's not that everybody is positioned in the same time ready to power off. The locality of where the issue is when somebody wishes to decrease means that that will also have an impact. So, you have voltage that's on the lines and frequency constraints, congestion, as well as price, there are a number of factors that go into it. It is a physical attribute, electricity, a lot of people think of it closer to the Internet, but we have the poles and wires there for a reason, because it's physical. Now, those physical constraints mean that, yes, everybody can't turn off at the same time, but what you'll find is that as power prices -

CHAIR - Or turn on at the same time notionally.

Mr NELSON - Correct. But as power prices go up, people will start to signal where they're going to exit the market, so you end up having the volatility swings decrease, so we don't end up with 16,000 as a price for energy.

CHAIR - Are you suggesting there'll be fewer spikes in the market, it'll smooth it out a bit? Is that what you're saying?

Mr NELSON - Absolutely. And, equally at the bottom, you end up increasing the base price because more people are competing for lower cost energy you don't have negatively priced energy as often, or potentially ever, so you end up squishing the top and lifting the bottom. It's not too dissimilar to the capacity investment scheme type approach. It's just that it's the market operating and sorting it out without people or government having to put their hand in their pocket to sort it out. There's a benefit there where the market will stabilise that constraint. When we talk about everybody participating and turning back on, we are regulated businesses and participate inside of AEMO's rules and the network service providers and TasNetworks' rules. There is a specific rate or designated rate that we turn on or turn off at. It's not that everyone just rushes to the power switch and turns it off, you actually have communication and a coordinated effort that will occur.

CHAIR - I do understand that bit. Otherwise, it would crash the whole system, which wouldn't be good for anybody.

Mr NELSON - No. And that's part of, you know, there's a lot of what we do is to make sure that TasNetworks understands how to work with us and that we can understand how to work with them, so we're sharing the right information between us to form that partnership. And it does require trust to go there, to make sure that we're both set up in a way - but the way that we form that trust is by setting ours up as an automated system. It is not that somebody has to be called inside of our business to respond when TasNetworks asks for help, it is an automatic response.

CHAIR - Is TasNetworks up for it currently, in terms of their strategy. Obviously, the board's got a strategy and they have plans for the north-west transmission development, which links partly to Marinus, partly because they need to do some of the work on the northern corridor anyway. And that's just the transmission line, then you have all the distribution, which is patchy when you get into the regions where I'm from. Do you believe that their strategic direction is right for this?

Mr NELSON - When talking about the strategic direction, you mean for being able to take on load inside of the state?

CHAIR - Yes.

Mr NELSON - Absolutely.

CHAIR - Yes, significant loads. We heard from ABEL Energy just before you, you're potentially a fairly large user as well. There are others, as well as the new renewal bid. I mean as you said, it's a physical thing. It has to come from there to there to be used and from, you know, if you're going to send it across you've got Basslink or Marinus.

Mr NELSON - Yes, we probably have some sensitive information that we would be happy to share about how we select our sites, but they're cognisant of some of the characteristics of the grid.

CHAIR - Are they limitations or characteristics?

Mr NELSON - Limitations. Anything that you look at as a limitation is also an opportunity in a different manner. So, when you are having to uplift - and a lot of what we talk about in electricity, it's about investing in the future and people will try to put together a business case that says we're going to receive this here and today or we're going to build that, get that value back in five years. But, if you look at the sewer systems and the way that somebody built those, they built them with a forecast of a hundred years and we get benefits from them over-scaling those because when we grew, as, you know, society, they put in the right things. Now, I'm not saying that we're going to change that business case to being directly positive, net positive on a financial scorecard, but we can play a role in trying to take assets that exist and make them get a return for the government and for the people of Tasmania on assets they've already spent money on, or that they will be spending money on - that mean that they don't just become a burden to people, but they become a revenue generation for the state.

Ms FINLAY - Just on that final comment there, what has your modelling demonstrated - might be economic returns to the state over, say, the next 10 or 20 years?

Mr NELSON - A lot of our economic returns are based upon what we're able to achieve on access to power, and then investing with people. The models that we return are really healthy, and again, you know, there's a lot of IP in those sorts of things.

We're happy to go through and walk interested parties through some of those numbers and what it means. We've actually engaged an independent group to do those economic benefits, because I think everybody has their own way of doing assessments. So, we've tried to get somebody who's independent to be able to demonstrate that, and try to quantify it in a manner that is understandable - so that when we put in a dollar of investment, what does that mean to the economy, and what does it - you know, pros and cons, nothing comes and is just positive - so, what are the detractions from what we bring, and what are, you know, the positive side.

Ms FINLAY - In your first statement in response to that, you talked about it depending on the price. Do you think price or return to Hydro is their hesitation to enter into a PPA? Where if they were actually trading, what they might be able to enter in with you to absorb or release the power when it's available under your model - are you hesitant, or have they not been able to find a match on what that price might be, compared to how they could trade it? Is that - do you think price -

Mr NELSON - We haven't been offered a price.

Ms FINLAY - Oh, you haven't even got to that point?

Mr NELSON - No. So, price -

Ms FINLAY - Alright. That's weird, isn't it?

Mr NELSON - hasn't been an issue. And we're not seeking a discount to market. We - and this is part of our 'partner, not parasite' - is that we believe that we should be coming into a market and operating our business at a market-relevant price.

Ms FINLAY - The question has been asked a few times, and I know you've answered it, but - so then, what do you imagine are the barriers to them coming to the table for a PPA? What are the barriers - from their perspective, what do you understand the barriers to be?

Mr NELSON - I think supply of power, and where does it go, and for whom. And, you know, they've got a challenge in front of them because, you know, while I care about DAME, they've got to care about all the mums and dads, and all the small businesses, the large businesses, the government strategic objectives, you know, the water forecasts of when it's going to rain, how much they can store, what the capacity is of their existing assets, when do they have to refurbish them. I don't envy -

Ms FINLAY - Can your PPAs be conditioned to that matter, though? Could you not condition a PPA that it's around availability?

Mr NELSON - You can absolutely do - all PPAs, all Power Purchase Agreements - or any agreement you're entering into can have conditions on it that allow for partnership models, especially when you talk about -

Ms FINLAY - Is there an example of that existing already in Tasmania?

Mr NELSON - I'm not across any.

Ms FINLAY - No? But it's not - there would be examples, elsewhere, of that type of -

Mr NELSON - Yes.

Ms FINLAY - So, that's not a barrier, then, really.

Mr NELSON - No, not at all.

Ms FINLAY - It's just about putting your mind around it -

CHAIR - I would have thought the major industrials would have some sort of contract like that.

Ms FINLAY - Well, they've got a standard agreement, haven't they? And then they've got their separate trip, sort of, balance agreements -

CHAIR - Yes. Well, they all negotiate an agreement.

Mr BAYLEY - Forgive me if I've missed it, but what quantum are you chasing for one site - for example, for Bell Bay?

Mr NELSON - Oh, no - that facility in Georgetown is an R&D facility. So, that's sort of like a - that's where we test technology.

Mr BAYLEY - Okay, right.

Mr NELSON - So, we'll deploy something and work out how to do it. We'll have the local engineers and everybody come together, get that working, and then we can roll that out onto our operational sites. We have a modular approach that means that we can target the scale of a site to the relevant part of the grid.

Ms FINLAY - But you saw how the whole business works, isn't it? Everything's based on packets.

Mr NELSON - Well - this is probably more in my core belief is that, you know, if you end up building a large hyperscale facility, then you're just dragging all of the energy into one location, and then you're putting a lot more energy into transmission to get the power down to you, and you're not really helping others. Whereas if you have a distributed model that's sized according to the population that lives around, (a) you provide a sizing -

CHAIR - The population and the neighbouring industry, I would imagine, would it be?

Mr NELSON - Correct. Proxies, often, for each other, a lot of the times. Bell Bay is definitely an outlier in that. But, you know, you end up being a close assimilation of our existing grid, and that provides that shock absorber or that ability to dampen the swings inside of the grid on a localised level, rather than being distributed and increasing the costs or increasing the demand upon transmission being costly, transmission being put in place to service us.

Mr SHELTON - Part of my question is, you've already been there in the general subject of your positioning of your projects, and how you determine just where they go. I was of the thought that, because it's about monitoring electricity use, then one major site where you do a certain area and manage the businesses within that. My question was around whether you site-specifically look at the businesses and therefore have a consultancy type thing for those businesses and the use of their power, manage with them, work with them to control their usage and when and what and so on, to save them money, and of course in and out? How do you determine where is a decent site, I guess is the basic question. You've been to that just recently about - is it business-specific, or is it just regional or grid-specific?

Mr NELSON - There are a lot of factors that go into it, but you need to have the grid already in place for us to be able to consider a spot.

Mr SHELTON - Yes, obviously.

Mr NELSON - We're not going to go to a spot where we're asking or requiring large transmission costs to go there. One of our strengths is we're location-agnostic. We can find spots that would otherwise not be used by others. One of the sites that we're looking at the

moment and assessing is landfill. It's where a tip used to be, and repurposing that into being a site for a data centre. No one's ever going to be building on that landfill site. For us, we can make use of that, and we can turn that into a revenue generation for the council that owns that land. There are always different situations. It's hard when it comes to interacting with the local businesses nearby, or anywhere.

Part of our virtual power plant software program is to look at in time where we have a natural alignment between what we've developed for ourselves on that software with other industries and other providers. That's Luc's job, to make sure that we're picking up those industries and those businesses over time and developing a way of taking our smarts and applying it across other verticals, other industries. We build it for ourselves and then try to use it for others. A very astute pick-up, that one.

CHAIR - I'd like to know what Luc and Nick are thinking at the moment. Do they want to add anything to this?

Mr SISSONS - Yes, definitely. Just going back to a few questions around the benefit of Marinus, I know we touched on why do we need it - from our perspective, it's not just to export new variable generation, but it's also to import that low-cost or negative-priced energy. Our business has great benefit in taking that low-cost energy when there's not enough demand. It's low cost because there's a surfeit of supply and there's no load. That's kind of the problem. By having that Marinus Link -

CHAIR - That's why there are negative prices, isn't it?

Mr SISSONS - Exactly. We, by having Marinus, it's very attractive for us to be located in Tasmania where we can actually access that, run cost energy during the day. If Marinus is not there, then we'll find low-cost energy elsewhere. That's one consideration. There is a huge benefit, I think, for the state to draw business into the economy, by having that connection.

Mr van DUINEN - For me to add, you mentioned that there are many other large loads that you're speaking to. Just to call out that there's a big different between the load that we're talking about, which can be very surgically dimmed up or down, but also very fast. That kind of technology makes it very complimentary to the large hydro power stations that we have in Tasmania, to provide services that keep the grid very balanced, almost like a battery, without some of the drawbacks of a battery. It's always available, it doesn't run out. You can control it for many hours, endlessly, basically, and very quickly.

Mr SHELTON - That's where the Hydro see themselves as a general producer of energy, and, in this case, transitioning to the new negative priced energy coming into the state and being able to switch off the water, you're saying that you fit in there at a finer detail of being able to switch on and off power to and from people?

This is where I think the Hydro see you guys as competitors in the sense that that's what my impression of where they see their future as well as being the main manager of that negative priced energy coming in and utilising the backup water storage. So where's the difference?

Mr NELSON - So, even then, when Hydro decreases their power, they're not turning off completely, because there's still a demand for power generation in the state, and they're having to work out which of their sites they're reducing power from, which then puts the pressure on

the transmission and distribution network to then match that change and have a response around, 'Okay, power was switched off at Gordon Dam and now that transmission has to be rerouted and moved around'. The electricity is still a physical thing, has to be moved around. So, you're talking about large spots being managed and changing the power flow.

And again, like we said before, you're potentially going into inefficient generation of power to provide that service.

CHAIR - Not maximising the amount of energy you can generate, you're switching it, slowing it down type of thing.

Mr NELSON - Yes. You can be going down to a point where you're actually really inefficient. The amount of water that you're going through isn't enough to keep the turbines running at the level that they should be running and generating that amount of energy from the water that comes through so.

CHAIR - Particularly on the runner river systems. I imagine that would be the case?

Mr NELSON - Yes. The other part of it is that you now have Hydro Tasmania almost going down into the TasNetworks space to provide services, because those services are regulated by AEMO, and Tasmania networks are saying we've got this constraint, they've got AEMO and AEMO goes to the market, and that's where Hydro Tasmania would be responding now.

It's a marketplace, and it should be on my belief, and I'm pretty strong on this belief, that it should be an open marketplace. I don't think any one entity should ever control the marketplace, because that's how you end up with the worst outcome for people, if you've only got one participant in the market. You should have healthy competition. And for Hydro Tasmania, that's a blend of solar or wind generators. When it comes to responding to demand response, it's having other entities like DAME and others that are out there providing that response so that it's not that you're paying a premium for the only one company that can do a service in the state, that you having people compete to provide that service for the people of Tasmania.

Ms FINLAY - In one minute or less, I'm really interested in the product that you create and what your modelling has indicated in terms of a percentage of packets of data that you then release out with the potential of being taken up anywhere globally. What you see could happen for Tasmania in terms of attracting in data rich operators to set up in Tasmania? What have you seen as a percentage of the product that you create could be used here, and what impact would you have on that additional investment into Tasmania?

Mr NELSON - We are probably a separate stream to what you would call a normal, traditional data centre. So, a normal data centre, as you understand it, is continuous 24/7. They'll have redundancy, so they'll have a lot of extra transmission lines and Transformers in place to make sure they never go down. Those businesses are very important. They're the ones that process your payments, they're doing streaming of this, they're the website providers. They provide services that we all need in a digital world to do that.

Our model is to be interruptible. We're looking to provide services back that are of a different nature. They are not instantaneous. They are where somebody is looking to do, so, we

take topical AI large language model training. You will train a model over a series of weeks and months, and then it will get released to the public with version 3, or, you know, Llama version one. But they will take months to do that work and then it will be released.

If we have an interruptible data centre providing that training, we have about 10 per cent, say 5 or 10 per cent, of interruptions, so we will take five or 10 per cent longer for that training to take place.

If you're trying to process a payment, you cannot have an outage. Everyone will get very upset. However, if you have something you're taking five months for and it takes just a little bit longer, 5 per cent longer, it is okay, because you're there. I've got a lower cost to deliver that model over time. That's the attractive thing for us as a state, but us as a nation as well, as we transition to variable renewables - we can then produce these sorts of exportable products that are packaged up by the Internet and then sent across.

Those data packets themselves are going to vary based upon the client who comes to Tasmania. Some of them will be looking for an output in a month's time, some will be looking at more regular things, they're going, 'Can you do this piece of work and get it back to me in 10 minutes'. There are things that people are trying to do. Our business will be to manage all those requests across our facilities so that we have the right blend of availability to our clients.

Ms FINLAY - If I understand the answer, that's around your delivery to market no matter where they are, based on what they need in terms of those interruptible packets, data management, whatever. Is there an opportunity for Tasmania, concurrent to what you're doing, to look at certain types of industries or businesses that might move, that only operate on that, that could be of interest to Tasmania? Or not really.

Mr NELSON - Maybe I'm getting too - if I get it wrong, just jump in - but I think you might be talking about the Silicon Valley effect, where once you create an industry, it actually ends up having others that generate around them.

Once you've got technology like we're talking here, of computers, the highest power computers in the world, operating locally, you start to have other industries that come along and can say, 'Well, it doesn't cost much to spin up one of those type of computer instances, for me to start my idea, my start-up.' People who are local can start to tap into something, because the cost to begin decreases substantially. Either you've worked there, or you know somebody who works in our business, or you have contracted mates. You end up with this ecosystem that evolves. This is what happened in Silicon Valley. It grows, and you have a locality or a location-based explosion of industries that follow.

If you look at what we do, we are taking computers and - we probably haven't jumped into it yet - but we take computers and we effectively put them in a fluid, like water, and we keep the computers cool by pumping that fluid over them. Instead of having expensive fans running to try and keep them - and they're noisy - we have old school technology of pumps moving that fluid out, and you cool the fluid and it comes back in there. That technology is what we use on the smelters and the different refineries and the pulp mills in Tasmania for years and years. We're not having to go out there and try and train people. We're taking an existing skilful workforce -

CHAIR - This is the hydraulic work that's going on in George Town.

Mr NELSON - and putting them towards a new industry that is not disappearing, but it's a nascent industry that is going to grow. I don't think there's anybody now forecasting AI to go away any time soon. The need for us as a society to continually use digital products, services, like streaming of shows - those things have only increased over time. It's not going away, and we just now start to create an ecosystem for us to be able to do that here in Tasmania.

CHAIR - We are out of time. Thank you. Is there anything you wanted to add in closing that you wish you'd said that you haven't?

Mr NELSON - I think probably the only thing that we'd talk about is some of the stuff that we're doing is cutting edge in how we respond, in very fast response to the grid, and to provide that service. Part of that is around good community members, but part of it is just looking at the waste that we have in the electricity industry across Australia, across the world, and try and make a difference in how that happens, so that we can transition today, not keep putting this problem off for the future.

I think some of the things that we look to see is pragmatic decision making. We're not asking for favourable regulations our way, but that people can look at things and say, 'Right, if you're facing the problem,' or if you're facing an interaction that we have at the moment - as an example, we'll have a site where it has a high voltage connection, and that powers our computers and so forth, but part of our interaction with TasNetworks is that we will turn that completely off and give TasNetworks the ability to completely turn it off if they need. That's all done remotely, but we would require a second connection so that we can keep the security lights on and make sure it's a safe working place. There's the red tape. It hits you and says, 'No, you can't have two connections'. You're trying to do a logical, good thing for the grid that gives them control and the ability to protect the grid and provide the lowest cost power to Tasmanians, but we can't provide a safe working -

CHAIR - Can't get the lights on.

Mr NELSON -Yes, and we're only talking about keeping the security gate and the cameras and the lights on, like a normal load that an industrial user would have. Not a large industrial user, just a normal - that's the red tape that we struggle with. It's just at that level, rather than really the policies that have gone in place. There's a lot of great thinking and foresight that the state has put in place. There are definitely challenges ahead, that they've run into around the cost to deploy electricity and the infrastructure associated with it. We're just looking at how you can take that cost and turn it into lower cost power now, not wait for another 30 years.

CHAIR - Thanks for your time today. We do appreciate that it's a very complex sector, my brain was sort of hurting a bit there at times trying to understand the ins and outs of it, I must say. We do appreciate the information provided and that explanation of the squashing of the price curve actually did resonate, so thank you.

THE WITNESSES WITHDREW.

The committee suspended at 11.06 a.m.

The committee resumed at 11.31 a.m.

CHAIR - Thank you for attending the public hearing for the Energy Matters Committee. We appreciate you being online, being as it is quite a distance to where you guys are. I will in a moment ask you to take the statutory declaration, but I'll read it out and ask you, do you agree? I will just say that all the information you provide to the committee is covered by parliamentary privilege that may not extend beyond the committee hearings. Just keep that in mind if you're speaking publicly at a later time. The evidence you give will form part of our public record and inform our report at a later time. It is being broadcast at the moment as well as transcribed. If you wanted to discuss anything of a confidential nature with the committee, you could make that request. Otherwise it's all public. The committee would consider that request. Do you have any questions before we start?

Mr SAWARD - No, all good. I think we've just got a five minute intro time slot, is that right?

CHAIR - Yes.

Mr BEN SAWARD, COMMERICAL MANAGER AND **Mr MARK LUCADOU-WELLS**, COMMERICAL ACCOUNTANT - ENERGY AND RISK, GRANGE RESOURCES WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED VIA WEBEX.

CHAIR - Ben, if you would like to introduce yourselves, your roles within the company, and then we've got your submission. We've also got some information you emailed through just for the committee's reference. If you'd like to speak to your submission, add anything further, then the committee will have questions.

Mr SAWARD - Sure, no worries. Firstly, thanks to the committee for inviting Grange to say our piece here on the back of our submission. I'm encouraged by the fact that the committee's been formed to look at what is best for Tasmania moving forward.

Just a little bit about Grange, for those who don't know Grange. First of all I'll introduce myself, Ben Saward, commercial manager at Grange. I've dealt with the energy for Grange for the last 20 years. We've got Mark, who's our commercial accountant, who is my right hand man, who does all my treasury functions and reporting, and all my strategies around hedging diesel, electricity or gas, or whatever it might be. I also sit on the Energy Users Association of Australia Policy and Regulation Committee, that drives our major users around Australia, and what that industry body's priority should be when it comes to policy and regulation as well. I've also represented the Tasmanian Government's Future Gas Strategy working group. I also committed to that report that minister Duigan handed down a couple of years ago.

As far as Grange goes, obviously we're a big player in the state, we've been around for nearly 60 years. We have an iron ore mine at Savage River that makes magnetite out of the ground. Your normal mining operation there, we convey it to Port Latta in a slurry where we turn that magnetite into iron ore pellets in our furnaces, and then we have our own port facility that ships that around Australia, and to China and other Asian markets. Port Latta, obviously, that's the driving engine of shipping at the ground around the globe.

As far as our contribution to the state, as you can see we've spent a lot, nearly $100 million in wages. We give the government over $20 million in royalties every year and over $5 million in payroll tax. We support local suppliers in the tune of around $150 million plus in spend on local suppliers, it goes back into the economy.

When it comes to energy, obviously, diesel, the largest user of diesel, we spend about nearly $50 million on diesel every year. We spend nearly $20 million on electricity, and over $30 million on gas. So, a big contributor in that space.

As the world's moving to sustainability, decarbonisation, we've got our road map to do that. Namely, you know, removing anthracite from our furnaces, also transitioning our mining operations from open pit to underground, also recovering some of our heat in our furnaces, and also replacing the gas in our furnaces. You can see we've got a road map to reduce our emissions by 50 per cent by 2030, and net zero by 2035. Obviously, that changes the energy mix that we have to get to that point. So on that, we're using electricity around 34 megawatts capacity every year. That's broken up, around 2/3 of that is at Savage River for our mills that operate and the conveyors, and around 1/3 of that is to run the conveyors and furnaces on top of the gas at Port Latta.

As part of that transition, obviously we'll remove most of that diesel and all of the gas. To do that, we need electricity. So, we're looking to grow our electricity demand from that 34 megawatts, with another additional 21 megawatts to go to underground. And then if we go, when we replace the gas, if we electrify the furnaces, that's probably another 50 megawatts, if we were to build an electrolyzer and use green hydrogen, that would be another 100 megawatts.

We're currently in the phase of really needing to underpin our investments to decarb and transition to underground mining. And to do that, we need some price certainty and volume certainty on electricity to underpin those board decisions and financer conditions to spend that money. There's about nearly a billion dollar in development to go to underground. And then obviously significant investment to transition the gas as well.

Some of the key topics that we raised in our submission was around the cost burdens through different initiatives that the government's got, that will come back to us with transmission developments and so forth.

The first one being the North-west Renewable Energy Zone. I won't go into all the detail, you've probably already read some of the detail in the submission. Basically, we don't feel that we should be imposed with the cost to do with that development that may benefit others in wind farm proponents or HIF or whoever to do that part. So, that's a 5 per cent increase in our transmission costs, around $150,000 a year, that we'd have to pay for that. We support government investing in these initiatives. However, we don't feel that we should have to pay for what benefits others.

Same with Marinus Link. We've been advised by TasNetworks that our costs will go up 29.6 per cent. That's roughly $800k, but that'll be even more with this recent civil construction award that's meant stage 1 is going to go up by another 17 per cent. So, that's $1 million per year that we'll have to pay for Marinus Link. We sort of feel that that benefits others more so than us.

With Basslink, we fully support the AER's (Australian Energy Regulator) draft decision to reject the regulation of that asset because that'll bring that around $55 million back to consumers to pay for, rather than Hydro. There's no guarantee that Hydro will drop the wholesale prices to match that. Basically, it will burden taxpayers with that regulated asset.

I won't go into the wholesale pricing instrument change, but that was approved by the Office of the Tasmanian Economic Regulator and has impacted everyone without any consultation with the customers.

Similarly, there was no consultation on the Basslink in the impost that would pose to consumers as well.

Then we've tacked on a couple of others. We've reached an announcement that TGP want to put their tariffs on the transmission of gas up by 12 per cent at the end of this year for everyone, apart from Hydro, that basically pay a quarter of what we pay to transmission our gas to the state.

Then on the renewable side, we've done studies with government. I was the lead of the hydrogen feasibility study that government half-funded, and we gave the government the enables that were required to make that viable. We will obviously put our expression of interest with the hydrogen hub thing that's happening at the moment, but unless there's someone underpinning a new pipeline to Port Latta, it's not really feasible to offtake out of Bell Bay. Yes, and I'll leave it at that.

CHAIR - Thanks Ben. Just the odd problem or two that you're facing.

I was writing as fast as I could to pick up on some of these things, so it may be that you need to repeat some of that. It's interesting - we've heard from potential new loads in the state, potentially, that they want to particularly operate in Tasmania, because with Marinus Link, they'll be able to take the opportunity of having negative prices at times when there's an excess of solar - or wind, particularly - generation on the mainland. We are seeing negative prices across Basslink at times, now. Ultimately, that means that if he wants to take that approach, then no-one - it's not going to work, because there'd be no more negative prices.

You said that - you've been told with Marinus Link that your costs will go up 29.6 per cent and roughly, with the current projected price of Marinus Link, that's about $1 million a year extra for your business - obviously a pretty significant cost increase. Do you understand how that figure was arrived at, the 29.6 per cent? Is that your modelling? Is that their modelling?

Mr SAWARD - No, it was a presentation that was given to Grange by TasNetworks, that had a table in the presentation that showed the impost of Marinus that they plan to charge large industrials. And it also was part of - they had to put their resubmission in because they had to break down different tranches, as far as stuff coming on at Bell Bay that they broke into projects as well. There is some relief there if certain projects in Bell Bay come online. But just the Marinus Link portion itself, cost recovery is that 29.6 per cent advised to us by TasNetworks.

CHAIR - That's for Grange - and the other big MIs around would have a similar situation, or are you saying this is across the board?

Mr SAWARD - Yes, exactly. Pacific Aluminium, I'd hate to see their increase in their transmission costs.

CHAIR - Correct me if I'm wrong here, but if there was another significant number of large loads come in - like ABEL Energy at Bell Bay, HIF at Hampshire, others that may come in with significant loads - would that reduce that percentage for you, or are you still expecting the same?

Mr SAWARD - Only minimally. Only minimally, yes. Look, TasNetworks, I'm sure, would be happy to share that modelling with you, so you can see what they're telling large industrials the impact would be.

Mr LUCADOU-WELLS - They did break that down for us, but yes, it wasn't a huge impact.

Mr SAWARD - Yes. As far as the offsets, with projects coming online, it doesn't offset that much. I can certainly share the information that TasNetworks provided us.

CHAIR - If you can provide that to the committee, that'd be really helpful, Ben. If you could send that through later, that's alright. It'd be really helpful.

Mr SAWARD - Yes.

CHAIR - In terms of the cost of the energy component - not the transmission component - of your pricing, has there been modelling done around that? With Marinus, I mean.

Mr SAWARD - Yes. We've engaged experts to do a lot of modelling. We've looked at a lot of wind farms wherever they stack up, and we've done export modelling that shows that they're significantly overpriced when they're firm. We have modelling that reaches out and builds in the impact of Marinus when we're making those decisions as well.

The actual energy price - well, that's crystal ball stuff, isn't it, as far as what Hydro will be bidding at, as far as their wholesale come Marinus coming online. That's where we've sought after a long-term sort of fixed-price deal that underpins our investment decisions, similar to what Liberty just received from Hydro last week.

CHAIR - So it's basically a big unknown, is what you're saying?

Mr SAWARD - Yes. I can't guess what the price will be in 2030, just like you guys can't. Obviously, when more renewables are coming into the energy mix, all the prices are going up.

Mr LUCADOU-WELLS - Yes, there are a lot of risks that will be further exposed to the Victorian spot price - which, when all their coal plants retire, that's going to be highly reliant on wind and solar.

CHAIR - Which seems to be a matter that's being overlooked by some people providing evidence to the committee, that they're only seeing the upside of the negative or low prices, whereas it seems that the modelling suggests that there's going to be a significant overall uplift.

Even the lowest prices will be higher, if that makes sense. Is that what you're seeing, that's what you're expecting?

Mr SAWARD - Yes, I don't know what deal Hydro did on the solar farm, but that'll flow in, no doubt. If that has to be firmed, then I'm sure that's not coming cheap either. That's what we're seeing when we've broken down, you know, we've talked to Port Latta Wind Farm, we've talked to a few others that I won't name, and you'll be paying over $100 a megawatt firmed for wind capacity, whereas you can go and get four-year contracts wholesale with Hydro at about $75 to $80 at the moment. Why would you sign into 10 to 15 year PPAs at $20 a megawatt higher than what you can get now?

CHAIR - Right. In terms of - a lot of this is reliant on Marinus Link and that's what the modelling that's been provided to you has been around. Clearly the world needs to decarbonise. You've laid out your timeline here, and I have seen presentations on this before, obviously, so I'm fairly familiar what you're up to. Some would say it's quite ambitious to do this in the timeline that you've got, but if your extra energy requirements for electricity requirements are significant to complete this transition for your business, could that be done without Marinus Link? If it could, how?

Mr SAWARD - Definitely, definitely.

CHAIR - Yes, so how would you get enough electricity in Tasmania without Marinus Link?

Mr SAWARD - Well, certainly the 21 megawatts we need for underground isn't significant when it comes to the current generation mix in Tasmania. We don't feel there's any issue around getting the electrons for that stage of our decarb. Yes, the 50 to 100 - there would certainly be some arrangements that we need to enter into, whether it's PPAs or the like. Ultimately, our thoughts are that both government parties committed to supplying Tasmanian energy to Tasmanians and at Tasmanian prices to drive economic development here rather than ship it to the mainland, and use Hydro as a firming. When we had discussions 18 months ago with Hydro, it was a little bit different because they seemed to be down the track of just wanting to make money from firming. I think they've changed their tune and rewrote the charter and I'm pleased that they've done that. I still think that we should be supplying Hydro energy to Tasmanian businesses and creating our own additional renewable energy here, so that we do have capacity to provide to Tasmanian business and allow the multiplier effect to continue to drive the economy here rather than quick wins on selling off to mainland.

CHAIR - To get the full benefit of that, wouldn't we need to disconnect from Basslink as well?

Mr SAWARD - No, I think you could have the best of both worlds where you could capitalise when you need to send it north at high prices and then still maintain - because I think we're trading off our reliable base load energy for intermediate supply from the mainland, which they can build wind farms and get themselves, right?

I don't mind if there's these ambitions from a government state level, but not for Tasmanians to pay for, and not for us to be hampered as far as not being able to have the electrons to need it to decarb or grow our own industries.

CHAIR - You talked about supporting the decision that AER made with regard to APA's request to have a regulated link as opposed to a merchant link. It's pretty clear that Marinus Link is intended to be a regulated link, and that's where some of the challenges arise for you because it will be regulated and the cost will be passed through. Is that a fair assessment?

Mr SAWARD - Correct, yes. As you can see, TasNetworks wants to charge the extra 30 per cent under the rules of its regulation. Yes, the ownership, and I know we've talked about fed-owned, Tas-owned certainty, but ownership doesn't mean anything. Who pays is the more important thing and we've been given the evidence that we're expected to pay for Marinus.

Look, there's the financial benefit test that has to be ticked off when they submit to the regulator, but we know how wishy-washy that'll be. They'll be like, 'Yep, it's going to benefit all industry in Tassie because there'll be more generation and that should bring down energy prices'. But I bet if I keep paying my million dollars and I never get cheaper energy prices or any benefit that I won't get my million bucks back each year.

Mr LUCADOU-WELLS - I think there's a question that consumers benefit from Marinus Link, but there's no question that generators don't benefit from Marinus Link and being able to export that extra energy.

Mr SAWARD - The way that it's working at the moment - the government engaged KPMG to consult with industry and major proponents 18 months ago. When I went to a TasNetworks briefing on what they were submitting for their revenue capital spend at the moment, I said, 'Well, haven't you looked at the RES model work that KPMG did to sort of help with your decisions?' And I don't know that that report's even been finalised. We contribute to these things and give our feedback, but they seem to go nowhere. Same with TasNetworks. We keep saying that, 'You're imposing these extra costs on us,' but it seems like the consultation is just a box-ticking exercise.

CHAIR - Regarding the renewable energy zones, do you believe that renewal energy zone transmission costs should be funded by generators rather than consumers?

Mr SAWARD - Correct. Similar to the Queensland model.

CHAIR - Okay, well, I'll come back to that. What are the economic and equity implications of that model? And maybe you can talk about the Queensland model when you answer that.

Mr SAWARD - I guess why should we pay to set up transmission infrastructure for wind proponents to come here to just ship it off to the mainland? Simple as that.

CHAIR - If a major user like yourselves or a new entry into the market directly into a power purchase agreement rather than - what we've seen at the moment is Hydro or even Aurora, depending on which one it is, have entered into power purchase agreements with the generators. If it was a load entering into those, would that make a difference?

Mr SAWARD - Well, I think with Aurora, they don't really want to. They're trying to make loss situations -

CHAIR - No, they don't. They were directed to it.

Mr SAWARD - They were directed to, right.

CHAIR - That's correct.

Mr SAWARD - We just need to just be propping up the wind farm people, right? Whether it's by the REC schemes or transmission assets that are paid by consumers, just to give them an entry in the door, right - to make it easier for them to establish? It's a competitive advantage that we're giving wind farm proponents because we're paying for the infrastructure to set them up to be able to then ship it to the mainland.

CHAIR - You think all those costs that are basically sunk somewhere either to move the energy from one spot to another should be paid for by the generator, not by the end users.

Mr SAWARD - Correct. They're the ones benefiting, it should be built into their pricing. Otherwise they're pricing their price with someone else having to pay for the cost to transmit it.

Mr LUCADOU-WELLS - They can claw back that cost through a competitive market.

CHAIR - Can you just explain that a little bit further, Mark, if you wouldn't mind?

Mr LUCADOU-WELLS - They'll be bidding into the market against other generators. That's a competitive market. The consumers want the product, but whoever bids in at the lowest price, that energy's going to get taken first. So, they can still get their money back by adding that cost into their bidding.

CHAIR - So the lower price would be a bit higher if they were doing that, wouldn't it? There's a general statement that I've read many places that the lowest costing energy is wind or solar. Once the infrastructure is built, that's it, pretty much. That's because they don't pay for the transmission network, partly. But, you're saying that if they had to pay for the transmission, they would recoup the cost of that through their pricing into the market, but it would naturally be at a higher price then, wouldn't it? You see fewer negative prices. Is that what you're saying? I'm just trying to understand what you're saying.

Mr SAWARD - Yes, we're saying, let market forces play rather than us subsidise the transmission side of it to make them able to bid lower. We're giving them a free ride into reducing their price that they can bid into the market because we're paying for the transmission costs, not them.

CHAIR - This is going back a little while in history: ACEN, when it was UPC, part of the deal to build Robbins Island was that they would pay for the transmission network from Robbins Island through to Hampshire. Then notionally they were going to have to pay from Hampshire through to Staverton. That has somewhat changed. But in that case, there's an expectation that the proponent there, the generator there, will pay for the transmission.

Mr SAWARD - Yes, look, the modelling that TasNetworks is doing and the way it was looking with KPMG, they were looking to sort of do a hybrid model that they recommended to government. Our position is that why should we pay for new infrastructure that doesn't directly benefit us?

Mr LUCADOU-WELLS - Yes. But also incentivise the generators to have input into the transmission network, and help make it be built in the most cost-efficient way.

Ms FINLAY - Can I ask a follow-up question to that? You're saying that that happens in Queensland but nowhere else in Australia?

Mr SAWARD - Yes, look, I think New South Wales has a bit of a hybrid model, but yes. Basically, Mark Grenning, who sits on the Energy Users Association, is probably the guru in Australia when it comes to transmission regulation and so forth, and sits on many panels around that. I had Mark Grenning help us with our submission back to KPMG and most of what we provided was stating that we feel that the Queensland generator-pays model is the most practical one to apply to Tasmania.

Ms FINLAY - Did you also imply that that report hasn't been released, but you've seen a draft of it that was potentially recommending a hybrid model?

Mr SAWARD - No, I haven't seen the draft. I haven't seen anything.

Ms FINLAY - Right. Oh, okay.

CHAIR - That was the one done by KPMG.

Ms FINLAY - Yes. But given they've progressed on their RES model, you're not expecting that to see the light of day. Is that what you're implying?

Mr SAWARD - I don't know. When I asked them why they haven't used it in any way with their RES modelling that they applied for - to get this extra $152 million that they're going to spend before FID and they've told us that they can charge us for that even if it's a business case that gets up - basically, they said, 'Oh yeah, we're aware of that report, but yes, no, timing didn't suit, we've gone forward with -' I said, 'Well, what if some recommendations out of that change the landscape of the model that you've put forward?' They said they'd just have to address that come the time.

Ms FINLAY - It was commissioned by government for that purpose? Who commissioned it?

Mr SAWARD - Correct, yes. Specifically, it was ReCFIT, I believe. The Commission, KPMG, 18 months ago to consult with everyone. Mind you, they didn't invite all the major industrials. They only invited us because it was a north-west zone, which is the first off the cab, right? They actually invited a lot of the generators, like, you know, Aquila, Port Latta Wind Farm, and all those, and us. Then, when I told Leigh Darcy and Greg [inaudible], they weren't very happy that they hadn't been consulted and invited to have their say at the KPMG report, too, because it does affect other areas of Tasmania. There's things like the TUOS charge that's part of the transmission assets, that gets paid by other areas, right? Here is a consultation with KPMG. They don't even invite Pacific Aluminium and the like that are probably going to pay for most of this stuff.

Ms FINLAY - Is it appropriate at this point, Chair, so that we don't forget at the end, whether the committee might seek to get an update on the status of that report?

CHAIR - Yes, we can do that. We can discuss that later. Yes.

Mr SAWARD - That'd be great.

Mr BAYLEY - Did we take on notice a copy of Grange's submission to that process? Would you be prepared to share that, Ben?

Mr SAWARD - I can share some information that I sent to them, yes, definitely.

Mr BAYLEY - That would be useful, thank you.

CHAIR - We'll write to you to remind you about that, Ben, if that's okay.

Mr SAWARD - Sure. No worries. Back to the question, if I could just finish. With this recent submission from TasNetworks for this $152 million or whatever they're going to spend before FID, I asked the question what happens to that if FID isn't approved? Who pays for that $152 million? They advised me that that we would pay for it, us and users. I said it's a failed business case, you're going to burden us with the impost of your pre-work program, but there is, apparently, the discretion that can be applied by government not to charge end users for that portion if Marinus Link is unsuccessful. So, I guess you are probably thinking it's going to be approved anyway, so it won't be an issue.

CHAIR - Nobody is convinced of anything right at the minute, to be honest.

Mr SAWARD - I shouldn't think us Tasmanians should pay all the costs for the failed business case of Marinus, if that's the way it went.

Ms FINLAY - I'm interested in the KPMG report and any other reports that you might have participated in or processes that you might have been in regard to the government's whole-of-business assessment, the business case for Marinus. Are there other processes that could have been valid or valuable in that, that you perceive or worry might not be fully realised in that consideration in that whole-of-government business case?

Mr SAWARD - It depends what hat you wear, right? I'm wearing my Grange hat. I have personal opinions as well, which I'll keep aside. Ultimately, we've gone to many submissions, sort of updates that TasNetworks has to tell us about the project. We continually say the same thing, that we shouldn't have to pay for it, and that we do not inadvertently want to see our energy, the energy not transmission prices, go up as a result as well.

We're already disadvantaged when the Hydro is chasing profits on the mainland with spot prices, right? So yes, sure, we can jump in and help the mainland and benefit from it and I encourage the government to make as much money when the mainland needs energy and we can sell it at a top price. But, Tasmanians pay that top price as well at the same time that we're exporting. So, why should we be paying $15,000 a megawatt/hour just because Hydro can get that from Victoria? There should be a cap on Tasmanian spot prices at the times Hydro is chasing those windfalls. Yet, those who take spot price risk, which is, yes, there's inherent risk there we choose, we shouldn't have to pay $15,000 a megawatt when Hydro can benefit from the mainland off that. Why are we still paying that?

Overall, I think the government needs to come back to what the parties promised before the election, in really working with the industry to drive what we need from an electron point of view. We've done that for years with the big four. We seem like the poor fifth cousin, right? We contribute just as much to the state as those big four, we're just as important and energy viability is key to that. That's where I encourage government. And I'm pleased that ReCFIT has now produced or started a major industrial team within their ranks since they met with us about what it is it that we need, Tim Davies, Kim, and Mark Bowles are certainly pushing the barrow for Grange at the moment, from what I understand, in the report that they produced for government.

CHAIR - Mark's now left.

Mr SAWARD - Right, okay. That's only recent then.

Really, we want what's best for the state, right? We're team Tasmania, like you guys are. I just don't want us to get carried away with helping the rest of the country solve their problems that impose more on Tasmanian businesses. Because, you take out those top four and ours, the cost of electricity going to skyrocket for the rest of Tasmania because us five underpin paying for that transmission network, paying Hydro for the bulk of the electricity. Yet, then we're being asked to dig into our pocket more to support these ideals that the government has. That is my view.

CHAIR - You have basically addressed this, but I just want to put it to you just as a question to see if there's anything else you wanted to add. What alternative approaches could be considered to ensure Tasmania benefits from increasing to connection without disproportionately raising transmission costs for industrial and, notionally, residential users?

Mr SAWARD - Yes, generator pays for a lot of the transmission development. Government might have to take some risk on there themselves as far as not burdening us with it. Maybe government need to sort of pick up some of the tab as well. I think we're lucky in Tassie with our hydro system and wind. I'm not saying decouple from the NEM because we don't want to run out of energy either like we did when we ran the dams dry and tried to capitalise from the carbon tax.

I think it's putting Tasmanians first and trying to bring industry here right, rather than giving renewable energy to the mainland. I think, you know, you read the Hydro publication *Lifeblood* for instance; it's a really good read, I suggest you read it and it talks about the four founders and how they built all this as a private thing, not a government thing. That was all about bringing these four big players. If that foresight wasn't there back then, you know, we'd basket case, so yes, we've got to keep these industries here and to do that energy is a key player in that. I'm not saying do favourite deals for the big four or five - we just underpin the rest of it to keep us here to keep the prices low for everyone else. We can't pass through costs because we're global traders, so our costs go up. We can't pass it on. We just get whatever the iron ore price is globally.

I think, yes, we've got to look after the big players, not give a too sweet a deal that it lessens the ability for Hydro to make money, but we need to underpin large business by long-term electricity deals.

CHAIR - If you were to take capping or somehow subsidising Tasmanian energy users particularly, I mean there may be achievable, perhaps, in the generation space potentially, but in the transmission space, in a completely regulated market which Marinus would be in as I understand, not APA. Well, Basslink is still not there at the moment but can you actually do that with the rules as they are? I don't understand the rules entirely.

Mr SAWARD - I'll tell you. So, at the last year's Energy Users Association Conference, the CEO of Transgrid got up and was talking about all of the investments needed to bring renewables online in Australia and what they're planning to do and the impost of cost that that would bring with it. I asked the question, why doesn't the generator pay for all this stuff and I got a typical answer that didn't answer the question. When I was in the elevator going down he jumped in and I asked, 'You didn't quite answer my question there, mate' and he goes, 'Oh well, mate, you've just gotta suck it up. That's the way it's been for the 30 to 40 years and it's the way it's always gonna be so there's not much you can do about it.' That's the head of Transgrid, right?

So that's the mentality you have of the transmission company that the regulations are there to work for them. They can say, 'I want to spend all this money on capital' and that guarantees a revenue stream for them without too much scrutiny on it. It just needs to pass the public benefit test, which is wish washy.

CHAIR - Which is the rule, isn't it? That's the rules then. Do the rules need to change?

Mr SAWARD - Well, yes, I think they do because they can go and spend money willy nilly and we have to pay for it whether it's a good decision or not, but that's where the AER does their job and that's why we're happy they did the job when it comes to Basslink because they know that's a bad deal for consumers.

CHAIR - It's interesting when it comes to Marinus Link. Just on another point then, from a business perspective, are you more concerned with electricity price volatility as opposed to an increase in the electricity price level, like the lowest price becomes a bit higher, but it's stable. Is that better for business than the volatility that we see and particularly when the coal comes off in Victoria, we're likely to see even more?

Mr SAWARD - Would underpin billion dollar investment decisions, we don't want volatility in electricity price because all of a sudden in five to 10 years we could be paying $150 megawatt hour for all I know compared to the average 60-odd that we're paying now and diesel price could come right down.

We can't break our business just because we're good citizens and want to decarbonise, right? It has to be viable and you know we've a Chinese board and shareholders that don't want us to obviously go down tracks to destroy our business by entering into deals on electricity that aren't known and volatile that could mean we're in loss-making positions, compared to using diesel, where the price might go down so we need some certainty around those decisions so we know we're around in the long term as well. Yes, the reason we play a bit of a spot market volatility thing at the moment is just so we can bring our price down by managing risk and buying hedges, which is, we buy. We're like a retailer: we buy blocks of electricity in different quarters and different spot, peak and off-peak. We buy caps. We take certain exposure on spot in different quarters. We have control rooms that I can shut down the whole plant if it spikes.

I designed this 20 years ago with Aurora, and it's now, you know, common in Australia, and we did the same thing with gas - where we now buy blocks of gas, we do next-day auctions from Queensland, we have iona storage we can build from, we have a line pack that we use in the pot. We do all this complicated stuff just to bring our cost down. That's what Mark spends his time full-time, so that we're not just price-takers all the time.

You know, two years ago we would have had to pay $30 a gigajoule for our gas if we'd gone with just the retailers, and that's what they were offering. But we did a different model with another crowd, and we averaged around $12. We saved $40 million in that year alone, from what the energy players wanted to, you know, draw out of us, because they could.

So, we've got to be smart, and we have been smart for 20 years, in the way that we're procuring our energy. But, the way we're seeing it is that the market with building all these renewals and extra transmission, and it's just going one way. So, I think we want to draw on Tasmania's competitive advantage with our hydro scheme, that then allows us to be around for a long time, allows to decarbonise, grow - rather than just getting in this big cement mixer that who knows what the price is going to spit out once they build all this infrastructure.

We've seen what happens with Snowy and others. It's not - to say that won't happen to Marinus, right? You've already had a 17 per cent increase in costs, and it's just stage one - through the issuing of the civil tenders. Who knows where it's going to go? And that overruns are all passed through to us.

Ms FINLAY - I'm interested in the comment you made a little while back around Tasmanian prices supporting Tassie industry. I'm wondering what your thoughts are on a restructure of pricing in Tassie, where the price of energy in Tasmania is the price of production, plus maybe a margin, so that the system changes. There's always been a conversation that says, 'In Tasmania, Tasmania should benefit,' 'We built the hydro, the legacy, and therefore it attracts in industry, productivity, jobs, economic sort of growth.' Do you have thoughts on that, and the likelihood or possibility of actually achieving a change like that?

Mr SAWARD - I like the concept, you know - 'plus margin'. So, it's transparent, right? Everyone benefits from the cost base. And obviously, Hydro can then set a level of margin that everyone's happy with, in a sense, if that's the case. Because what we're seeing is, through them benefiting from firming arrangements or shipping to the mainland, we're imposed with those profit margins that they're chasing, right?

So, I do - I think Tasmanians - there might need to be a two-tier system where Tasmanians are looked at first, and then the mechanism allows Hydro to chase the windfall when they can jump in and help others at high prices.

Ms FINLAY - The part (b) of the question was the likelihood or possibility of actually achieving a change like that?

Mr SAWARD - Oh, I don't sit in government. I know how slow government moves with things. We've got that issue with our port services at the moment, trying to get assistance to resolve some issues around that - but I won't - it's a different forum. So, we're a bit - yes, we don't expect government to move fast or directly in our direction at all times. There are many aspects you'd need to consider, I know, but yes.

Ultimately, without disconnecting from the NEM, I think we should be looking after our own backyard, encouraging business here. Like, people don't model the economic multiplier effect when they're making decisions, as to if you can keep money here and keep turning it over, you know, our $200 million and spent $190 million, then $180 million, you keep showering that money over rather than just, 'Alright, we'll make a quick buck and build that into consolidated revenue from our dividends from Hydro.'

Ms FINLAY - I imagine thinking like that must be considered in the whole-of-government business case, in terms of - I mean, do you imagine that that's something that we'll see in the content of that report, those sort of considerations?

Mr SAWARD - I think government has pushed their own agendas as to where they want to go, and I think they want to get this Marinus up, so I don't think anyone will get in their road, is my gut feeling - because, I don't know, when we're saying our view, it just seems like box-ticking.

Ms FINLAY - Mark, did you have a comment on that? Were you going to say something before?

Mr LUCADOU-WELLS - Yes. I was just saying back to your previous question. I'd say the first part is far more likely than the second part.

Ms FINLAY - The idea's okay, but the ability to change it -

Mr LUCADOU-WELLS - The idea's okay, but I think the likelihood is the bigger hurdle of the two.

Ms FINLAY - Okay. Thank you.

Mr BAYLEY - Ben, Vica Bayley here. On that, I guess, do you look with a high degree of cynicism and scepticism around the Treasury work on the whole-of-Marinus business case? Am I hearing you say effectively that you feel like those reports are going to be written with an outcome in mind and the report will be tailored accordingly?

Mr SAWARD - Correct. That's my personal view, and maybe most people we've engaged. Obviously, I've been around this industry 20 years, so I've seen the inner workings quite closely and how that fits into the Australian landscape as well. Ultimately, maybe if it's going to benefit Australia, the fed should own it and the fed should pay for it and then maybe there's different ways to claw their money back then just from industry in Tasmanian and Victoria. There's a question whether the Victorians need it too, right?

Mr BAYLEY - Have you had conversations with government or Marinus or TasNetworks about that and put that fear? What do they say in response to reassure you?

Mr SAWARD - Look, they're very polite and understanding. I think some of them get it right, but they're wearing the other hat than me. If I was working for them wearing their hat, I'd probably push the same agenda because it's my job. I work for them. It depends what hat you wear. No matter who has opinions on energy, it's hard to get to the bottom of the truth because everyone's got their own hat and agenda and they'll push it in their own direction.

CHAIR - That's exactly right, Ben. Everyone has their own agenda. That's why it's hard to work through that or to actually get to the bottom of anything really, to be frank.

For you to have confidence in the whole-of-government business case, which is I think for any of us, to a degree, to have confidence in it, what does it need to be really clear about in your view?

Mr SAWARD - How much Tasmanians will be paying for Marinus Link, because that's unclear. That's never come out. You do high fives at government level because we've got ownership things done. But I keep saying, 'Well, show us who's paying for it. How's it going to be funded?' I think Marc White from Goanna will tell you his view on all of that as well. No-one seems to be listening.

CHAIR - This is my view, I'm just going to ask you what you think, Ben. During the process of APA seeking to have that Basslink regulated, if they had agreed with that, it might have given us, as Tasmanians, an idea of the breakup of where the cost would be apportioned, like how much Victorian customers would pay, how much Tasmanian customers would pay on a regulated link across Bass Strait, acknowledging there's different aspects to Basslink than there would be to Marinus Link. That would have given us some indication. Now, the government and RecFIT, I assume mostly, and Treasury beavering away, working on this whole-of-government business case in what seems to be a void of information about what's likely to be the case in a regulated environment. Is that the case?

Mr SAWARD -Yes. You've got to spend this money, you've got to make your return, so how are you getting the return? Who's paying for it? And how's that fed into the revenue models that are submitted to the AER? Some that have already been approved.

I think it would be good for TasNetworks to say this is how we're going to pay for it, this is who's going to be charged what. Then you all have that information, you go, 'oh, shoot, should I be imposting another bloody $2,000,000 on Pacific Aluminium?' - whatever the figures are - and you know the impacts to all of us before you make decisions. Because that could break a business.

CHAIR - I don't fully understand how the AER goes about its business. Even if, say, it costs $3 billion or $2 billion to build Marinus Link, that's the amount of the cost. It doesn't necessarily mean that the AER is going to say, 'Well, it's worth $2 billion'. They might say, 'It's worth $1 billion, and so we're going to set the regulator price against that.'

Mr SAWARD - Well, it's interesting, because APA originally wanted replacement costs when they were putting in a submission for Basslink, and that would have been excruciating, as far as -

CHAIR - I know.

Mr SAWARD - Yes, right?

CHAIR - Because they paid a lot for that. They paid a lot for Basslink, to get it all back.

Mr SAWARD - Yes.

Mr LUCADOU-WELLS - It was like, $700-odd million, wasn't it? For Basslink?

CHAIR - 700?

Mr LUCADOU-WELLS - 780-something? Is that correct?

CHAIR - Yes, something like that. It was a pretty high figure.

But see, that's - you know, the regulator said, 'Well, no, you haven't made the case,' basically. But the expectation is that Marinus Link will be regulated and, thus, I think there's an expectation- well, there's sort of an assumption, I think, from some people, that whatever it costs to build, whatever that figure is, is the figure that will be valued at the end of the day.

But that's not always how it works, is it? You're driving your car out of the showroom and it drops 10 grand in value.

Mr SAWARD - The RAB - the revenue asset base - so, there's - I'm not an expert in transmission law and revenue submissions, so I've never worked for TasNetworks to do one, but I've obviously commented on them, and it comes to the - yes, the revenue asset base, right? And there are ways that they apply different valuations on that.

Look, at the end of the day, I think if I was sitting in your seats, I'd want to know the impost on Tasmanian businesses due to Marinus Link and who are the big hitters that are going to pay for it, and how that may impact their businesses, and whether it's fair that they pay for it.

And I'm sure if you ask TasNetworks or Marinus to come up with that, they would have it.

CHAIR - You think they know?

Mr SAWARD - Well, you'd think you'd know, because you're building it into your revenue models that you're trying to get your approval based on. So, you've got to have a revenue stream and go, 'okay, that's coming from Tasmanian users to give me my return on investment.'

CHAIR - If that's a no, it's a shame we haven't been told about it already, before we've gone this time down the path.

Mr SAWARD - Well, that's - TasNetworks has come to all those major industrials - which I'll give you that PowerPoint presentation - and told us what it's going to be.

CHAIR - So, if it's 29.6 per cent increase in transmission costs to Grange, does that mean my power bill at home will see a 29.6 per cent increase on my networking charge?

Mr SAWARD - On the network proportion of it. Because with TasNetworks, right, I think there's 13 of us which are direct customers, right? Aurora being one of them. Okay, so we've got a grandfathered contract that was when they split off Hydro and the likes into the three. So, 13 of us or whatever became direct customers of TasNetworks, so we actually have a transmission agreement with TasNetworks.

Mums and dads and business have a tariff-based scheme, which is kind of a little bit different than the direct thing.

But all those increases, my understanding, will flow to all of those 13 direct customers - Aurora being one of them - and then their tariffs will be updated, standard tariffs will be updated, to allow for the impost that they've had on the Marinus.

CHAIR - So, essentially, that would mean that of the networking component of everyone's bill in Tasmania, every mum and dad and everyone else will see basically a 30 per cent increase in the networking component?

Mr SAWARD - That's my understanding. I don't know if there are different rules for different categories, or whatever that they're applying their modelling, because they've only showed us the impact on us. But they're saying that that's the same for other industrial customers.

CHAIR - Well, Aurora being -

Mr LUCADOU-WELLS - And that's before overruns on the project, as well.

Mr SAWARD - Yes.

Mr BAYLEY - And just to be clear, sorry - on that across the major industrials, is it your understanding that it's equal across the board? That 29.6 per cent is - they're not kind of carving it up in different ways for different industrials, depending on how far away you are from somewhere? Is your understanding that it's the same?

Mr SAWARD - Look, I imagine there's a little bit of that, because I imagine, like, some of this transmission development to cater for Robbins Islands and all that - there are certain elements, there are four different elements that make up your transmission costs, and TUOS is one of them, and the TUOS gets shared around the state.

Then there's another one that directly relates to the size of the substation. The substation at Port Latta might be 22, right, and we're using 20 of it, so we'll pay for the bulk of it, and then they'll get a bit off others that use that. It's really capacity-based for the substations in the network and what your usage is in your area. Then there's subsidising across the state with the TUOS charges. Like I say, I'm not an expert on transmission cost allocations, but I would say that the other industries are very similar to that 30 per cent. Talking to Leigh and the others, that's what they've been told.

Mr BAYLEY - Thanks.

CHAIR - Other questions, members? No?

Mr BAYLEY - Can I ask, Ben, you're obviously a wealth of knowledge and experience in this space, is there anything else you think we should know, that hasn't been in your submission because of the passage of time and everything?

CHAIR - Anything you wish you'd said that you haven't.

Mr SAWARD - We touched on the gas pipeline. Obviously, TGP/Palisade own that pipeline, right? To put things into perspective, when Grange was a foundation customer with Tamar Valley Power Station to bring that gas pipeline over in 2001 with Duke Energy, we paid $2.92 a gigajoule, CPI-based, for 10 years with a five-year option. That included transportation, alright? Now we're paying, with this government intervention on the gas code, there's a floor now of $12 basically, just for the gas. Say we're paying the 12 bucks, right, then we're paying another $3 a gigajoule to get the gas across on the pipeline. We're $15 a gigajoule, compared to $3 a gig - five times what we were 20 years ago. But times change. Do you know how much Hydro is paying per gigajoule to get their gas across to the Tamar Valley Power Station now? It is 60 cents a gigajoule. How much am I paying? It is $3 a gigajoule.

There's a sweet deal that was done with Hydro and TGP, but we're actually helping fund or subsidise the rest of the pipeline for Tasmania. Yes, there's different zones, Port Latta is a bit farther than Bell Bay, fine, but I don't know why Hydro gets such a good deal and we don't on our gas transportation. Anyway, I'll just leave it at that.

CHAIR - As you transition away from gas it will become more irrelevant, maybe, but still.

Mr SAWARD - Look, I'm very passionate, and sorry, my passion overflows sometimes, in opinions. I just want the best for Tasmania really, at the end of the day, in a personal sense. Obviously, I'll wear my Grange hat and try to get the best for Grange when it comes to cost and opportunity to grow and decarbonise, but to do that we need some price certainty, and volume, to then underpin our investment decisions at board and financier level. That's really the end message - we don't want handouts or favours, we just want some certainty, and to be able to get to the table to get some of these deals done that can underpin the jobs and the money that we pump back into this state.

CHAIR - I think the committee appreciates your frankness and your experience and your knowledge in this sector, and the explanation you provided on how it impacts Grange and potentially the flow-on impact to every other Tasmanian customer, including the other major industries, is clear. Thank you for your time today. I really appreciate your submission and your appearance today. And say hello to the other Ben.

Mr SAWARD - No worries. Yes, I will. Ben couldn't make it today, sorry.

CHAIR - No worries. Thanks for your time.

The committee suspended from 12.29 p.m. to 1.31 p.m.

CHAIR - Welcome, Chris, to the public hearing for the Energy Matters inquiry. We appreciate your submission and the time taken to put into that and also to appear before the committee.

Mr CHRIS CLARK, STATE SECRETARY, CEPU TASMANIA WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED VIA WEBEX.

CHAIR - You're probably aware that the evidence you provide to the committee is covered by parliamentary privilege that may not extend beyond the committee hearings. So, just keep that in mind if you're speaking about your evidence today. Outside this setting, everything is part of a public hearing. We're being broadcast and it's being transcribed and will inform our report and our considerations. If there's anything of a confidential nature you wish to share with the committee, you could make that request and the committee would consider that otherwise it is all public, just to keep that in mind. Do you have any questions before we start?

Mr CLARK - No, I don't.

CHAIR - Okay. I invite you to introduce yourself and speak to your submission and add anything further you wish to. It's been a little while since you wrote it obviously, and then the committee will have questions for you. Thank you.

Mr CLARK - Yes, no problem. Thanks for that. My name is Chris Clark. I'm the state secretary of the Communications, Electrical and Plumbing Union (CEPU). We are the principal union for electrical and electro-technological trades people and apprentices in Tasmania, representing over 2000 workers. The electrical workers we represent will form the backbone of Australia's clean energy workforce across all sectors and stages of the transition. In Tasmania, electricians will be installing and maintaining the major generation and transmission projects, such as Marinus Link, Battery of the Nation, the North West Transmission development, which are part of the process to achieving the government's 200 per cent renewable energies generation capacity.

The submission that we submitted can be summed up in that there's basically two ways in which we view energy in Tasmania, one is a commodity that we generate and then sell via Basslink to make money on the NEM (National Electricity Market), the other one is to provide an essential public service to Tasmanian consumers. The way in which it's currently set up I don't think delivers and our union doesn't think that it delivers the best bang for buck, in the fact that if we are going to go down the path of paying for something like Marinus Link to facilitate the building of more generation, the question needs to be why would we do that and who benefits?

So, if we want to become 200 per cent efficient, obviously we need more generation as far as our capacity is concerned. Depending on who builds that extra infrastructure, like wind farms for instance, really gets to determine who benefits from that. So, if it's all going to be overseas investors tapping our wind resource to generate energy to then sell on the NEM, I would suggest that that's a very limited window of opportunity for Tasmanians to benefit from that resource being used in that manner.

The regulations set up by the market mean that taxpayers would then have to allow those generators access to the transmission grid, which we would then have to pay for, because in

Tasmania, obviously, all the transmission and distribution lines are owned by the Tasmanian government. Whereas, if it was to be majority owned by the Tasmanian people via the government, it gives a lot more scope for what you can potentially do with the excess generation energy rather than just selling it as a commodity on the market, such as the NEM.

Obviously, when Hydro was first set up, the goal of Hydro was to bring major industry to Tasmania and provide them with cheap power and then set up base, create good meaningful jobs, and then expand and benefit the broader economy. There's no reason why, if we want to build the capacity for excess generation, we wouldn't be looking at what's happened in the past and heading down that same direction with this transition.

I think the federal government has outlined the potential for 10,000 square kilometres of a REZ (renewable energy zone) in Bass Strait. That comes with an enormous capacity to manufacture all those components here in Tasmania, feed that back into our grid, and then decide via some sort of government board, so to speak, what should be done with that energy. It's long-term benefits to Tasmania, good jobs, rather than, 'Let's just set up a wind farm' where it becomes, in our experience, a race to the bottom as far as who's going to build it. The jobs aren't that good. The workforce generally is fly-in/fly-out and the only real benefit is during the construction of those wind farms with no long-lasting benefit to Tasmania.

The crews required to maintain wind farms are quite small. Offshore wind requires a bit more maintenance, however they're not these massive job creators that we're led to believe, because the skills to build the wind farms don't exist currently in Tasmania, so you have to ship those skills in from interstate. So, the benefits around jobs would be limited. Whereas, if it was done in conjunction with a government department, they could put requirements in there around local procurement and training to have a long-lasting benefit, good apprenticeships, good tradespeople with a longer term view rather than a quick-fix and a sugar hit to make money selling energy on the NEM.

Basically, that's what our submission outlines in a nutshell.

CHAIR - Sure. What you're suggesting in your submission - there's a few things I'd just like to look at - but you sort of suggested that decoupling from the NEM, which would mean disconnecting from Basslink and not building Marinus Link, obviously. Can you tell us what evidence you have to support the claim that decoupling from the NEM and the grid, and thus AER regulatory framework, how that would result in lower prices for Tasmanian consumers?

Mr CLARK - That's a really good question. The NEM, the market mechanism within the NEM, sets the price of the power. So, because Tasmania wants to be a participant, we are bound by the price set by the NEM. Whereas, if we were decoupled from the NEM we could have a democratic discussion around, what do we want to do with our energy essential public services.

The cost to generate is around, and this is to generate and maintain the network, is around the six to eight cents per kilowatt/hour. However, we get slugged with a way higher price because, as a market participant, the NEM sets the price at which power must be sold. There's no control over what the price will be that we offer to Tasmanian consumers. And, if we were to decouple from the NEM and bring it back into the hands of the government, the government could then be the determining factor of how much we sell the electricity that we generate for.

CHAIR - I know that there's a need to decarbonise for the future, over a period of time. Tasmania's electricity requirements will grow at that time because we have to decarbonise the transport sector and heavy industry, and that sort of thing is going to take significant more amounts of electricity. Also knowing that, you know, having Hydro as our as our base load provider.

Mr CLARK - Our battery, yes.

CHAIR - And battery, if you like. Droughts occur, as we know. Could decoupling without the option for buying in if we actually had to, or selling when we had excess that there was no demand for at the time, could that create new risks such as supply instability and, potentially, higher infrastructure costs because most industry wants stability in prices and supply?

Mr CLARK - That's another really good question. Obviously, you'd want to have the generation capacity fully operational and commissioned before you decided to decouple. The maximum demands and the amount of energy that Tasmania consumes, all that data is really easily accessible, so it's not a difficult feat to then know how much future energy we would potentially need. The way in which it could potentially work is, the hydro's a big battery. It's the water in the dam, that's the battery cell. While wind was producing the energy requirements that you needed, you obviously wouldn't need to drain the dams.

You mentioned about droughts and so on and so forth, and where Tasmania potentially had a bit of an issue a few years ago, but I'm led to believe a lot of those issues were to do with, and we're talking about low dam levels, were to do with the fact that there was money to be made on the NEM. The dams were drained of water against good advice that this is not necessarily a good thing to do because it's going to leave us vulnerable if there is a drought. Basslink suffered a malfunction because of the amount of power that was being sold at the time, which then put us in a bit of a precarious position where diesel-powered generators needed to be connected to the grid just in case we ran out of water. As it so happened, before they got commissioned, it rained and the risk was alleviated. But, you definitely want to do a thorough risk assessment, know what your maximum demand currently is, what it potentially could be, build that generation owned by the government, make sure it's up, operational, ready to roll, before you would decouple.

CHAIR - You don't think there's a place for private investment then in variable renewables?

Mr CLARK - I'm not saying there's not a place for private investment, however, I would suggest that having a controlling stake where the government is the decision maker will then encourage the best outcome for communities. Because, as we've seen time and time again, if we put the best interests of shareholders, like profits and return on investment, into the market, they will be the prevailing perverse incentives that drive projects like renewable energy. Whereas if the government owns it and we have good outcomes as far as jobs are concerned, it gives you public licence and social licence to say, 'Look at these outcomes, they're great outcomes.'

If all we want to do is make overseas shareholders get a really good return on investment, then I would suggest that, yes, have a majority owned by the private sector, however, we've seen time and time again that that doesn't deliver good jobs, doesn't deliver for the communities.

If these wind resources that we want to tap into - you can only build, I'd suggest a wind farm in that location. Once it's built, you can't build two wind farms next to each other because it's not how that works. If we have a natural resource which is consistent wind blowing that would drive a turbine to generate energy, we should be looking to get the best bang for buck for the Tasmanian community, not overseas shareholders.

I'm not saying that there's no place for private investment, but if it's not controlled by the people, for the people, then market conditions around returning the most profit will prevail.

CHAIR - So just with - sorry.

Mr CLARK - That's where you miss out on value-adding - good jobs, good apprenticeships, good safety, good wages and conditions. The regional communities where these wind farms will be, where you get to see good staffing levels, you don't run on skeleton crews, those sort of things - the value-adding, good training, the list goes on and on.

CHAIR - You didn't rule out having private companies, regardless of where their ownership sits, involved in building new renewable energy. Who do you think should fund the necessary transmission, the new transmission to facilitate the linking of the new generator, wind farm or solar farm to the grid?

Mr CLARK - Currently under the NEM, the Tasmanian people would have to fund that. I would suggest that as long as there is sufficient benefit for the overall community, that once again the Tasmanian community should fund those sort of projects. If you look back once again to the good old days of hydro, we built that for us. The same principles now apply. If we're going to put extra generation into the grid, we should build this generation for us to use in a democratic way that provides the most bang for buck. If we decide to subsidise industry like we have done in the past, who knows what job opportunities could arise via manufacturing data centres, things of that nature. Your imagination is your only limit, but you have to have the infrastructure in place and you have to have it in place for the right reasons.

CHAIR - Perhaps to rephrase my question, if you have a private investor building new renewables, should they also build the necessary transmission infrastructure as part of that? You're talking about a government-owned arrangement where the government on behalf of the people of Tasmania invests, split-shares the benefits, costs, that sort of stuff. With a private investor, there's been some evidence to suggest that they should pay for the transmission. Others would say, 'Well, it's part of the grid, the people of Tasmania should pay, regardless of who builds the new generation.'

Mr CLARK - Under the current rules, we have to. I would say, if we're looking at this from a pub test point of view, if it's a private investor where the overwhelming majority of shareholders live overseas and they're building excess generation to sell energy on the NEM to make profit with very little to no benefit to Tasmania people - then the pub test would say, 'Well, they should build the transmission line that gets them to plug into the grid to enable them to sell that power.' The NEM requires the Tasmanian state government to do that at the moment because it's a natural monopoly. If you're asking me whether private investors should have to pay for that, I would say, yes they should. That's why I think a majority-owned stake by the Tasmanian government, given that we have to build the people of Tasmania and have to build these transmission lines anyway, regardless of who owns it, should be getting best bang for buck. Does that answer your question?

CHAIR - Yes, what I think you're saying, and correct me if I'm wrong, is that if it were to be the case that whoever builds the new generation has to build the necessary new infrastructure, or notionally upgrade existing infrastructure to allow that new energy to come into the grid, that there would need to be a rule change to facilitate that.

Mr CLARK - Under the NEM it would be, yes. Probably one of the things that gets overlooked the most with majority stakes owned by the government - that means that there's proper consultation with the communities where these potential wind farms would get billed as well. Because then the elected representatives become accountable to the people and we don't end up in situations where the spreadsheet says, 'Let's build this wind farm in this location because the returns on investment are the best they'll be for shareholders.' However, probably not the best outcome for that community who potentially wasn't consulted, or the consultation that takes place basically becomes a tick and flick exercise to say, 'Oh yes, we consulted, we heard the community. However the science says this is the most efficient space to build said wind farm, and the community's concerns get overlooked. So, there's a whole scope of reasons around why having more generation capacity owned by the Tasmanian people and governed by the Tasmanian elected representatives makes a lot of sense, as far as our Union's concerned.

CHAIR - If we were - well, we are - remaining in the NEM - certainly in the foreseeable future - are you aware of any alternative models that exist for pricing electricity in interconnected markets? Is there some other way that it could be done to promote the advantage for Tasmanian customers when we link to Victoria?

Mr CLARK - There is none that I know of, and that's not to say that there aren't any that exist. There is a lot of subject matter experts within the overall union movement - within the ETU, the Electrical Trade Union, which we're a part of - that may be able to answer that question, so I could take that on notice and come back to you with an answer for that. But there's none that I'm aware of.

CHAIR - I note that your submission said that the current spot price setting mechanism disadvantages Tasmanian customers, because they're linked to Victoria's currently gas-fired and coal-fired generation.

We will write to you on that, to see if you could - see if there's other models that exist. And if there are, the further question from that would be, 'how much lower would the price potentially be in a disintegrated system?' Not 'disintegrated' fall apart, but separated system or different system.

Mr CLARK - I'd love to get that on notice, and then I'll chase it up for you and come back with an answer. I mean, the layman's term is: it's more expensive to generate power in Victoria, and when you look at a spot price where every generator gets to bid, it becomes an average. So, even if you can generate electricity lower than potentially your competitors on the mainland, because you're connected to the NEM, you pay more for your power down here as consumers overall.

Ms FINLAY - Thanks, Janie here. I'm really interested about the benefits to Tasmania from projects in Tasmania. And you talked a little while ago about apprenticeships. I'm interested in your comments on workforce development, and in particular, the limitations around investing in apprentices. You sort of touched on that in your submission.

Mr CLARK - I mean, the way in which the NEM views apprentices as an inefficiency is a disincentive for people participating in the space, or companies participating in this space, to put on and train apprentices - which to us is quite bizarre, because it's an investment in your future.

If the government were to be the majority shareholder in any sort of extra generation capacity, then they could employ and train as many apprentices as they see fit, which would then- and where they see fit, so, rurally - to give opportunities to Tasmanians that live in our rural communities - like we used to with Hydro before it got split up.

These were hubs for the community where, you know, it's investing in the future of society and your community by providing good, meaningful work and good, meaningful jobs. And that doesn't mean that you then, you know, train 100 apprentices if you need 50, but you don't also run a skeleton crew and get to the point where we've seen other state-owned corporations like TasNetworks get to a point where they say, 'You know, we would have really liked to put more apprentices on this year, but we don't have enough tradespeople to supervise the amount of apprentices we require to train'. They're all decisions that have been made from a corporate lens, whereas if we had more of a community lens, we would make sure that we're not running on a skeleton crew, which obviously creates more opportunity and less outsourcing.

Ms FINLAY - At a state or a national level, has the CPU run any campaigns about trying to change regulations or legislation around that? Is there anything that we could look at?

Mr CLARK - If you're talking about apprentice ratios, Janie, generally the only real mechanism that we have seen is to have the ability to write them into procurement documents or into enterprise agreements. So, the government, if they are going to tender, could put as part of that tender provision a ratio of like for every five tradesmen that you employ on this project, you will employ one apprentice for the life of this project. We have had success previously in the construction sector where we've had clauses like that in enterprise agreements, but that's a way in which the government could make sure, just like local content in your procurement and tender process where you could enforce making sure that local workers are employed and apprentices were trained.

Ms FINLAY - Yes, okay, thank you.

Mr CLARK - We lobby for those things with the relevant stakeholders and whoever the relevant ministers are at those levels, but that's generally the mechanism that we see that gets those things in place.

Mr EDMUNDS - Hi, Chris, it's Luke Edmunds here. I will ask something off the back of that as well. What are your observations on the ground? I think you touched on this earlier about the state of the skills of the workforce in Tasmania to deliver the projects that are on the horizon.

Mr CLARK - Yes, that's a really good question, Luke. Often the job opportunities get over-inflated because there's no context given to those job opportunities. So the amount of skilled workers required to build the scale of some of these projects and the uniqueness of some of these skills don't exist in Tasmania. So what we see is a fly-in fly-out workforce that specialised and have experience with building wind farms so the local content on these jobs is quite small. Generally, what we see is after the project is finished and commissioned, there's a

small group of Tasmanians that will then be employed to be the caretakers, so to speak, they do all the maintenance on the wind farm but the general construction phase, the overwhelming majority of that is fly-in fly-out, because there hasn't been the scale in Tasmania that's required the retention of that labour. I think Cattle Hill was probably the last wind farm that was built, I think that was after Granville Harbour, one or the other; Granville Harbour is on the West Coast and both of those wind farms, the majority of the labour was fly-in fly-out and when it came to building the transmission line for Granville Harbour, they were fly-in fly-out workers employed by Zinfra and I think the majority of them come from Western Australia. I think that should answer your question, Luke.

Mr EDMUNDS - Your comments about the conditioning of apprentices et cetera: in your view is that a way with this potential bow wave of investment in Tasmania that we can actually establish those highly skilled Tasmanian jobs into the future?

Mr CLARK -Yes, I think so. I mean, if we just talk about Bass Strait alone, you're talking about 10,000 square kilometres. There should be an investment where we trained Tasmanians to do that work. Generally, to become a skilled tradesperson it takes you about four years to do your apprenticeship. That means you've got a handle on the basics of your trade. It then takes you probably about another three or four years post-trade to then be like a fully competent and experienced tradesperson, so it's about an eight-year cycle.

If we're going to be building renewables in Tasmania for the foreseeable future, we're talking decades as we head towards net zero by 2040 and try to get to a point where we have a generation capacity of 200 per cent; it just makes sense that we would invest in the infrastructure, whether it be in the manufacturing of all the components, the installation of the wind farms, the maintenance of the wind farms. It's a massive opportunity for us to revisit the glory days of Hydro, but just in the capacity of wind alone. The potentials are only really limited by your imagination.

We have the ability - given that wind farms are not complex machines - these turbines aren't, they're not complex so there's no reason why we couldn't build, manufacture all the components in Tasmania, install them with Tasmanian workers and maintain them with Tasmanian workers. Obviously, it's going to create amazing jobs, good meaningful work, but it's really up to the boldness of what it is that the Tasmanian people are prepared to do and invest with, invest into, like it's an incredible opportunity and I'd hate to see it wasted with short-term vision.

Mr EDMUNDS - Thank you.

Mr GARLAND - Chris, you state in your submission you're not opposed to Marinus Link, but say there are lessons to be learned from Basslink. What are those lessons?

Mr CLARK - With Basslink, Craig, it's basically been used, I suppose, as an ATM for governments to be able to then send our essential public service over the mainland to make money via the NEM.

I'll head back to when Basslink blew up. The government of the day was hellbent on getting the best bang for buck because commodity prices for energy were really high on the mainland. They drained our lakes to make a fair bit of money. Basslink blew up. We then had to spend millions and millions of dollars on diesel generators that never even got to get used

because it actually rained in time. It appears as though the federal government's going to build Marinus Link anyway. So, if we're going to take advantage of Marinus Link, it should be viewed through a lens of - what's the best bang for buck we can get for Tasmania in the way in which we're going to use Marinus Link, and Basslink already at full capacity.

So, if we're going to build another interconnector and it's going to be to sell energy as a commodity as part of what we say is good for the Tasmanian community, then we should own the generation and we and government should own the cable.

Basslink, in my understanding, is owned by a foreign government.

CHAIR - Not anymore. It's owned by APA.

Mr CLARK - Is owned by the private sector, I should say then. The amount of money that we've paid as a Tasmanian government to rent that cable, we could have built it multiple times and owned it. So, I'd say that's probably another valuable lesson that we could have learned from that, Craig.

Mr GARLAND - Also, you've mentioned the acute skills shortages. How will that play out for Marinus Link's construction timeframe?

Mr CLARK - It's quite a large project. As far as timeframes, all I'd say is let's look back at history. A lot of these major projects have a habit of blowing out in cost and time to deliver.

The skill shortage probably would push out the time frame on completion, although I'm not 100 per cent sure about all the particulars, but I'm just going off what we already currently see. I think the current skill shortage for transmission lines people for doing work already on the mainland, somewhere in the vicinity of around 20,000 short. So, if we're already that far behind the amount of skills that we need, I'd say it'd be very difficult to deliver a project like Marinus on time due to the fact that we don't have the current skills already and it hasn't even started.

When it comes to blowouts, we know the longer you leave things, the more expensive they get. It suggests that probably, you know, history tells a story there, Craig.

CHAIR - You make a point in your submission, about page four, I think it is, under Revenue Determinations, you say -

> The AER's revenue determinations restrain networks from investing in proactive maintenance, necessary skills investment, and timely asset upgrades by only allowing razor-thin budgets for meaningful work that is needed to maintain the industry in the long-term.

How do you suggest the balance is struck between controlling energy prices for consumers and ensuring adequate investment in grid reliability and workforce stability? Particularly, there is a balance between reliability of suppliers, as well as price, and some people value one more than the other, obviously.

Mr CLARK - It's a pretty complex risk analysis, I would suggest. But, if you don't have the relevant skills on the ground and you run a 'break it and then we'll fix it' model, it becomes extremely less efficient.

So, having a proactive program, maintenance program where you're upgrading equipment prior to its end of life, rather than waiting for it to fail and then going in and repairing and/or replacing it, makes for a way more efficient long-term view. The short-term view of 'let's cut maintenance' and that means we have to keep potentially less inventory, as in less gear on the shelves, we don't need as many workers because we're not doing as much preventative maintenance, and we're not going to train apprentices because they're seen as an inefficiency.

They're all, I would suggest, short-term gains that, while you may - I mean, these things, they're due to fail at some point in time. If you're willing to roll the dice and risk preventative maintenance to try to make potentially better profit margins and/or say 'okay, well that means we can in the short term provide cheaper power', it's going to come back to bite you in the end, I would suggest.

CHAIR - So, what we're talking about here is the network component of the charge. You were talking about network or transmission. I mean, some time ago, probably about, my memory goes back fairly well, but I think it's about 10 or 12 years ago when the AER came down pretty hard on TasNetworks because there were claims, particularly by major industry that they were gold-plating their assets. So the AER came down pretty hard, pulled them in and thus, networking charges did drop. There must be a balance here somewhere, though, that if you know, you're building a long-term infrastructure asset, if it's built like - you know, if you build a good house, it'll last longer than if you could build a crappy house that might fall over in a strong wind, type of thing. You see the AER are making these revenue determinations that constrain this. Where is the balance in this?

Mr CLARK - That's a really good question and it's probably subjective from what your point of view is. I'd point to other examples, like interstate when South Australia lost its interconnector because the towers fell over in a storm, because the lack of maintenance meant that those towers became weakened over time. No maintenance was done on those towers, therefore, the loss of production due to the fact you had no power, probably, was far in excess of putting up new towers that weren't half rusted through.

It's true, it is a balancing act. I'm not surprised that private enterprise is saying we pay too much for power and you shouldn't be gold-plating your assets, and the regulator taking the side of the private sector. But, if we have good energy and we have good, reliable energy infrastructure that gives confidence for investment, I would suggest in industry, like we have in Tasmania that we attracted here, like your smelters, your paper mills, those energy intensive manufacturing industries - it sounds like they want their cake and eat it too, to be honest.

CHAIR - Mums and dads obviously pay the same percentage of their bill as the networking charge. Maybe for some families, having less reliable power is not so much an issue. They don't have anyone on life support that requires emergency electricity all the time. They may be able to do without power for, you know, a day. I mean, on the north-west coast, we had two to three weeks without power for one period there. But, then there's an industry that's sensitive, well, their machinery is really sensitive to any instability in the system. It's a bit hard to do one for one, without the other. I guess it's a really difficult balance to find, in fairness to the AER. I don't have their job. I can't imagine doing it. But, there has to be some

balance here, doesn't there? There has to be an agreement as to what sort of reliability we'll accept, at what cost. Isn't that what we're talking about here?

Mr CLARK - Yes, sure, but I think probably the main point that we're outlining is the fact that the AER views training apprentices as an inefficiency and that falls under the banner I think at which you're which you're talking about. There is obviously room for improvement. We don't want, potentially, higher network charges, but at the same time, if we had more control over the price at which we sold power for, rather than being coupled to the NEM, it would potentially give you options to say, 'Well, we're going to have a better, more reliable, fit-for-purpose network for certain circumstances, which means we'll be able to offset those network charges through lower power prices.' Then it gives you the flexibility to decide which way you want to go. It's definitely a nuanced argument and there's a lot of things to consider.

Mr GARLAND - I'll backtrack to Basslink. You stated that it's already running at full capacity, but according to Professor Bruce Mountain, it's only operating at about 44 per cent of its capacity over its lifetime.

Mr CLARK - I'd have to take that on notice, Craig, and do a bit more backgrounding on that. My understanding is that they're already running it at full capacity as far as the ability to export power. My understanding was a lot of that was due to - I think there was an issue when they blew it up, where it reduced the overall capacity of that cable when they had to repair it. I'm happy to be corrected and be wrong, but my understanding is that it's already at full capacity as far as the ability to send power over to the mainland. Hence, that's the reason for needing Marinus Link, if we're going to build excess generation. But, I could be wrong.

CHAIR - They did have to de-rate it a bit after the incident to make it safe.

A member - It's at full capacity, but it's new capacity.

Mr GARLAND - I have one more question. Consumer electricity resources - does the CEPU have a view on the role of consumer energy resources, solar, batteries, et cetera, in Tasmania's renewable energy mix, and whether in comparison to other jurisdictions the incentives for consumer electricity resources in Tasmania are right?

Mr CLARK - Can you put a bit more context around that, Craig, just so I have a full picture? Are you talking about things like feed-in tariffs, or?

Mr GARLAND - Community batteries, along those lines.

Mr CLARK - Is your question, 'Is that a good idea, or something we should go and do,' or?

Mr GARLAND - Just your thoughts on it.

Mr CLARK - Once again, it comes down to the context of why you would do it and what's the purpose of it. I can't see it being a bad idea. However, I think if we're trying to commoditise energy to be sold on the market, I would suggest that that's the wrong founding principles of why we should generate and distribute energy. It should always be seen as an essential public service. Therefore, we shouldn't be looking to add an extra tax for profit incentives. If it's to provide stability for the grid in a certain community, then absolutely,

amazing idea. Once again, with something like the feed-in tariffs where we have solar panels on roofs, I think it would be fair and reasonable that it should be one for one, like it used to be. But, if we're talking about becoming micro-generators to then sell power on the NEM to return money on investment, I don't believe that's a good idea of a way in which you should approach this. If it's about stability and reliability, then yes, absolutely go for it.

CHAIR - Just to follow on from that a little bit, currently there's a 10 kV limit to put on a residential rooftop solar setup. Do you think that's limiting?

Mr CLARK - Once again, it depends why you want to do it. If it's so mums and dads can now become generators to sell power on the NEM, then I'd suggest that it's the wrong reasoning we should do these things.

CHAIR - What if it's to use domestically, though? Behind the meter?

Mr CLARK - Yes, if it's behind the meter, so you can become fully self-sufficient off the grid, I can't see why there would be an issue with it. As long as any sort of network instability -

CHAIR - The rule doesn't apply if you're off the grid, because you're off the grid. If you want to feed - if you have more than 10 kV on your roof, and you're connected because you can't live off with 10 ks on your roof necessarily, then sometimes you'd be feeding in, sometimes you'll be drawing out. Are you aware the reasons that sit behind that? Is it network, is it distribution network stability, is it too volatile, or what? What's the issue here, do you know?

Mr CLARK - No, I'm not 100 per cent sure to be honest. Whether it's networking instability, I'm not sure the reasons behind it. To be honest, we haven't really had a proper energy plan in Tasmania, let alone Australia, ever, about why we generate energy and what we should use that energy for. I would suggest that, if you have the space to be able to generate energy, which means whether you're feeding in or drawing in, that you can offset your energy costs to zero because you have the ability to install solar and battery at your premise, that really that's probably only going to be a small section of the community who can afford to build those type of installations and it's probably not delivering the outcome we need where it's needed, which is low socioeconomic areas.

Why the cap is there, I don't know. I'm not saying if you can afford it, you shouldn't be able to do it, but, once again, I think the reason why we should be doing things or why these things exist should be examined through a lens of what's the best bang for buck for everyone, not just the people that could potentially afford to build that type of infrastructure for themselves.

CHAIR - Just on that, if I might, if the low socioeconomic communities where this would definitely be a benefit in terms of their energy bills, do you think there's a role for government to play in perhaps subsidising or supporting the installation of solar rooftop generation and batteries?

Mr CLARK - Yes, I do.

CHAIR - Would that be a more equitable way of dealing with the situation?

Mr CLARK - Yes. Once again, pointing back to our submission, our union's view on something like that if the government was going to roll out a solar program and it was done and owned by the government, once again, you get good government jobs, good training, good safety, which would be absolutely crucial, and it could be targeted towards the people who need it the most. It's a win-win for everyone I would suggest because over the long term it has the potential to pay for itself, so if the government wanted to do that I would be all for it. Whether it be at schools or government-owned domestic dwellings or whatever, that would be a fantastic idea in our union's point of view, especially if it was attached to - if it was done by the government. And, when I say the government, I don't mean the model that we went down with the NBN where everything was subcontracted out and was a race to the bottom where safety standards were quite low. It would be proper auditing, properly policed, good government jobs, good training, good safety. It'd be a win-win and a really good news story for those communities and those people who were able to offset their power bills.

CHAIR - We're out of time. Thanks, Chris. Sorry it has been a bit of a rush. We'll write to you about that question on notice. I was wondering if I might also ask you one about REZs in that question on notice to get your feedback a bit more on some of the comments you made there, if you're happy to take that as well.

Mr CLARK - Yes, absolutely. I mean, REZs, we'll be here for another half an hour if you want to go down that path.

CHAIR - Yes, I know. That's why I thought we can always write to you and ask you for more feedback on that. Thank you very much for your time today. Appreciate the effort you put in and your submission. Thank you very much.

Mr CLARK - No problem. Thanks everyone.

THE WITNESS WITHDREW.

CHAIR - Thank you, Ben, for appearing before the public hearing of the Energy Matters Committee. We appreciate your appearance, your submission and look forward to what else you've got to add.

Mr BENEDICT BARTL, PRINCIPAL SOLICITOR, TENANTS' UNION OF TASMANIA WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Thank you. I know you're fairly familiar with committee proceedings. Just to remind you that everything you say is covered by parliamentary privilege when you're before the committee, but that may not extend beyond the hearing. It is a public hearing. It will be broadcast and transcribed, and we'll inform our committee reporter at a later time. If there was anything of a confidential nature you wish to share with the committee you can make that request, otherwise it is all public.

I invite you to speak to your submission, anything you wish to add, acknowledging there's been a couple of submissions you've made over the journey of this inquiry or these inquiries. We do appreciate your interest and invite you to give us your thoughts.

Mr BARTL - Great. Thank you, Ruth. Thank you to the committee for having me speak today. Before I take questions there are three points that I'm hoping to make. One is about Tasmania's *Residential Tenancy Act*. Secondly, what the government is doing to address energy efficiency in rental properties. Three, what the Tenants' Union believes the government should do. Mark, I'm looking at you.

To begin with Tasmania's *Residential Tenancy Act*, there is very little in the act that addresses energy efficiency. While all rental properties are required to have a heater in the main living room, it can be any heater and it does not need to meet any energy efficiency standard. Similarly, there's no requirement that any other appliance or fixture in a rental property, including the hot water cylinder, meets energy efficiency standards. Finally, whilst all private rentals are required to have curtains or blinds in the lounge room and any bedroom, this does not apply to the majority of social housing. In social housing, only renters who moved into their homes after May 2024 are required to have windows or blinds. The reason that energy efficiency in rental properties is important is because the quality of housing is usually of a lesser standard than that of a known occupier. To put it bluntly, there is less incentive to invest in energy efficiency measures in a property in which you do not live.

To improve energy efficiency in homes and businesses, the Tasmanian government makes available no-interest loans of up to $10,000, but this measure by itself is unlikely to lead to improvement in energy efficiency in rental stock for a number of reasons.

First, most energy efficiency measures require the landlord's consent. No renter is able to install solar panels or double-glazed windows or energy efficient hot water cylinders or heat pumps without the landlord's consent. In many cases, renters are unlikely to want to take out a $10,000 loan, even a no-interest loan, when they can be evicted at the end of their lease without any reason being provided.

While there are some landlords who will make improvements to their rental properties because they do want to improve the comfort of the property or reduce a renter's energy bills,

many will not because there's little in it for them. Solar panels paid for by a landlord reduce the electricity bill of a renter, not the landlord.

Our strong recommendation is that energy efficiency standards should be law as is the case in the Australian Capital Territory, where ceiling insulation is required in all rental properties, or Victoria where appliances are required to meet a minimum energy efficiency standard.

As well - and this is something that will hopefully be debated soon in the lower House - renters should be able to make minor modifications to their rental properties without the landlord's consent, such as putting up blinds or installing window glazing.

As well as introducing basic energy efficiency standards, the government could offer incentives such as reduced land tax, a continuation of the no-interest loans with an extension of the current three-year limit to perhaps seven years, and free energy audits of up to $1000, which are currently only available to small business. If you weren't already aware, at the last state election, the government committed free energy audits of up to $1000 for small businesses.

Finally, social housing is an area in which government can directly improve the living conditions and cost-of-living pressures for our most disadvantaged. Ninety per cent of all Homes Tasmania properties do have heat pumps - something that I was surprised to read recently, but it is in a Homes Tasmania media release. However, there is more that can be done.

An initiative that should be rolled out is solar panels on all social housing properties that can take them. We accept that some social housing properties can't have solar panels - for example, because they're heritage listed, or because they're at the bottom of a valley, or for some other reason. But we also believe that community batteries should be installed in areas where there's high levels of social housing, to store the excess energy. This initiative has been recommended in the submissions I've read by the Tasmanian Council of Social Services (TasCOSS), the Carbon Zero Group, and the Tasmanian Climate Committee - I think they're called.

CHAIR - Collective.

Mr BARTL - Collective, sorry. Thank you. The reason I think solar panels are particularly important is: one, because a lot of the submissions talk to it being the most cost-effective way to bring in energy efficiency measures; and secondly, because of reduction in energy costs. One of the submissions talks to solar panels reducing energy bills by between 25 and 50 per cent. That's the end of my little presentation. I'm happy to take questions.

CHAIR - You did talk about the energy efficiency minimum standards in introducing those in Tasmania, citing Victoria. What are the potential economic impacts of that, in if we were to implement that in Tasmania - we've all seen the revised Estimates report; not looking all that healthy, the state's finances. So, just interested in what the benefits would be and what the cost would be. I mean, I know it's comparing the government with, you know, low income households, but how do we fund this as a government if we were to do that?

Mr BARTL - Well, towards the end of last year, the Commonwealth government agreed to put an extra $500 million across Australia into improving energy efficiency in social

housing. If that was to be broken down by state and by proportion of population - Tasmania has a proportion of the population of around 2 per cent; 2 per cent of $500 million is $10 million. TasCOSS, when that was announced, did say that they believe the state government should match that funding. I do believe that that should be a recommendation from this committee.

In January 2024, Julie Collins, who was the then Housing minister, announced $16 million for energy efficiency in social housing, of which the state government was contributing half. So, if the state government can contribute $8.5 million roughly in January 2024, an extra funding has been found, an extra $500 million or $10 million in Tasmania, then we would say the state government should be matching that.

In terms of how much it'll cost, I can't answer that directly. What I can say is that of that $16.6 million, $8.3 million from the Commonwealth, the state government's calculations were that that would improve the energy efficiency of 1600 social housing properties in Tasmania. There are roughly 14,000; 1600 is not a lot in the scheme of things.

A final point I'd make is that every state and territory in January 2024, when the Commonwealth announced how much they were contributing to this measure, every state and territory said they will match that funding. So, as I said, in Tasmania it was $8.3 million. In the ACT, the Commonwealth contributed $7 million, and the Australian Capital Territory government is putting $28 million. So, four times as much as the federal government was prepared to contribute. I raised the Australian Capital Territory as a good case study because it has a similar population to Tasmania. It has roughly 450,000, and Tasmania has 550,000, roughly. On one argument, if the Australian Capital Territory government can quadruple the funding provided by the Commonwealth, what we would say is Tasmania can too.

CHAIR - We compare apples with apples though with the social demographic. We do need to compare apples with apples, Ben.

Mr BARTL - Yes, sure. I accept that the ACT is a bit wealthier than Tasmania in some ways.

CHAIR - Going back to the energy efficiency programs, and again, looking at the Victorian incentives for landlords, what lessons can Tasmania learn from the Victorian program? Were there things we would do differently or, that we should absolutely do?

Mr BARTL - Victoria is a good example because it has introduced minimum standards of energy efficiency in rental properties. The way it's worked in Victoria is they've provided incentives: carrots as well as a stick. The stick is we're going to change the law to bring in energy efficiency minimum standards. But in the years leading up to that, they offered a range of incentives - rebates and discounts were available to landlords to ensure that appliances did meet the minimum standard of energy efficiency. Rebates were also offered on solar panels. Off the top of my head, I think it was a rebate of $1400 and a no-interest loan of potentially the same amount was also offered.

In the Australian Capital Territory, another example, there was a rebate of, I think, $2500 and a no interest loan of $10,000. There's a range of measures that the state government can offer. I've suggested a few. As I said, one is potentially reducing land tax. I accept that the books are not in a particularly healthy position at the moment and that land tax that is needed

for essential services. But if those reductions in land tax were used to improve the energy efficiency of rental properties of 58,000 households that rent, that would reduce the cost of living questions for people living in those properties.

CHAIR - In Victoria, when that happened, there were some claims that properties will be sold off and landlords would throw their hands in the air and say, 'Right, I'm out of here, I'm going to sell the property', taking it out of the rental market. This is for private landlords, not obviously for public housing. Have you got evidence that shows that did or didn't happen? You mentioned it, but I'm just interested in where the data comes from.

Mr BARTL - It's from PropTrack, which is no friend of the Tenants' Union. They collect data on sales, and their data showed that there had been no impact as a result of the introduction of minimum energy efficiency standards. I think landlords sell properties because they can make a lot of money from selling the property, not because energy efficiency minimum standards are being brought in. But there are ways to encourage landlords to meet those minimum standards. As I've said that there's a range of options available: no-interest loans, rebates, potentially reduction in land tax.

CHAIR - One of the largest providers of rental properties, if you like, is the state, through various models, as you know. What do you see as the critical things that the government should do to manage their own portfolio, whether it's managed by themselves or by other contracted out providers?

Mr BARTL - Ideally, the state should be acting as a model citizen. So, social housing should be comfortable for the people living in it. It shouldn't be seen as second-hand or not fabulous housing. We would like to see the state government doing more. As I said earlier, they have matched the funding provided by the Commonwealth, which is a good start, but we do believe there's more that can be done, given that only around roughly 10 per cent of homes will be impacted by that.

Mr EDMUNDS - With your comments before about the incentives, et cetera, and the lead-in time for the upgrades to be performed in Victoria, do you know what the window was for that? Was it a decade, five years, or?

Mr BARTL - Off the top of my head, it was a couple of years, but I'm happy to take that on notice, Luke, and provide a response.

Mr EDMUNDS - In your opinion, are those the best incentives that can be come up with, or do you have other suggestions?

Mr BARTL - Of the models I've looked at, they're pretty good, yes. There have been reports which talk to the rebates and discounts and the like that are offered and they're the things that keep coming up.

CHAIR - Did anyone else have questions down there? Mark, did you have?

Mr SHELTON - Only a comment around that, and I agree with Ben, in the sense that incentives to upgrade energy efficiency are always a great thing, rather than regulation, because regulation in this instance, given where we are with the housing market, there are a lot of rental properties out there that are based on a value that the owner has had for a number of years, and

if the owner was forced into a sale, then the new owner would pay today's prices and, therefore, the rent, we would agree with the rental, could actually go up. It might be a - what's the term?

CHAIR - A perverse outcome?

Mr SHELTON - A perverse outcome, yes, if regulation was used.

Mr BARTL - To answer that question, Mark, what I'd say is, in Victoria they did both. There was a carrot, and then at the end of the carrot there was a stick. I agree that we do need to offer incentives but, at the end of the day, we're only going to reach minimum standards if we legislate for it.

CHAIR - While we're in this sort of space of legislation, regulation, whatever we're talking about - and you talked about - tenants don't want to invest in their properties mainly because there's barriers to actually doing anything properly without landlord consent. The landlord might not want to consent. They might. But in any event, if you're getting a no-interest loan or some other support to put on solar panels, they're fixed to the house. You can't take them when you go.

Mr BARTL - No, that's a very good point.

CHAIR - Even if you get a whatever-thousand dollar no-interest loan to install them, effectively if your tenancy ends and it's not renewed, or you're evicted because the property is being sold or whatever it is, you lose that money. Not many tenants would be willing to take that risk, particularly with a fixture.

Mr BARTL - That's right.

CHAIR - Curtains you could take down and take them to the next property, for example. You have to patch up the holes, possibly, where you've stuck them into the window frames and stuff. But is there a mechanism that can be employed to somehow allow the tenant to get the value back for the money they've invested in the property that improves it - not necessarily for the landlord, unless they end up living there, but for the next tenant perhaps?

Mr BARTL - I think the answer is perhaps. I mean, one concern is, if we use the example of solar panels, the tenant might be moving into a property that already has solar panels. There's no point taking the solar panels they have, given they won't need them in the next property. Yes, could the landlord offer a rent reduction to the tenant on the condition that they do put in the solar panels, perhaps?

CHAIR - Should the money then be provided to the landlord as a rebate, if you like, or some payment to enable them to fund that, rather than requiring the tenant to do the work. Like incentivising the landlord to put them on, even though the landlord themselves don't get. Isn't that a better way, rather than focusing on the tenant being the one who will see the benefit to themselves, where the landlord sees no actual benefit to themselves in the same sense? So, should we incentivise landlords?

Mr BARTL - Yes. I mean, one response is, if a property has solar panels on its roof, it's probably increasing in value in any event because the person who buys a property is going to see that as value added.

CHAIR - But the rent may be put up as a result.

Mr BARTL - Well, yes.

CHAIR - I spent $10,000 on putting solar panels on a rental property and then I think, 'Well, this new tenant's going to save X amount of dollars, so I'll put the rent up because I've paid for the solar panels, so the tenant can afford to pay more.' We're sort of chasing our tails a bit here without some really clear indication from government they will support the landlord to do that, so the landlord is not so out of pocket, thus doesn't need to recoup the cost from the tenant. It's just going around in a circle, isn't it really?

Mr BARTL - Yes, sure. Totally agree that there need to be incentives for landlords to encourage them to do these sorts of things.

Mr GARLAND - Could you give them an interest-free loan that could be repaid upon the sale of the house?

Mr BARTL - Yes. Just on the issue of the no-interest loans, that raises a really good point, Craig, which is the current three-year period in which people have to repay a loan is not long enough in our opinion. If we use the example of solar panels, the data that the Tenants' Union has provided is that solar panels cost between roughly $6000 and $13,000 to install. If a landlord or anybody only has three years to repay that money, it's not very long to pay it back. But the data shows that you can make your money back because your electricity bill could potentially be halved. So, if you got seven years to repay $7000, if that's how much it cost to install the solar panels, you'll make your money back within that.

CHAIR - The tenant would, not the landlord.

Mr BARTL - Well, it depends whose paying for it.

CHAIR - We're talking about landlords. You were talking about the landlord getting in that NILs.

Mr GARLAND - Yes. An interest-free loan -

Mr BARTL - I don't have any problem with a landlord paying back a loan when they sell the property. I suppose the difficulty for the government is that might be 10, 20, 50 years down the track though. I'm not opposed to it because it's not my money. The government might have a view on that, but yes, I'm not opposed.

Ms FINLAY - Your response to that question, Chair, is of interest. Of the number of renters in Tasmania and of the number of people in social housing, how common is it that someone would be in a property for more than, say, two, three, or five years? When you talk about, say, paying it over seven, is it common that someone is in a property for that long?

Mr BARTL - If you're in social housing, you've won the lottery, so people in social housing don't leave unless they have to. Once they're in, they're going to be there for life unless their circumstances change. The difficulty is that people in social housing can't afford to make the improvements to their properties.

Ms FINLAY - Sure. I suppose I was asking the question more generally around renters as well. When we're talking about that payback. One of the elements of your submission, if I read it correctly, was linking the costs of electricity and the fees and things that go with that to the amount of churn in rental. I'm wondering if you can speak a little bit more around that - the fees and the costs associated with electricity supply for renters - and whether you have a comment on the impact of the power prices for renters in terms of debts, and what that means for their sort of tenancies?

Mr BARTL - Sure, I'll answer as best I can. I was asked about connecting prices last time I appeared and I went away and did some research. For those properties that do need to connect in person, Tasmania does have some of the highest prices in the country.

Luke, for example, was suggesting, 'Well, what if they could be waived or significantly reduced?' And from the Tenants' Union perspective, we would totally agree with that, because there is a lot of churn, particularly in the private rental market. Every time a renter has to move into another property, they have to pay to have the internet connected, the electricity connected. So, yes, anything that government could do to reduce those costs, particularly electricity, would be great.

The problem with that is that we're moving to a model where the connection will be done remotely. So, I think in my supplementary submission we've pointed out that TasNetworks, or whoever it is, is suggesting that within a year all properties will be able to be connected remotely, which means there won't be any cost. I think that's less of a problem now.

CHAIR - There's a technological solution to that?

Mr BARTL - Yes.

Mr EDMUNDS - And they've committed to no cost, have they?

Mr BARTL - Or maybe it's significantly reduced - yes, sorry.

Mr EDMUNDS - We might follow that with - we'll follow that up.

Mr BARTL - Have a look in my submission.

Ms FINLAY - And in terms of, you know, the broad range of things that we can consider under energy matters, the impact of high-power prices and people in power debt and their security of - yes, tenure - in the public?

Mr BARTL - Yes, sorry. You ask too many questions, Janie.

Ms FINLAY - Yes, sorry.

Mr BARTL - The TasCOSS submission points out that since 1 July 2022, electricity prices have gone up by 23 per cent, which is significant. CPI has only gone up by roughly 8.5 per cent. And again, the TasCOSS submission talks to around 50,000 households having an electricity debt. So, yes, the more that government can do to see electricity prices come down, the better it would be.

CHAIR - This is probably way outside your comfort zone, so feel free to kick it off into the long grass. There's been - and I don't know how much you've been watching and reading of these submissions to this inquiry - but some of it's focused obviously around the energy transition, and the need to decarbonise, and the potential building of Marinus Link. Now, there's some evidence to suggest that if Marinus Link is built, there'll be a not-insignificant increase to wholesale energy prices and network charges. Do you have a view on whether that's a reasonable way to spend taxpayers' money - assuming that the taxpayers are paying for this?

Mr BARTL - I don't have anything to add, sorry. I mean, I've read about half the submissions, and the submissions that talked about Marinus, my eyes glazed over. I'm sorry.

CHAIR - That's alright. Each to their own area of interest.

Ms FINLAY – You have talked about the impact on prices.

CHAIR - Yes. I mean, I'm sure it's not something that the people you represent generally exercise their minds to either, so they're not likely to raise it. But the reality is, if there is increases in power prices as a result, then do you think the Tasmanian government has an obligation to really - if, you know, they're going gangbusters on supporting this, then is there - if what appears to be almost inevitable - if it goes ahead, increased prices - does the government then have a responsibility to respond to the very real price pressures that energy users are paying?

Mr BARTL - Well, yes. If electricity prices are going to go up, and we've already got roughly 50,000 people with electricity debts, then it's likely that that will only increase. So, if the government is going to go ahead with it, it needs to ensure that there are programs in place to ensure that people are getting the deductions they need.

CHAIR - Do you see that as an expansion of the concession framework? Or how do you see that working? Because unless we have something that's really well-constructed, it won't necessarily hit the mark.

Mr BARTL - Yes. Again, the TasCOSS submission talks to that these sorts of programs need to ensure that the most disadvantaged receive the most impact. What we have seen, I think $250 blanket reductions in electricity bills - I didn't need that. I mean, I took it, and I was happy to accept it, but I don't -

CHAIR - It was nice to see on my power bill this time too, I might add.

Mr BARTL - I don't really need it compared to many people in the community. We need to be ensuring that those sorts of concessions target the people who need them. But from a Tenants' Union perspective, we think the best way to see a reduction in electricity bills is to ensure that there are minimum standard energy efficiency requirements in rental properties.

CHAIR - There's more than one thing that needs to happen here, that's what you're saying.

Mr BARTL - Yes, yes.

CHAIR - In some - and I don't know the actual reason why everyone got the $250 whether or not you needed it, other than that the administrative cost or something like that can be quite a large amount -

Mr BARTL - That's right.

CHAIR - Unless we're talking about giving each of us a $2500 rebate, which would be even nicer, for example, then the administrative cost of delivering that would be less, percentage-wise and a smaller amount.

Mr BARTL - Yes. My understanding is that that's the government's response. It was going to cost more to administer than just -

CHAIR - Giving everyone some, yes. Looking forward, then, there's work need to be done on modelling the impact - when we have some modelling that shows, with a degree of variation as to what the increased price is likely to be - do we need to start that work now to understand how you would define, describe, implement a scheme or an expansion concession framework? Should we be doing that? Not us, but -

Mr BARTL - Of course, Ruth, of course. It should already be done. It shouldn't be that difficult in the sense that Homes Tasmania is essentially the state. They've got access to all those people. They're aware how much those people are earning.

CHAIR - Who should be doing the work? Who should be doing the modelling? Is this something that TasCOSS should be doing, or should the government be doing it?

Mr BARTL - The government should be doing it. TasCOSS doesn't have the resources.

CHAIR - I want you to tell me.

Mr BARTL - Yes, but please ask TasCOSS. Maybe they've got a different opinion.

CHAIR - Maybe they've got a bigger bucket of money tucked away somewhere. I doubt that. This would be something that sits in Treasury, obviously?

Mr BARTL - Yes.

CHAIR - And would effectively be revenue foregone to the energy businesses.

Mr BARTL - Yes.

CHAIR - But the work needs to start now, is what you're saying.

Mr BARTL - That's right.

CHAIR - Other questions, anyone?

Ms FINLAY - We've focused a lot on the solar and energy efficiency elements. What do you think would be the single biggest impact for tenants? Is it outside those obvious ones? What are other things that could happen that would make a real difference?

Mr BARTL - There are two issues. One is around the comfort of people living in the properties and the other is cost-of-living pressures. Solar panels, if they reduce electricity prices between 25 and 50 per cent, they would obviously be great from a cost of living perspective. Ceiling insulation - we know, for example, that around 30 to 40 per cent of all heat goes through the roof, so if we're ensuring that there's ceiling, we're improving the comfort of the people that live there. Yes, probably ceiling insulation and solar panels would be the two things we think should be done sooner rather than later.

CHAIR - And the energy efficiency standards with regard to heating appliances and things like that.

Mr BARTL - Yes. Obviously we would also like to see the law changed to ensure that there is a minimum standard for all rental properties.

CHAIR - Okay, unless there are any other questions, is there anything you want to close with, Ben, anything you wish you'd said that you haven't?

Mr BARTL - No.

CHAIR - That's fine. Thank you for your appearance today and your submission, and representing the tenants around Tasmania.

Mr BARTL - Thank you.

The committee suspended at 2.54 p.m.

The committee resumed at 3.15 p.m.

MR ANDREW RICHARDS, CHIEF EXECUTIVE OFFICER and **MR LEIGH CLEMOW**, POLICY MANAGER, ENERGY USERS ASSOCIATION OF AUSTRALIA, APPEARED VIA WEBEX

CHAIR - Welcome, Andrew, and your colleague, Leigh, to our public hearing on the Energy Matters Committee. We appreciate the time you have taken to put in a submission to one of our previous inquiries. We have carried it forward into this inquiry.

Because you're appearing from interstate, I won't actually ask you to take the statutory declaration. I'll tell you that the evidence is being transcribed and is being broadcast and will form part of our public record. Just keep that in mind when you're speaking to us, if you don't mind. Are there any questions before we start?

Mr RICHARDS - No, that all seems in order. Thank you.

CHAIR - Thank you again for your submission. I'll invite you to introduce yourselves and tell us a bit about the organisation you represent, and then to speak further to your submission, acknowledging it was written some time ago, now just over a year ago. There may be a few new things you wish to add.

Mr RICHARDS - Yes, in the never-ending changes of the energy market and the world that we live in.

CHAIR - And the Tasmanian parliament.

Mr RICHARDS - We are the Energy Users Association of Australia. We represent large commercial and industrial customers. In Tasmania they include Rio Tinto, Bell Bay, Grange Resources, Nyrstar and Simplot to name others. They're our key clients down there. We're a national body, not-for-profit, we rely solely on membership from members to fund our activities.

My colleague, Dr Leigh Clemow, is our Policy Manager and I'm the CEO.

I do have an introductory statement if you'd like me to go through that?

CHAIR - That would be great. Thank you.

Mr RICHARDS - Thank you for the opportunity to address today's committee. In our submission, we note today that Tasmania is taking a different approach to many Australian jurisdictions to emission reduction and resilience, mainly due to your very lucky situation with all the hydro you have down there. You've already effectively got to net zero emissions in 2014, we understand. However, we also see that there is a 200 per cent renewable energy target that's been set, or ambition, at least, which will take no mean feat to achieve.

It's pleasing to see in developing the draft sector plans for both industrial processes and product use, that the Tasmanian government has recognised the difficulty in businesses, particularly energy-intensive businesses that I named before in being able to make that transition to a net zero world that we all want them to be in. Sometimes that's the lack of

commercially available alternatives; sometimes it's through a lack of internal capital within the business or competing needs for that capital resource.

Hydro-based sectors face a difficult challenge to decarbonise. Therefore, we must recognise that the use of traditional sources of methane, amongst other things, will be required for many years to come as we find alternate technologies - be it electrification or low emissions gas. Renewable gas will take some time to build to scale and to reduce its cost to keep our businesses competitive. With hydrogen, consumers will be required to invest heavily in new end-use technology. That's assuming that the fuel itself is available in quantity and is price competitive.

One of the points we like to make in the transition to net zero is that it's the customer that will be one of the largest investors in part of that decarbonisation. Whether that be a large smelter or a household, they will need to invest thousands if not millions in new technology within their home to complement the new technologies that have been sent to them, be it through electrification or through different forms of gas. We need to keep that in mind, that as much as there are capital constraints and capital pressures on those who are building the system, those very similar pressures are on those who actually use the system and produce products that we use every day.

In talking to our members in Tasmania about their key issues, they consistently raise that access to energy is one of their big concerns, particularly as they're looking to increase supply or move away from gas or coal, and trying to electrify. There is what appears to be a supply shortage of, particularly, those who want to increase capacity substantially. The conundrum for many of our members is they need to increase consumption for electricity or gas in order to decarbonise. Unfortunately, that's not always possible in Tasmania, as I mentioned.

We have recommended and we'll continue to recommend that the Tasmanian government audit these businesses' future needs, the constraints of the infrastructure and supply of energy resources to each of its major industrial hubs, and put in place actions to allow Tasmanian members to decarbonise their sites. Tasmanian industries spread far and wide, as you well know, so we understand that's a difficult challenge, but a challenge that we need to face into as these companies begin their decarbonisation journey.

They talked to us a lot about renewable fuels and gases, so renewable gas. It's both for energy production and for feedstock, in many cases. I think we need to be identifying industries that require biomethane and facilitating the co-location of biomethane production either onsite or nearby, if that is part of the direction. I think we would be advocating for grants, both state and federal, for production facility upgrades and to help those businesses transition to green hydrogen, should that materialise, or some other form of green gas.

A lot of orchestration needs to occur to make it more efficient, particularly when it comes to things like green hydrogen - similar to the Bell Bay Hydrogen Hub, where that's quite important. It's our opinion that any green hydrogen production facility - built for export particularly - should have domestic reservation applied to its production levels to avoid a repeat of the Queensland LNG export program impact on domestic gas prices. It's all well and good to have a hydrogen export industry, as many planned; if that just links us to higher international costs, then it's not particularly good for Tasmanian or Australian business.

We also urge the Tasmanian government to consider geographic barriers to emissions reductions by industry, knowing that in many industries located close to feedstock energy inputs and/or ports, which now places them at a disadvantage of supply-appropriate renewable fuel volumes. We just don't have that co-location at the moment.

More recently, Basslink has had a draft regulatory response from the AER. We are quite supportive of the AER's position that Basslink should remain a market network service provider. Moving it to a regulated network would, in effect, transfer price and volume risk from the owner to the customer, and we don't think that's a particularly fair outcome - particularly with Marinus being built by 2030, the risk to consumers that this asset effectively becomes stranded, yet we continue to pay for it, becomes heightened. I think we probably need both Basslink and Marinus, but our view is that the owners bought it knowing it was a market network service provider, so buyer beware.

Marinus Link, I think, is going to be quite important. If you go back to one of our earlier comments around access to increased supply, it seems like Marinus Link is turning out to be a bit of a key to everything, whether it be getting more energy flow from Victoria into Tasmania, but also increasing generation in that north-west corner of the state.

There are swings and roundabouts in that. Marinus Link will increase network costs and we hope sometime in the future that we will see lower electricity costs as a result, but I also understand from many of our members that the concern is that high Victorian electricity prices will feed their way down to the Tasmanian jurisdiction and increase prices for Tasmanians in the wholesale market. These things need to be studied very carefully. It can't just be taken on face value that things will happen. Understanding how those interactions work are a key focus of our members.

To just conclude our remarks, we consider that the Tasmanian approach to accept the plans is well-placed to capitalise on the net-zero position Tasmania currently holds. We urge the Tasmanian government to utilise existing tools amidst the carbonisation mission that is to remove impediments that large industries face when looking to decarbonise, as we've talked about the supply side, [inaudible] infrastructure and/or energy resource, and to develop an action plan for the bioenergy sector, including the supporting policies.

Re-emphasising, bioenergy as a replacement for methane, can be a drop-in fuel for many of our members, whereas hydrogen is not a drop-in fuel and will require substantial investment at the customer end. There are additional constraints there.

That's very brief opening remarks. Happy to take questions from the committee and thank you again for allowing us to present today.

CHAIR - Thank you. If I can just pick up on the commentary made around Basslink and we heard from Grange earlier today who also supported, as members obviously too supported the AER decision with regard to that. You said, rather harshly, 'buyer beware', which I guess it was.

From previous, other committees I've sat on we've had this whole Basslink situation scrutinised a number of times. It seems that was in place before that decision landed, and probably still is - well, I assume it still is. It was an agreement with Hydro to purchase the power and a network agreement they had with them.

Who holds the cards now? Notionally, could APA increase the cost for Hydro to access that cable, thus reducing Hydro's profitability and thus the returns to government because they're not regulated? What do you think the likely scenario is there? I assume a new agreement will have to be struck because, as I understood, that one was until - I don't know whether it was until Basslink was regulated or until a decision was made about regulation. I'm not sure.

Mr RICHARDS - I mean it's a hard question to answer because we can't see inside the deal. That would be a double-edged sword, I would have thought, for APA. You could try an increased price, but that would be a very short-term strategy, particularly with Marinus Link effectively - let's face it, Marinus Link is guaranteed to be built, given the level of government support that it has. That would be a very short-term strategy, I would have thought, from APA. Perhaps that Hydro might want to push back and say, 'Well, if you increase the price of Basslink transfer and you push us towards buying gas, then we will do that.' I don't think they've got all the cards. I think it would be a very short-term strategy.

CHAIR - That's probably more a matter that Hydro could answer. I'm not saying they would answer it under the veil of 'everything's commercially sensitive' there.

Mr RICHARDS - I will say, at the end of the day, this is a conundrum for us in a lot of places in that what is the best way to recover costs? Through a market or through a regulated regime? Typically, you would think that cost recovery is going to be far more efficient through a market. If Hydro buys those, buys that PPA, they then need to compete away that in the market. Whereas a regulated regime effectively locks us in, and is meant to replicate what would be the outcomes of competitive market, but it simply - and the AER would agree to this - it simply can't do all of that. If we're given the choice between cost recovered by a market or by regulatory scheme, we tend to try to trust markets to deliver a far more competitive outcome.

CHAIR - The market's much more nimble than a regulatory framework, too, in adjusting to day-to-day pressures, don't they? Or changes.

Mr RICHARDS - It can do, yes. Absolutely.

CHAIR - I appreciate some of your comments around the transition. Whether we like it or not, it's happening and it needs to happen. There'll be the withdrawal of all the coal-fired power stations over time, but that's coming ever closer. In your view, with regard to the transition of the whole national electricity market, how should policymakers balance the rapid phase-out of dispatchable thermal generation with the need for system reliability and stability?

Mr RICHARDS - Very good question. That's really one of the central questions of the NEM review that's currently underway, otherwise known as the Nelson review, how do you actually manage that process. We would describe the current situation as the messy middle of the transition. We've probably got halfway there and we've done the easy half and we're now facing the hard part. I think the reality that governments are facing into is that the deployment of new assets isn't running to schedule. It's running behind time and therefore we're needing to pay old coal-fired power stations to limp along a little bit longer. Some are able to do that. I think up here in Victoria, Yallourn seems to be very much on its last legs. I doubt very much whether that can be extended again. We are facing into some serious issues there.

How do you best manage that? I think you need to be rational and clear-eyed about what's possible. We are in a super-heated infrastructure environment. The same people who construct wind turbines, powerlines, et cetera, are the same resources we're using to build roads and fast rail and everything else. It's labour, it's material supply. We're short on both of those. We're in this overheated market which is just increasing the cost pressure, but it's also making some of these projects more difficult to deliver on time. It's almost like the perfect infrastructure storm which is creating this. In other words, governments might need to make a choice as to whether they build a fast rail loop or build a transmission line.

CHAIR - Do you think there's going to be a period, particularly if one of the lives of one of the coal-fired generators can't be extended again or at all, where there will be issues with system reliability and stability?

Mr RICHARDS - You certainly can't discount it. I know AEMO has been talking about this issue for quite some time, both from a coal-fired power station perspective, but also the need to get more gas being implanted into the system as part of that longer-term resolution. There are also other issues around system strength and the need to replace the synchronous machines that we're losing with artificial forms of synchronous condensers, et cetera. They're also in short supply. I think there is - it needs to be very carefully managed, which means you need to be very pragmatic about how you transition and the rate of transition that you expect to achieve, and be flexible so that you can, if you need to extend something, extend it. We all want coal out of the system as soon as practical, particularly the old ones because they become less reliable, but you still need to be flexible, because at the end of the day, if the lights go out, then the transition is in big trouble.

CHAIR -Does there need to be a greater public awareness campaign around this, do you think? Most people, what they're concerned about is their daily cost of living, and their energy bill feeds into this. Do you think there is also perhaps a need to better inform them about what we're actually talking about? Or do we just get on with it?

Mr RICHARDS - Yes, I think we need to have some - we need to do both. I think we need to have a really clear-eyed conversation with the public about how much it's going to cost and how long it's going to take.

When we hear politicians and others, to be frank, talk about 'my plan will save you money, my plan will reduce your electricity bill', it's very difficult to believe that will occur across the national electricity market. We need to invest something like $100 billion rebuilding and retooling our energy system. Now you don't spend that amount of money and expect the bill to go down because that capital has to be recovered.

In the longer term, you hope you will get an improved outcome and the bills do come down. But to your point, we're in a cost-of-living crisis and it's a very hard thing to be talking to the people about, yes, but your bills going to go up. But having said that, it's going to go up regardless. If we were replacing coal with coal, your bill still would have gone up simply because the old coal assets were basically written down and only had a marginal cost of production of about ten bucks. You replace that with a brand-new asset that doesn't have a written off value, automatically you have increased bills. If you build nuclear, you basically need the government to become the peak energy generator in the country because private equity won't touch it. These sorts of issues start to become very real and need to be discussed.

CHAIR - What we tend to hear from our government, and I'm sure other states are similar, is power prices will go down: 'we're doing a good thing for you, power prices will go down', but it's pretty clear to me, it seems from what I've heard, that certainly in the short term power prices are going to go up while we pay for this. Is that a fair assessment?

Mr RICHARDS - Yes. There are two aspects to this: power prices will come down eventually; when, is the next question to ask. The other thing is a lot of the times when people talk about that, they're referring to a counterfactual argument of what would have been if not for this. Now most of the general public hasn't got an economics degree and doesn't understand that concept. To be fair, if you polled people in the street and said the government said against the counterfactual of X, that Y is going to deliver you a better outcome and therefore your bill is going to be cheaper, what have you heard? Most people will say, well, my bill is going to come down. Not that it's against some sort of nefarious question.

CHAIR - It's coming down from a much higher place.

Ms FINLAY - From what it could have been.

CHAIR - Yes, that's right.

Mr RICHARDS - It gets very confusing for the public. Our leaders need to be much clearer about how they explain this. The fact is we do need to decarbonise, we would have had to replace our ageing fossil fuel fleet regardless, whether that's doing it in a way that's cleaner has its own challenges but we still need to be clear right about that discussion and it's a difficult one to have. I'm not sure we're having that honest conversation, shall we say. People have talked about the transition being easy and cheap, when actually it's really hard and quite expensive and because of a whole range of factors will take a lot longer than we'd hoped.

CHAIR - You being on the mainland, should Tasmania hydro resources be considered an asset primarily for Tasmanians or an asset that all Australians have equal right to?

Mr RICHARDS - That sounds like -

Mr SHELTON - I didn't get that. It just dropped out at the right time.

CHAIR - We might have to start that answer again now you've composed yourself.

Mr RICHARDS - That would be a decision for government, but if you look at that Hydro is talking about being battery of the nation, it appears that they think it's for everyone. Now, I'm assuming that what they're going to do is be a major player in the contracts market selling lots of caps onto the mainland. Ultimately under that strategy, it's good for Tasmania because Hydro Tasmania's profitability goes up being a major service provider in the contract market.

You could say should it just be for Tasmanians, maybe. Will there be additional benefits in the future market, maybe. Too many unknowns. I don't want to start quoting Donald Rumsfeld, but too many unknown unknowns over the next 10 years of how the market's going to unfold. Bearing in mind something like Battery of the Nation has a major competitor in Snowy 2.0 basically selling the same product into the National Electricity Market, so it would be a balanced decision that our government will need to make. How they deal with that public

asset? Do they maximise profitability for the Hydro, or do they have it as a strategic reserve for Tasmanians. That balance is really where it sits.

Ms FINLAY - Andrew, could I just ask a question off that? In your introduction, you talked about your desire to have an audit of the large commercial industrial users and an understanding of the reality of what is needed.

As I see it, there are a lot of conversations on maybe what's publicly palatable of what future needs would be because you don't want to be disclosing your hand like all sorts of things. And I have heard it said that in fact all of the proposed generation at the moment in Tasmania is likely to be absorbed by our large commercial industrial users, in terms of decarbonising and electrifying. So even what we've now proposed, if we're going to see our major industrials and others actually achieve what they need to continue to operate best of class that we're going to absorb all of the investments lined up now.

I'm interested for you to make more comment about that need for the audit and what you might at a gut level believe the audit will reveal.

Mr RICHARDS - I think the audit idea is to ensure, sorry, I'll wind back.

Energy is the economy. If you don't have affordable, reliable, sustainable energy, you don't have an economy. When you start talking about energy and climate change policy, you are making really, hopefully, well-informed decisions about what you want your economy to look like.

Do you want an industrial base? Do you want a food processing industry? Because the energy inputs will drive whether you have that industry or not. For us energy is the economy.

The audit then looks at understanding what heavy industry we have. What value they create. What their exposure to climate change policy looks like. And what are the pathways to decarbonisation? And then, how are we able to facilitate that if we've decided we want to keep Bell Bay or if we want to keep making potato chips or whatever it may be? Clearly, governments will decide whether we want to continue to do that or not. Or, we say, you know what, we think you like the car industry, and we don't think that you've added enough value there, therefore we're not going to help.

They are decisions of governance that come out of the audit to say it's worthwhile saving or worthwhile supporting? What does it add? What's its risk? And how if we want to keep it, do we help them reduce that risk and move forward.

That's where the audit would come in to be one useful tool to help understand that.

Mr CLEMOW - There is a lot of commentary at the moment about electrification and businesses that can electrify. But as Andrew said earlier, depending on where they are in their capital cycle in being able to access the capital markets and the competition for capital from their overseas partners, depends on whether they can invest in electrification or whether they need a drop-in fuel.

The solution for each business is quite bespoke. Some will need to continue with methane, be that biomethane. Some need hydrogen for the hydrogen atom. Some need methane

for the carbon atom. Some need methane for the physical properties of how it burns and others can electrify. And that audit can inform governments of where you need bioenergy, where you need hydrogen, where you need to upgrade the electricity network to electrify and therefore provide a better road map for government on how it's going to do these things.

Ms FINLAY - As a user association, are you in any conversations at the moment that might imply that an audit of that level is occurring as part of our whole-of-government business case for Marinus.

Mr RICHARDS - Not to our knowledge, no.

Ms FINLAY - Do you think that would be useful to include?

Mr RICHARDS - I think it would be useful. There's a lot of assumptions in these business cases that need to be tested; they need to be robust and an audit would certainly help with that.

CHAIR - In terms of your members, I know they're not just in Tasmania, but everyone's going to be impacted by the energy transmission. From your members' perspective, by and large, do you see they believe an average lower price during the year is more important than stability in the price or stability more in the price more important? What about the reliability? What are the key things for them? Would they be happy with a lower price but more price volatility?

Mr RICHARDS - They're very good questions. Our membership is quite diverse, both in their operations, but also in their ability to take risk in energy markets. At the end of the day, they make things. They're not energy day traders. I'd say, in the heart of hearts, they probably wish for, well, 'If I could get a long-term agreement at a reasonable price I can just put in the drawer and I can just go away and start making glass again or McDonald's chips, or whatever it is, then I'd probably like that'.

I think there are others, having said that though, that are a bit more - I hate to use the word - sophisticated in the way they manage their energy contracts and are able to take a bit more risk. They actually might like volatility. What I'm saying is it's not a vanilla flavour here. It's quite every colour of the of the rainbow that sort of comes into this.

I think the one thing is they don't want to sacrifice reliability. They're looking for more sustainability, particularly those who are associated with things like Safeguard Mechanism, which quite a few are. All of them have ESG targets, so certainly reliability, sustainability at an affordable price. That's not just for them. Most of our members make things we use every day, steel bricks, baby formula, tissue paper, all that kind of stuff. To the extent they can pass through those increased costs, they absorb some, but they'll also pass them through. Again, this is where I say energy is the economy. A lot of this is driving the cost-of-living crisis.

What's happening with gas, for example, where we used to buy it for $5 a gigajoule, now $25 a gigajoule. That affects the cost of building a home or a glass bottle or processed food. That also flows through into the electricity market. The more increases in electricity prices you have or energy, then that has that inflationary effect. It has effect on their bottom line, but also has effect on everyday mums and dads and households as well. That's a long way of saying it

just depends on who you talk to, right? Because they all have slightly different phases of their transition and have different levels of flexibility.

CHAIR - Following on from what one of your members said to us earlier, they were very clear about it, but I'm interested from the organisation perspective. Should new generators of variable renewable products in particular, bear the cost of transmission upgrades or new transmission lines such as in a renewable energy zone rather than consumers via regulated transmission charges?

Mr RICHARDS - Yes, is the short answer, because if you had generators to pay for a part or all of that infrastructure, they will recover that cost via the competitive market. This goes back the point I was making before. We would much prefer to see cost recovered through competitive markets than through a regulatory regulated regime.

Quite a few years ago, we actually proposed a change of the transmission use of system charge to go from just being a consumer related charge to one that's shared with generators; a G2, generator - GUOS - use of system charge.

At the end of the day, it all flows downhill to consumers who pay for it all. What we're focussed on is what is the most efficient way of doing that. Generally speaking, the most economically efficient ways to use markets rather than a regulated regime.

CHAIR - Perhaps to put the question to you, but you've probably answered it pretty much, given there are public benefits in a robust transmission network, particularly as we're feeding more variable renewables into it, should the government reconstruct the structure of the rewiring of the nation funding to alleviate the TUOS and might put a GUOS in, as you suggested, these charges on customers. How would that work? Clearly, that would be a change of approach.

Mr RICHARDS - Our strong advocacy to the federal government on rewiring the nation is to move it from a low-interest loan to a grant scheme effectively, or that the Commonwealth take a degree of equity participation in the asset for a period of time, not forever.

The main cost and risk of these big assets is in the first 10 to 15 years. After about 10 or 15 years, when you've confidence that generation is connected and flows of electrons and feeling pretty confident it's a high utilisation asset, then the Commonwealth could pull their equity piece out. At that point in time there would be super funds falling over themselves to get into it. Our advocacy to the feds is to say low-interest loans don't make a big difference to TUOS costs. We've done a bit of economic work on this to demonstrate it has a very marginal impact. I'm happy to share it with the committee. The biggest impact on reducing TUOS and getting more stuff built quicker at lower risk is the government taking a position whether it be a grant or whatever.

Our recommendation was to be an equity participant. I'm not really sure where they landed on Marinus. I'm guessing it's a high degree of equity participation by the Commonwealth in Marinus to get it moving and to shield particularly Tasmanian energy users from what would have been a significant increase in cost if we used a normal regulatory regime to price Marinus, which would have been quite horrendous for Tassie.

CHAIR - Did you say you had some modelling on the impact of the transmission?

Mr RICHARDS - Yes.

CHAIR - And you're happy to provide that to us?

Mr RICHARDS - Yes, absolutely.

CHAIR - We'll write to you and ask for that. Again, from some of the comments you've made, do you believe that transmission projects should be made contestable to encourage private sector investment, or is that further down the track - as you're saying, once things are built, they'll more likely come in once they see the runs on the board?

Mr RICHARDS - Yes, we think most things should be contestable. That's generally how you get better outcomes for consumers and lower prices. We're actually a supporter of contestable transmission, particularly sitting here on the mainland looking at how some of the current ISP projects are being rolled out, a bit of contestability wouldn't go astray. It's a good idea. I know the regulated monopolies don't like it. They often put up we need to run the backbone of the transmission system to keep it safe. Not really. Someone can build it and own it and you can still operate it and whoever's operating it still needs to operate it to the requisite standard anyway. Saying that we need to -

CHAIR - It is all set by the AEMC I don't know if they'd set the rules, who sets the rules? The AER sets the rules, but they apply to everyone?

Mr RICHARDS - Yes, under the national electricity law, there's a certain standard on how you run a transmission system.

CHAIR - Even if it was built by a private sector, they'd have to comply, they can't skimp on that.

Mr RICHARDS - They would be required to - and if it came down to it, the host transmission company can still operate the asset if they're worried about that, not really sure why they would. At the end of the day, you don't want two control rooms being set up. That's kind of inefficient. You can certainly have a model where someone comes and builds and owns it and the day-to-day operation is sitting with the central transmission company. Then you don't have to so-called risk of having two operators in your transmission system. Again, to build the transmission system, it needs to be built to a certain electrical standard. It doesn't matter who builds it, it's going to be the same standard.

CHAIR - Given that private capital is hesitant to fund large-scale projects, what regulatory reforms, if any - well some we've touched on here - are necessary to prevent financial risk from delaying transmission investments? We have seen some delays in Tasmania. As you mentioned right at the beginning, this is taking longer than was anticipated and hence the challenge with keeping some of those older coal-fired stations going. What's needed in this space?

Mr RICHARDS - That's an inquiry all of its own, quite frankly. One of the big things we've noticed over the last few years is the transmission companies have said, we're good at building big things. We've done it before. Then you say, have you really? When was the last time you negotiated a new easement? When was the last time you mobilised $3 billion or $3.5 billion worth of capital equipment on the ground?' None of them have. The challenges of

building these big assets when you haven't done them before are large in themselves. When you then put that into this over-heated infrastructure market we have, you've limited human and material resources and you're competing with every other country who's looking to do the same thing. You can't get an order for synchronous condensers into Australia for five years. It takes you three years to get a 500-kVA transformer built and sent to you. These are just material challenges that make it incredibly difficult. People need to be clear as to what's possible.

One of the big things we would say is when big transmission projects go to assessment by the AER (Australian Energy Regulator) to understand their benefits, normally the capital cost that is put into that because it's so early on in the process, is what's called a Class 4 Estimate, and that tends to be plus or minus 50 per cent. It's not going to be minus 50 per cent, it's always going to be more.

Mr SHELTON - It never is.

Mr RICHARDS - The net benefits for consumers have been based on a capital cost that is at least 50 per cent lower than what the actual cost is going to be. As we see progressively capital costs keep going up, there's no requirement or rule that allows the AER to go back in and reassess those net benefits to see if they're still there. The person who decides we need to get this reassessed is the transmission company. They need to put their hand up and say, hey, my costs are blown out, we need to reassess this.

What we would be asking for then is the number that goes to the AER for assessment of net benefits needs to be far more robust than we're currently seeing, otherwise we have no faith that the net benefit number is anywhere close to being accurate.

Ms FINLAY - Does that mean it comes later in the process, or they need to be doing more work earlier?

Mr RICHARDS - More work earlier, which probably then means a little bit later in the process. There's a thing called - a lot of them are applied for this now - Early Works Contingent Project Application where they apply for $300 million to $400 million of early works, which allows them to do all the preparation and do the sorts of things that get you to a more robust outcome. Consumers will pay that $400 million in this example, whether the project's built or not, that's just effectively done.

CHAIR - That's what's happening here with Marinus Link.

Ms FINLAY - And North East Transmissions.

CHAIR - And that too.

Mr RICHARDS - We would be comfortable with that if there's a degree of guarantee that the outcome is more robust, both from a pricing point of view, but also from a community point of view. So, that social licence issue is dealt with to a better degree than it currently is.

What we'd be looking for, I'll give you $400 million down payment, which is going to be a sunk cost for me, if I can get at the end of the day a Class 2 estimate going to the AER or a better community outcome or at least a more known or a less than more known outcome.

Ms FINLAY - You're investing in uncertainty.

CHAIR - That is almost contrary in some respects to what you said earlier that Marinus Link is almost certain to go ahead because the amount the government's throwing at the minute. Like with the Northwest Transmission Development and Marinus Link, I understand it, both have had some early works approved that is being paid for by the customers, us, you know, you members, everyone. And there is still this impression that we're going to spend all that, it'll go ahead and we'll just pay more when it goes ahead.

What's the likelihood of it doing the early works and then seeing actually this doesn't stack up? What is the chance of that?

Ms FINLAY - That made you both smile.

Mr RICHARDS - My personal view is next to zero. And you go back to the source document for all of this, which is the integrated system plan, and what's called the Optimal Development Path. This is not a criticism of AEMO (Australian Energy Market Operator), they've been asked to do this work. It appears, though, that the Integrated System Plan (ISP) has now become the bible for the rollout. And, once you're in the bible, it's truth, and therefore it has to happen.

We've seen that and the political narrative around the ISP, including ministers from Tasmania saying, 'It's in the ISP, we have to build it'. Well, you haven't done the regulatory investment test on it yet. How do you know? Politically, I think it's very unlikely that it won't go ahead.

CHAIR - How can Tasmania's interests be best protected then? I know you're based on the mainland, but you've got Tasmanian members and we're Tasmanians. How can our interests be best protected when we have the battery of the nation? There's an expectation that we will build on our island significant more variable renewal energy. Our population is far smaller than the rest of the NEM (National Electricity Market). If we were paying our percentage by population, it would be much smaller.

Mr RICHARDS - It would be unsustainable for you.

CHAIR - Yes, so how would Tasmania's interest really be served in all of this?

Mr RICHARDS - Again, a lot of this is closed door negotiation between energy ministers. My observation of what I've seen is the Tasmanian government has done a reasonable job in negotiating with the Commonwealth on reducing the impact on Tasmanians, because they understand it would be pretty severe. Now, that's for Marinus Link. The north-west build-out is1000 megawatts of wind, that in itself is going to be a substantial capex. Again, you'd be leaning into Rewiring the Nation and other things to act as that sort of risk and cost shock absorber, particularly over the first 10 to 15 years.

To the extent that Hydro Tasmania gets a really good leg up on revenue through Battery of the Nation, I guess that ends up backing government coffers and hopefully spent on some schools and roads and bridges and hospitals.

CHAIR - Well, it depends on the government of the day, doesn't it?

Mr RICHARDS - Correct, yes, but you would hope that's how it's spent if I was a taxpayer down there.

CHAIR - Some of those are political questions. I appreciate you even entertaining the idea of talking about them.

Mr RICHARDS - I'll probably get in trouble later.

CHAIR - We are just about out of time, Peter. Were there any other pressing questions? It's been really interesting understanding your view.

Mr SHELTON - A question on Tasmania, my discussions with people that are involved in wind farm development say that without Marinus Link, it won't go ahead. You might get one or two little ones, but the reality is there are billions of dollars out there of investment that's waiting to see what the future holds as far as whether they can get rid of their excess energy or not. Therefore, because we are a constrained market, whether that investment will happen. What's your view on it?

Mr RICHARDS - I spent 15 years in the wind industry before I did this job. If I was building a project in Tasmania, particularly if there's going to be 1000 megawatts of wind, I would want to be able to export it into the NEM. Other than that, you would be saying, 'Okay, well, I'll build that. I'll install the battery and take a punt on an electrolyser and start making hydrogen, but then do I have a customer for that when $10 a kilogram when we need to get it to $2 a kilogram?'

In the short term it probably would constrain the amount of new wind that's built. But let's remember that a wind farm has very low operating costs. There's not 100 people running around a wind farm doing maintenance or whatever. Offshore wind doesn't have a lighthouse keeper on the top of every turbine. The benefit is in the construction. That's where you get a fair bit of activity, but once that activity is completed, the actual job is quite small. It's a little bit like the LNG trains up in Gladstone, while they were being constructed, it was a boom town up there. Now the jobs have disappeared. It's gone to pretty low-cost ops. Again, this is this is a decision for government. Do they want the economic development, the jobs in in construction and what's the ongoing benefit once those jobs disappear?

CHAIR - And mind you, they'll be there for a few years yet.

Mr RICHARDS - I remember when a time when there was, was it an assembly plant at Wynyard for wind turbines?

Ms FINLAY - Yes, Vestas.

CHAIR - It's now Haulmax.

Mr RICHARDS - I'm assuming that's not still there.

CHAIR - The building is, it's occupied by a different company.

Mr RICHARDS - Renewable energy predominantly is a construction industry. One of the reasons why it's gets to a low-cost output is because your OpEx is low, you're really just about paying back capex.

CHAIR - Thank you very much for your time. Is there anything desperately you want to say before we wrap up?

Mr RICHARDS - No, just thank you for the opportunity. I'm an energy nerd, and so is Leigh so we always enjoy talking about this stuff.

CHAIR - We're learning slowly, it's great. Every bit helps, thank you.

Mr RICHARDS - Beware, you won't be very popular at dinner parties.

CHAIR - Maybe that's already the case. We will write to you to ask for those couple of things you committed to. Thank you for that and we appreciate your time today.

WITNESSES - Thank you.

THE WITNESSES WITHDREW.

The committee adjourned at 4.05 p.m.