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THE JOINT SELECT COMMITTEE ON ENERGY MATTERS MET IN COMMITTEE ROOM 1, PARLIAMENT HOUSE, HOBART ON TUESDAY, 12 NOVEMEBER 2024

The committee met at 9.30 a.m.

CHAIR (Ms Forrest) - Welcome, Bess, and Ian, online, to the Energy Matters Committee. We welcome you and thank you for your submission. I know you're a seasoned performer at this in previous roles, Bess, but I will just go through the preliminaries. This is a public hearing. It's being broadcast on our website. Everything you say is covered by parliamentary privilege while you're in front of the committee, that may not extend beyond that and any comments you subsequently make.

It's also been transcribed and that will form part of our public record. If there was anything of a confidential nature you wish to share with the committee you can make that request and the committee would consider it. Otherwise, it's all public. Do you have any questions that you'd like to ask, or Ian?

WITNESSES - No.

CHAIR - Is Ian in the state?

Ms CLARK - Ian is in his home office.

CHAIR - In Tasmania?

Ms CLARK - Yes.

CHAIR - I will ask you to take the statutory declaration, Bess. Ian, have you got the statutory declaration there to read?

Mr SAUER - No, I haven't.

CHAIR - That's all. I'll put the question to you in a moment, if you could read the statutory declaration there.

Ms BARBARA ELLEN STENHOUSE, KNOWN AS **BESS CLARK**, CHIEF EXECUTIVE OFFICER and **Mr IAN SAUER OAM**, CHAIR, TASREX, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED

CHAIR - Thank you for your submission. There are two of our members online - Janie Finlay and Mark Shelton. For Ian's benefit, we've got Dean Harriss, Craig Garland, Luke Edmunds, myself, Vica Bayley; and Bec Thomas, who's a new member to our committee, and our secretariat and Hansard down the end, for those of us who are in the room. It is an open hearing, so potentially media might come into the room, but at this stage there's no-one else in the room.

Bess, would you like to make any opening statements, and then the committee will have questions for you.

Ms CLARK - Thank you. I'm Bess Clark, I'm CEO of TasRex, and Ian is one of our founders and our chair. TasRex is a home-grown Tasmanian renewable energy company working to grow clean industry in Tasmania.

TasRex is proud to have signed a memorandum of understanding with the Tasmanian government which puts a commitment to local jobs and opportunities at the forefront of our renewable energy plans. We are progressing staged construction of up to five gigawatts of onshore and offshore renewable energy opportunities across Tasmania. Our first project is the 288-megawatt Northern Midlands Solar Farm at Connorville near Cressy, and the project will generate enough clean energy to power around 70,000 homes. It has planning approval and environmental approvals, and we are progressing transmission connection planning for the project, working with TasNetworks on a plan that aims to minimise impacts of connecting the solar farm to the Palmerston Substation.

We are also making good progress on our customer offtake discussions. Our goal is to have the project investment decision by next year and to be in service by 2027.

We are also preparing to submit a licence or licences for Bass Strait, or an application for licences for Bass Strait offshore wind farms located around 20 kilometres or more off the coast of northern Tasmania, and working with an international offshore wind partner and local partners.

We have been advocating for further Commonwealth consultation on the offshore wind zone, to make sure that we tap into Tasmania's world-class wind resources in a way that delivers cost-effective energy to customers, and also delivers community benefits and manages environmental risks and delivers long-term environmental benefits.

In addition to building new solar and wind projects, we are focused on leveraging Tasmania's renewable energy advantage and looking at new technologies that can help us grow local demand for clean energy. Also, look at how we can look at flexible load behind-the-meter in a world where we'll have much more flexible renewable energy, and the opportunity to have more flexible customer load that uses that energy.

We are also in discussions with large international technology developers and some local and national developers around various load options, including options for green fuel in Tasmania that can use our renewable energy, and also use the ammonia expertise that TasRex has within our business. We want to do that because we see the world will need clean fuels like ammonia and methanol, and we see the opportunity for Tasmania to play a role in those fuels being developed here for local markets and for export markets.

We are working with Tasmanian businesses, government, land owners and communities, and we look forward to continuing to work with them to deliver profitable projects that deliver benefits to our island - economic, social and environmental, long-term environmental benefits - for our island and our planet.

We see that Tassie has a fantastic head start with our clean, dispatchable hydro resource. We have the opportunity to use this high-value resource, alongside variable renewables such as solar and wind, to grow our local economy, support clean exports. These are exports that the world is going to need - cleaner fuels for planes, for ships, for other transport. We see the

opportunity to develop those fuels here in Tasmania in a sustainable and responsible way that also benefits our economy.

We need the frameworks to be in place to do this well in Tasmania, including forward planning for the supporting infrastructure. That includes forward plans across transmission, across ports, across jobs and skills development - and our state government and our federal government have key enabling roles. The private sector, including TasRex, is ready to invest where these enabling frameworks are in place.

For example, it's going to take us at least 10 years before offshore wind is generating off Tasmania. We need to use the time now to set up the frameworks that achieve the benefits, and work with communities to make sure communities see those benefits and that their impacts are understood and managed so that we can develop what is a multi-billion-dollar, exciting new industry for Tasmania.

TasRex, therefore, looks forward to supporting the development of a state clean energy road map, which we feel we need to realise our potential, support affordable clean energy for decades to come, and contribute to addressing the impacts of climate change. I'm sure you would have read the most recent CSIRO and BOM report, which is pretty horrifying reading, so we really want to make a difference to climate change through development of renewables.

The world's in a once-in-a-lifetime transition to a renewable economy. Tasmania is well positioned, and we need to act now to stay ahead of the curve. We look forward to playing our part in the next era of Tasmanian prosperity on the back of our clean energy resources and our expertise. Thank you.

CHAIR - Thanks, Bess.

Ian, do you want to say anything in opening comments?

Mr SAUER - No, thank you.

CHAIR - I'll lead off, and I'm sure other members will have questions. In your submission, under section 2, you talk about one of the greatest risks at present is that timely infrastructure is not being progressed and Tasmanians will end up exposed to higher costs and risks over the longer term. Just above that you talk about the current regulatory framework being heavily biased towards slowing and preventing development. There's two separate things that I'd like to just come back to.

On the greatest risk as you see it, on what basis does TasRex believe that there is a greater risk with a wait-and-see strategy compared to one where infrastructure is built now?

Ms CLARK - I think that the nature of electricity infrastructure is that it is long-life infrastructure and it almost always has linear infrastructure, i.e. transmission associated with it. You often need to build new transmission or upgrade existing transmission to facilitate it. Even if you don't, you know, a new wind farm, or a solar farm or the equivalent can have visual impact and a whole range of other community impacts and, of course, a whole lot of benefits too.

You need to start working with the community. You need to start understanding the environment and the impacts environmentally. You need to do early consultation and design and much earlier than in the past, where, frankly, in the days of the past, someone would draw a straight line and then move it if they had to. Now, you need to actually engage much more fulsomely and do far more studies. The reality is you also need to be bringing communities and landowners on the journey. We need plans to start the consultation around, 'Here is a good area that, on balance, is right for renewables. Here is where we connect it. Here's how we can do that efficiently.' It's actually starting that planning and, if we don't do it, you end up in the situations where everyone hopes that the development will come in time and it doesn't and you end up running diesel generators or turning on a gas-fired power station or putting in a whole lot of stopgap measures because no one likes the lights to go out. You usually end up paying a lot more for those solutions, both in terms of financial cost but also often they're not as green, so, they have that environmental impact.

We see the opportunities to do that long-term planning to give confidence to investors and also give engagement to communities so that we have that long plan, people understand the intention, people can engage well. It doesn't mean everyone will be happy - that's the nature of development, not everyone is always going to be happy - but if we don't do that long-term planning, we won't be delivering the energy we need to meet our goals. All forecasts show we will need more clean electricity as we decarbonise. We need to replace diesel, petrol, we need to replace gas, we need to use more electricity. We also, of course, need to be energy efficient, so we only build what we need. We will need more electricity - green electricity - in our power system. We've got the opportunity to plan now and if we don't do it we will end up doing stopgap measures that cost more

CHAIR - I'm hearing you talking about more planning and identifying potential routes for transmission lines or other infrastructure -

Ms CLARK - Yes.

CHAIR - rather than actually building it right now?

Ms CLARK - That's right, it's the planning. That's what we see is the bit that needs - it's the lead-time work and getting projects shovel ready. For example, a new customer load - TasRex started as actually looking at ammonia and hydrogen derivatives and then realised Tasmania didn't have enough clean energy to support its domestic low growth, let alone that clean energy growth, so it pivoted to say, 'Well, let's do both, let's try and grow renewables first so that we can then sustain clean industries in the state'.

To have those green industries and even grow our existing businesses and industries, we do need to have confidence that renewables are coming. If it takes 10 years to build a decent transmission line, then you need to be progressing that and getting those projects shovel-ready, because the risk we face at the moment is everyone's going, 'Well I'm waiting for the - the transmissions waiting for the load to come, the load's going, 'I'm not coming until I'm sure there's going to be transmission'. I think we're in this no man's land.

I was at the All Energy conference a couple of weeks ago, and a couple of state government ministers said government has to be the difference maker. It has to bridge the risk gap between -

CHAIR - If we go then to your comment about the current regulatory framework being heavily biased towards slowing and preventing development potentially in response to past claims about gold plating of national investment. I think the AER (Australian Energy Regulator) has taken a bit of a tougher line on that in more recent years, but what do you see as a real barrier? You're not, as I said to you, I think I'm hearing you talk about the planning for it, not actually building a transmission line right now. You talk about planning so that you know where you can.

Ms CLARK - That's right. Yes.

CHAIR - What are the barriers then?

Ms CLARK - I think the barriers are that nobody is starting that work until there's confidence of the load, but you have to start well ahead of - you actually have to have a vision and you have to say the world is going to have cleaner energy. Tasmania will need more clean electricity so that we can then start to do the sensible planning, because unless -

CHAIR - Sorry to interrupt, Bess. What are the current regulatory framework barriers that you're talking about?

Ms CLARK - Okay. If I look at TasNetworks, they've got a whole range of contingent projects and, at the moment, if I go and engage with them and say, 'Let's start talking about connecting offshore wind into the George Town zone, what would it take to actually be able to?' and we would like to do that with an ammonia plant in George Town. If you're building an ammonia plant and you want it to be green ammonia, you want to use onshore solar, onshore wind, offshore wind first. You want to firm it with our hydro and one of the strengths of Tasmania is we can actually have completely green energy going into green ammonia. You can run your hydrolysers at a higher rate, which is all good.

The challenge is we'll have to get that energy into George Town to firm hydro. We'll need to upgrade the transmission network but TasNetworks, under the current framework, won't start doing that until they've got sufficient confidence of the load coming to George Town. But the load's not going to come until it's sure it can actually firm.

CHAIR - What's the solution?

Ms CLARK - I think the solution -

CHAIR - What do you need governments to do? You talked about governments being the leaders here.

Ms CLARK - Yes. What I'm seeing in other states is the governments are actually saying, 'We want you to go and take some risk-based spend to do early works. We know it's at risk, but it's actually a broader economic development goal, a broader climate goal and we will underwrite that. In Tasmania, obviously, we own those businesses. In some states they don't. They just say, 'We'll fund it'. But, to me, it's actually supporting the businesses to do that early planning financially so that they - and we have to accept as a taxpayer that we're doing that because the future vision of the state is to have more clean energy and clean industries.

CHAIR - Are you aware of any cost-benefit analysis that's been done on that? Spending it now, supporting that development if you like, even though we own the businesses here.

Ms CLARK - Yeah, no, it's a good question. I'd say yes. The fact that there's a contingent project, for example, means there's been preliminary cost-benefit analysis done.

I think the challenge is that you can do cost-benefit analysis until the cows come home. You also need to have a vision of what the future would look like and say that - like, we wouldn't have a hydro system if people had done, you know, said 'We have to wait until we're absolutely certain we're going to have load to use this'. Actually, the whole philosophy was we look at where the world's going, there is a need for more energy, we will attract energy customers to our state. We'll look at that vision, we will have some courage and we will take some calculated risks and, I think, at the end of the day, there has to be a degree of saying we could get it wrong but on balance we think this is the right decision.

Mr BAYLEY - Thanks, Bess, and thanks, Ian.

I think this kind of continues on from that line of questioning and in relation to section 3 of your submission, the role of the private and the state-owned businesses. In your opening statement, you talked about you're working on customer offtake agreements at the moment. There's been a bit of discussion in this committee and elsewhere about onerous contracts and Hydro stumping up what were onerous contracts - whether they are or not now is another thing - to enable wind farms to get up and so forth.

Can you just talk us through the role you say - you say here Hydro Tas has a particular role to play as an offtaker. I get the provider of firming services. But, as an offtaker, why is it that Hydro should bear that risk of onerous contracts or at least - well, not even risk, it's actually bear the cost of an onerous contract - in the first place?

Ms CLARK - I think it reflects that we've got a really unusual market - legacy market - in Tasmania because of our history that Hydro is the dominant generator, and, in us talking to large investors to come and partner with us in our projects, it seemed that Hydro Tasmania is the market maker and, so, it's very hard to go and engage with other offtakers because they're all looking for Hydro to play a key role.

I think in a world post-Marinus, where other retailers and generators can actually trade in a broader NEM, the reliance on Hydro to play a key role will dissipate because you could actually be contracting and generating in Tasmania and contracting across a regulated link and Hydro won't have the same market dominance. Hydro Tasmania has the ability, just by virtue of history and its scale and its dispatch resource, to set the price in Tasmania a lot of the time, and it's also involved in almost all offtake contracts in Tasmania. It's an obvious vehicle to help bring on new renewables at an affordable cost into the state. We see it's a vehicle that government can use to support green energy projects to get developed.

Mr BAYLEY - What about the sustainability of Hydro and its finances? I mean, to what extent should it push itself to engage in these kind of contracts?

Ms CLARK - Hydro has to still be commercial, however, I think this is an instance where government can - and I believe the charter change was intended to say, 'You also do have this really important role in the state'. Work with developers of new projects in a way

that's complementary to them and de-risks them, and look at how you do that in a way that minimises any onerous contract. There are some confidential discussions that are going on at the moment, to be honest, but my observation is I think Hydro is doing its best to do that, to make sure it is considering its commercial position, but also considering the need for the state to get new energy. Because if it's not leaning in and helping to develop new energy - we're running Tamar Valley Power Station, and I don't think that's a good solution. We do need frameworks that give confidence. You know, something like the Northern Midlands Solar Farm is a half-a-billion-dollar investment, and that's without batteries, which we don't think we need at the moment. We need people to say, 'I'm willing to stump up that amount of money in this state and be confident I'll get my money back in a decent return compared to where else I could put that money'.

Mr BAYLEY - In terms of the ammonia producers and green hydrogen or others, I mean, they're just not real enough yet to be able to have those customer off-take conversations with?

Ms CLARK - That's right, they're not yet bankable. For us, our goal is to get a project off the ground and then be looking at a 30-year project. We might only need an offtake for something like 10 years to get the project off the ground, then we can engage with those customers about the longer term. They're the sort of things we're looking at. Our ammonia timeline is to be time to work with on- and offshore renewables in the longer term, so a 10-year horizon so we can be building projects now and building the confidence that we will have the energy, so people are starting to take seriously the opportunities in Tasmania to develop those. Frankly, we are in discussions with the existing public proponents about how we could support their needs in the longer term, too.

Mr BAYLEY - Just one more on this, Chair, if I may. You talk here about the private equity and the super funds. Can you talk a little bit about them? I mean, the committee has heard that there's just oodles of money in that sector that's looking to do good things with it. Why isn't it that they can't bear that risk instead? Why is it the public entity and the government ultimately need to be the risk manager, as you put it?

Ms CLARK - I guess our experience has been that those entities are very happy to come in once you've got an investment decision or an off-take - even an off-take - which is why TasRex, you know, it's founder funded by Tasmanians who are prepared to stump up their own money to say, 'We want to make this happen'. However, in our discussions with other financiers, there is oodles of money, once you've de-risked a project. It's not completely de-risked if, at an investment decision, you still have to build the project, and you have construction risk, operation risk. It's not risk-free, but it is materially de-risk because you obviously need to have environmental approvals, you need to have planning approvals, you need to get a connection agreement, and you need an offtake. Frankly, we're in a competitive market for capital. If it's too hard to get those things in Tasmania and people see that there's too much risk, that they will spend their money and not get it back because they won't get all those four things, then they're just not putting their money in Tasmania.

Mr BAYLEY - They have plenty of other places to put it.

Ms CLARK - They have plenty of other places, both in Australia - like, at the moment Queensland is getting a huge amount of investment, because there's confidence that the Queensland government is serious about developing renewables and will make it happen.

Again, at All Energy there's a real sense that a lot of investment is flying to Queensland at the moment because there's confidence that people will gain a fair return on their investment there.

Mr EDMUNDS - Thank you. Thanks for coming in today. I wanted to ask you a bit about - paying a lot more - and your comment in point two about Tasmanians being exposed to higher costs and risks over the long term. One of the things that's come up through the inquiry is the fear of the investment actually making bills go up, alongside your comments about there being less clean energy.

Would you be able to maybe expand on that a little bit - just for the 'not energy expert' who might be tuned in or might read the transcripts later - just how the long-term planning and investment can actually be less of a burden on people for the cost of energy over the long term?

Ms CLARK - Yes. Many of you may know I have had a long history in the network businesses in this state, and we have built very little transmission in the last 15 years. We haven't needed to, that's okay, it's sensible not to build things you don't need. However, we are moving into an era where we will need to replace and build new transmission to support our growing load and just to sustain our load, and we have an Australian energy system where clearly coal is retiring and gases will be used more as peaking, so there's an opportunity to also support a new development.

We have opportunities in Tassie. We need to decarbonise. So, someone like Savage River who's got a very public plan about their decarbonisation goals and how they get off diesel, using the amount of diesel et cetera they use. It's just recognising that the cost of building infrastructure today - even if you're just replacing something that you've already got - you're replacing a highly depreciated asset, that you don't pay much for because it's been paid for over 60 years, with a new asset. So, we're probably in a lumpy phase of replacing and investing in the transmission and generation system in Tassie and Australia, and that has a cost. It's still probably the lowest cost to do it, but it's not costless and we haven't invested very much, and obviously in renewables, we haven't commissioned anything for four years. The nature of the beast is we will pay more for a slightly newer power system.

Mr EDMUNDS - But to your point, I think you said the longer lead-in and more planning you can do over the long term will smooth that out more?

Ms CLARK - It will smooth it out, and it means you're not doing knee-jerk solutions to fix problems that tend to cost a lot more. Victoria has had a whole summer readiness program where they've had to just throw things at the problem because they've been worried the lights will go out in the summer, and the cost of those solutions are far higher than if they'd planned and built something that was more sustainable.

Mr EDMUNDS - So, the knee-jerk reaction is going to cost people a lot more, no matter where they are in the customer -

Ms CLARK - Yes, that's right. Yes, and then I would say there's also the cost of missing the opportunity of businesses leaving the state.

Mr EDMUNDS - And the other question, you talked about planning around transmission and ports, et cetera, but also skills. I was wondering if you had any commentary about where

we're at in Tasmania, or even the country, around the skills that we might need to do this transition effectively, and, as you say, with the longer-term planning to cost less?

Ms CLARK - I think it's acknowledged that we have a huge renewables build in Australia ahead of us. Tassie's got the opportunity to be part of that. So, there's just a volume thing, we've got the people but we need to continue to attract and skill people.

The offshore wind industry needs a whole range of new skills and reskilling of people, because you're building infrastructure in the ocean with barges and the like, with cranes. So, there's a whole lot of skills and we have the opportunity to work as a nation to get a workforce that's skilled. The good thing about Bass Strait is the Gippsland zone has been declared; there will be a number of offshore winds that have progressed there - Portland zone. Tasmania can actually skill people up and have infrastructure and support staff here in Tassie who support more than just Tasmanian offshore wind; they support Bass Strait.

We remember working on the Clean Energy Council's Offshore Wind Australia group that's looking at the work that's needed to be done, and I have got materials on some of the skills development and some of the infrastructure plans that are needed. But, there is a whole body of work as an industry about what's recognised to be done, and I guess we're just encouraging Tasmania to make sure that we're learning from what Victoria's done and working collaboratively nationally to get some of those skills in place, and some of the training in place.

Mr EDMUNDS - Does Tasmania's historical track record around renewable energy have us in front of the rest of the country or do you feel like other states potentially have overtaken or it's just a different conversation?

Ms CLARK - It's a really good question. Traditionally we've absolutely had a head start but it's pretty public in the last year we've been a net importer over Basslink and ran Tamar Valley Power Station for a number of months to support energy security. The stats were 79 per cent renewable whereas South Australia was 100 per cent. Just to be clear, South Australia's energy was more expensive than Tasmania as well. Being completely clean, as I said, if you're building new things, it can have a cost. The Hydro resource is such a fantastic, clean, dispatchable, storable resource. The opportunity is to use that alongside variable renewables like wind and solar. That's the absolute gold Tasmania has that we can use to grow local industries, but also to be sharing our renewables in Australia across Bass Strait because the most efficient way to use renewable energy that's variable is to use it. At the time, storing it wastes energy, you use energy to store, so if we can actually be using wind and solar wherever it's being generated in Australia first, and then we can call on Hydro to firm it. That that's an extraordinary opportunity we've got.

Mr EDMUNDS - Thank you.

Mr GARLAND - Your talk in your submission about commercial frameworks to underwrite timely generation investment. Our government is broke; we have the poorest population in Australia. Who is going to underwrite this massively expensive development and what will we be underwriting?

Ms CLARK - I guess the framework is the capacity investment scheme that the Commonwealth government has introduced and it is an underwrite so that it de-risks initial investment. It's a competitive process, so projects put in and say 'we need this much underwrite

and we've got this project at this stage of approval' and the federal government using AEMO services, the market operator services, they assess those tenders that come in and then shortlist. But ultimately, they are picking projects that they think meet all the environmental and social and approvals criteria, but also come at their lowest underwrite cost frankly, or the best value I think they would describe it as, underwrite cost. It may be that that underwrite is never actually used; it just gives the confidence to investors that they at least, for example, can cover the cost of debt. It's because you are making big lumpy investments that are only going to be made if people have some confidence that they're going to get their money back. The underwrite model is quite a smart model because it actually is saying we're not necessarily subsidising you unless the world changes, but we're actually de-risking the project so it gets built.

Mr GARLAND - Also, Graham Lloyd wrote about offshore windfarms. It was stated that hydrogen is being pushed further into the future, if ever, and he said offshore wind is following the same trajectory as hydrogen. But as with hydrogen, when the numbers are properly crunched, the risk remains that it will be an industry that may look good on paper but not really where it matters, on the power bill. Global industry leaders say the offshore wind business model is broken and the costs are going to be similar to nuclear. Will it be too expensive or economically unviable to develop offshore wind?

Ms CLARK - They are good questions. Offshore wind is still a more expensive form of renewables just because of the nature of building at sea, which has obviously a whole lot of different constraints. However, in a future that needs a lot of clean energy to decarbonise a whole range of industries worldwide, then the opportunity for offshore wind is you can build it in a way that you can build bigger stuff because you're not constrained by roads and so you can build a turbine that can generate enough energy to power towns and things like that. So the opportunity for Australia is to get all those structures in place so that we can build cost-effective offshore wind and if we don't actually get the planning right and get those structures in place, my personal view is it will be too expensive, but the opportunity is actually to have a national strategy supported by the Commonwealth government; things like multiport strategies, those training strategies. We need to be working together as an industry so that we're not all tagging the same whales. How do we do environmental well, how do we engage with First Nations communities well? I think the opportunity is there to do it well and, in part, why TasNetworks is advocating for more consultation on the Tasmanian zone is, whilst it's a very big zone, a lot of it is actually in water that's too deep for what's called fixed bottoms and too shallow for cost-effective floating, which is really expensive.

We're trying to find good fixed-bottom areas and just nuance some of the areas so that we can actually do it more cost effectively so that it is sustainable and is built.

Mr GARLAND - And, finally, one more question. I worked in the shipping industry and I happened to run into an engineer. He said the shipping that is needed to build these offshore windfarms is very limited. He suggested that it would be quicker to build the ships to do that job than it would be waiting for the chance to use that shipping arrangement. Is that correct?

Ms CLARK - Yes, I think that is part of all the infrastructure and supporting services that we need and that's why I do think we need an Australian plan for it because it's actually an opportunity to say, 'How can we have ships built that serve multiple projects in Australia?'

I personally believe the SunCable project at Bell Bay, if that was a cable factory that was actually supporting the offshore wind industries, cables could be using Bell Bay aluminium, just taking it across the road literally and then delivering out to Bass Strait.

To me, things like that are real opportunities if we coordinate and say, 'How can we do this stuff locally? How can we be making sure we're getting the ships built and delivered in a timely way?' But it won't just happen, it will need careful planning.

CHAIR - In your view, Bess, whose role is it to create this coordination? And we could use the same model for most things we do, to be quite frank, so who do you see should be leading that?

Ms CLARK - I think offshore wind is a national lead. I presented to a forum that ReCFIT ran, borrowing some materials from Energise Renewables, who've looked worldwide at how offshore wind markets have successfully developed. And you need a strategy, you need policy and you need frameworks across a whole lot of areas. And a lot of those need the Commonwealth government to take the lead, but the state government then has to work with it. It can't just be the Commonwealth.

For example, my understanding talking to ReCFIT, they are engaging with the Commonwealth on a multiport strategy. Bell Bay has a huge opportunity to play a role in supporting onshore renewables and offshore renewables and ammonia and the like. So, it's not enough for the Commonwealth - the Commonwealth can take the lead, but the state has to fall in behind and say, 'Okay, we get it and we're prepared to do some of that early planning to understand the opportunities, look at models. If the state hasn't got the financial capacity or chooses not to invest in the area, is there a way to partner with the private sector?' Because private sector companies are investing, for example, in ports all around the world for offshore wind and renewables.

So, I think the Commonwealth has got a role but, of course, the private sector - and as I say, this Offshore Wind Australia group that's been established through the Clean Energy Council is a mixture of private and public sector entities. But the private sector wants to make this happen and we're prepared to lean in to help, but some of these frameworks are government frameworks. And even things like ports, the ports for competition law actually can't necessarily collaborate because they can be seen at risk of colluding. So, there does need to be some government guidance about, okay, if we want to make any successful offshore wind industry, we need our ports to do 'a, b, c and d' - that's the logical one to do 'a', that's the logical, you know, and engage with the ports to bring together and say, 'That's the plan and we'll support it.'

In Victoria, Geelong has obviously put up its hand and said, 'We'll help' and the Commonwealth government is leaning in to help with some of their upgrades.

Ms FINLAY - Just keeping on that thread, then, I've got a couple of other lines of questions as well, but - given that it is an intricate web of detail and responsibility, set the vision and everyone has to fall in behind as you described it, and you mentioned ports - one of my questions was going to be: How shovel-ready do you think that Tasmania is in the piece that it has to deliver to support offshore wind? And there's a lot of scrutiny on GBEs at the moment, what's been your experience or what is your thinking about Tasmania's capacity with our GBEs to deliver what's needed so we can secure the offshore wind?

Ms CLARK - Yeah, certainly we have been engaging really constructively with TasPorts. They have given us tours and looked at what they could do at their ports, particularly Bell Bay and Burnie have been in discussion. I think the opportunity is to be leaning in to say, 'We're ready to be part of a multi-port strategy, here is our state,' and then start consulting. I do think the suggestion of preparing some sort of master plan for public consultation and seeking funding as part of the next election is sensible.

I don't think we're shovel-ready, but I do think TasPorts has done quite a lot of early thinking and it's translating that into, 'How do we move it forward'.

Ms FINLAY - Yeah, okay. Thank you. When I put my hand up, what I did want to ask questions on was that a few of the comments so far have been about early works in transmission and taking the calculated early risks in terms of getting infrastructure ready. I'm aware that there's some consultation at the moment, I think, around TasNetworks submitting for cost recovery on some early works on some transmission at the moment.

Ms CLARK - Yes.

Ms FINLAY - At what point do you think - it's the chicken and the egg, you are needing the infrastructure in order to secure the investment. At what point do you think communities - whether that be affected landowners or communities more broadly - should be required to participate in that financial bit where the costs are shared? Is it as infrastructure is being developed, or is it once there's an economic benefit of the generation occurring? Have you got a thought on that in terms of the generation piece?

Ms CLARK - It is a chicken-and-egg question, because the nature of infrastructure is that it's lumpy. Sometimes people say, 'Well, I don't want to pay for something until it's in service.' That's not unreasonable. But then, what that means is you can get price shock, because suddenly there's something quite big that wasn't there yesterday and is there today. Traditionally, infrastructure investment and development works well where it's all nice and smooth and you just replace and build and load grows and everyone's happy. For a long time that happened and we had load growth that meant that the cost of the infrastructure was sort of almost hidden because there were more customers paying for the higher cost. We're in an era where we're actually building and replacing assets and generation and load is growing, but, for me, the opportunity is to say, 'We are building this and, so, load can come and share those costs.'

I haven't got an answer in short, Janie. I'm just saying there are trade-offs in either solution and ultimately what customers usually want is some sort of stable pricing and predictable pricing.

Ms FINLAY - No, that price shock piece is important. Thank you.

Specifically to TasRex projects - say, the solar farm now, which is the most progressed - what are the risks to the project once you get your financial investment decision and you're ready to go in terms of infrastructure not being ready? Is it transmission into Bell Bay and out of Northern Midlands? Are there two -

Ms CLARK - Northern Midlands, we are working with TasNetworks on the transmission connection and we've shortlisted a number of contractors to do the build. As I said,

we're talking on progressing an offtake strategy. Once we get to a final investment decision, it basically means we've got our contractor sorted, we've got our connections sorted, we are now moving to build, and we've got our financing sorted, et cetera. Then the risk is really around traditional risks: world markets change and something goes wrong; the contractor can't deliver what they thought they could for the price they could; TasNetworks can't connect its thing, build its stuff for the time; we have weather events that mean we can't get to site. I would say once you get to the final investment decision it's fairly traditional construction risks that apply to the project and, obviously, we do our best to mitigate those and, of course, making sure we're doing things safely and in line with all the approvals that we've got is also key to make sure we're not taking any risks there.

Ms FINLAY - My third question for the moment is that you talked about vision early and targets and being proactive in terms of these investments, and the state's got a vision of being 200 per cent renewable, and I know that there's an interim target around that. Had you imagined that your project might have supported the state to meet that interim target or a longer-term target, and do you think that the state, with support of your projects or others, is likely to meet those targets?

Ms CLARK - We certainly saw that the Northern Midlands Solar Farm would play a key role in supporting the interim target. We've certainly advocated that the interim target, which is the 2030 target, we should be tracking progress towards it.

I think it's fantastic that we've shown leadership and saying we are going to double our renewables, I think it's then making sure we've got a plan to make sure we achieve it and are on track, and not hoping it all happens in the second 10 years. So, yes, for us, we always saw that Northern Midlands would be a key part of the interim target, and we hope to develop other projects that will be part of the longer-term target.

CHAIR - Bess, I know you've talked about the big project. Has TasRex had a look at or any involvement in looking at more local community networks using rooftop solar and batteries potentially?

Ms CLARK - We have looked, I'd say, at more transmission-scale projects, but we are looking at how we can use 'behind the meter' energy, which can be at a community level. If we can use energy in a flexible way, then there's more opportunity to build more solar, because obviously it's no good at night, and there's cloud cover, et cetera - but if you have something that doesn't need continuous energy, that can be a win-win. We are partnering with some technology providers who have patents for some really interesting technology around on-farm use of creating fertiliser products that can be done flexibly, things like that. We're in early stages of exploring some of those opportunities because -

CHAIR - Using rooftop solar on farm sheds and things like that, or what are you talking about?

Ms CLARK - We're testing the technology at the moment to see if it works, and then it could be applied in a distribution solar network or a transmission.

CHAIR - This is maybe something that in your current capacity you may not be able to comment on, but in terms of using rooftops that are already there, the ground's already utilised rather than building a brand new big solar farm, for example, are you aware that there's

limitations in the distribution network that makes that a challenge to actually expand that to any great degree?

Ms CLARK - I'm aware that there are a lot of challenges in using rooftop solar, particularly the domestic level, because I was involved in past lives in trials around all of that. I don't think TasRex could particularly comment on that. It's fair to say our focus at the moment is on how we could build solar - and that could include solar on a rooftop - but we could build it in a way that can use flexible load. We are talking to a few other customers for whom we could develop renewables and they could take load flexibly on site. They're early and they're quite confidential discussions, but I guess we see the potential of renewables and one of the strengths could be that you don't necessarily have to build as a bigger network with distribution or transmission to move it, if you can use it onsite.

CHAIR - And that was where I was going with that. At the beginning you talked about the need for regulatory reform, perhaps, to enable infrastructure to progress in particular with regard to transmission. It brings me to the question of what makes grid-scale renewable generation preferable to some of these other alternatives?

Ms CLARK - I don't think they're preferable; I think we need both. If we're going to power our cities and factories and industries, we're going to need grid-scale, but it doesn't mean that's not complemented by local solutions and local storage. You know, I've got my EV that in the future will have its own battery, and the more we can be tapping into the resources and using them efficiently, that's all part of the solution. However, in a world where we're decarbonising petrol, diesel and gas use, so much of our industry is still using fossil fuels of some sort. We need grid-scale and local solutions.

Mr BAYLEY - On the grid-scale, it obviously presents a whole range of challenges we've already spoken about in terms of transmission and location, and we spoke earlier about the onerous contracts and the responsibility of that. Going to your state road map and a plan, I think we all agree there needs to be a plan and we've got significant controversy over energy projects and transmission and so forth in Tasmania at the moment; how would you describe the state of consultation and planning around energy at the moment in Tasmania?

Ms CLARK - We're making a start and there's more to do. If I look at the work that was done some years ago, it identified farther north-east, the north-west and west coast as areas suitable in the longer term for large-scale renewables, Central Highlands. So all those areas have been identified for 10 years or more as having resources and planning has started. I'd say ACEN renewables has done quite a lot of the planning for transmission, for example, into the north-east and the north-west and I saw an interesting story this morning about some of the community concerns of the north-east.

To my mind it is starting to develop the strategies to connect those regions now, and work out when is the right time to do the next step of work because, for example, to connect any scale of generation on the west coast will need transmission upgrades and there's the opportunity to connect through the proposed new route for establishing the Hampshire Hills and then up to Burnie and it's just time to make some of those options transparent. I think it follows railway corridors and so communities start to think of that as something that could happen in their areas. They make plans around it. There will always be local impacts and they will need to be managed as best possible and not everyone will like the solution, but the more can say this looks like the right balanced solution and start talking about it well in advance,

people can make plans with that knowledge. I think we've made a start and I think we've got more to do.

Mr BAYLEY - There's significant anxiety around some of those projects, both the generation and the transmission projects, so I guess there's a question around the level of consultation and planning done to date. You proactively put in your submission here around First Nations communities and when it comes to offshore wind there are articulated concems from Aboriginal communities about impacts on a range of different values that they value. How do we bring these together? We all agree that there needs to be consultation and yet it seems that quite a bit of the planning has pre-empted those consultations, and I'm interested in how do we actually bring that together to generate a credible plan for Tasmania that does bring communities along as well. Have you got a view on what can be done better?

CHAIR - Achieving consensus?

Mr BAYLEY - Well, at least a better consensus than we've got at the moment. This is the sad state of affairs is that both project and transmission infrastructure is mired in significant levels of controversy that probably should have been presumed in the first place and addressed way earlier.

Ms CLARK - Certainly our view is, as TasRex, we want to engage with communities as early as possible and we felt very fortunate with the Northern Midlands Solar Farm that was unanimously approved by the Northern Midlands Council acting as a planning authority, we understood those who had concerns engaged closely with them. We are working with First Nations groups because we absolutely respect their long connection to country and their ongoing role and we absolutely are engaging in that space on offshore wind because sea country is hugely important to Tasmanian Aboriginals, as is connection to how it comes onshore and coastlines, et cetera. So, I think we do need to engage with communities and I do think we need to understand that there will always be opponents. Whatever we do, there will be opponents.

We also have to be careful that the loudest voices aren't drowning out a community that's actually supportive. I observe - we often ask for things like 'let's have town hall meetings' and things, that just gives the loud voices opportunities to have their say, but makes people who are supportive of projects fearful, because if they put up their head and say they're supportive, they start to be attacked by their communities. I think we have to be really careful we're not just giving loud voices the benefit of saying, 'that's the community view'. It's a view but actually, we have to do this really well. We need to have forums that are done and managed carefully so that all views are heard.

My observation is there is actually a huge amount of support for renewables. Yes, people don't necessarily like looking at a transmission line, but having grown up on a farm with them running through the thing, they start to be part of the landscape once they're built. Certainly, we need to design them sensitively; however, we also need to recognise the huge benefits that come from these projects and be working with communities on those. Also, we should listen to people who say, 'I don't love how that looks but I'll tell you, it's exciting if my kids can have jobs in this community for the future, and we are actually addressing climate change instead of hoping someone else is doing it.'

Mr BAYLEY - The concerns are legitimate. Quite a lot of the concerns that have been raised could have been predicted, I would have thought, in relation to some projects that are on

the table. Northern Midlands Solar is probably a brighter light in this regard, I'll give you that. However, many of the other projects that are on the table at the moment, and the transmission projects in particular, the problems and concerns, I don't necessarily accept they're just the loudest voices. They're legitimate concerns.

CHAIR - We need to go to Mark as well, so if you have a question -

Mr BAYLEY - I guess the question is, are you engaging with government about that road map and how they can do it better?

Ms CLARK - Yes, we are engaging - we've made the suggestion and we're working with ReCFIT to say we think it's a good idea, and with Clean Energy Tasmania (CET). We think it would be great to have a road map with some targets and goals, including progress towards the TRET (Tasmanian Renewable Energy Target), and really just to track how we're going. We recognise this isn't simple stuff; it is complex and needs to be done well, but yes, we are engaging with government, in particular with ReCFIT, on working out how we develop this.

Mr SHELTON - Bess, given your huge experience in the industry, you mentioned where T-Rex are mainly on-island production or storage of electricity, and then on-island use. You haven't mentioned, or you did mention, post-Marinus earlier on. What are your views on Marinus and the benefits or disadvantages, and given that you're dealing with investors at the moment, on-island production, isolated, versus Marinus connected to the mainland. Could you inform the committee of any views that T-Rex, or TasRex, has on those issues?

Ms CLARK - I call it T-Rex, too, it's a whole lot of dinosaur founders. I think Ian might have said that.

Our view is that Marinus Link is a key part of our clean energy future. It allows us to develop renewables, variable renewables, and share them with mainland Australia efficiently.

It gives confidence that there's routes to market for variable renewables like wind and solar and offshore wind in the long term. It supports the state's energy security, and it opens up the market to that point we talked about earlier. It will make us a much more 'normal' energy market, where someone - a party like Hydro - will have an important role, but won't have such a dominant role in how prices and dispatch work between Tasmania and Victoria. So yes, TasRex is very supportive of Marinus Link and looks forward to a final investment decision next year.

Mr SHELTON - I don't know how much you're dealing with investors and that sort of thing, but given, as you indicated, that it opens the market up and allows any excess that's produced on the island to be - do you see better investment coming into Tasmania because of Marinus and the options available, therefore?

Ms CLARK - Yes, both for renewable energy generation, but also customers. Loads will be more confident of energy security in this state, and a free-flowing energy market where you're getting the most competitive prices. Yes, I do think Marinus will do a lot for confidence and investment.

Mr EDMUNDS - I have a broader question, if you could get your crystal ball out. What does the future for Tasmania, in terms of our energy profile, look like if we don't invest into more renewable projects going forwards?

Ms CLARK - I suspect that we will stop growing and we will probably lose some of our industries, because I think we will have to run Tamar Valley Power Station a lot more. The nature of, or the projections, of the weather system is that we're going to have far more volatile weather. Hydro will have boom and bust. We will have huge rainfall and then experience of extended low inflows. The good thing about building more wind and solar is that we complement that hydro resource. We'll run the Tamar Valley Power Station much more and I think some of our big industries will then start to struggle, because the world is going to value carbon, and the energy is a big input to a lot of Tassie's big industries. If it's not clean energy, that will make it hard work for them to be viable in an international market that will penalise them for not having clean energy as well. They are some of the things I foresee.

CHAIR - We are pretty much out of time, Bess. Is there anything you wanted to close with, or have you said everything you need to at this stage?

Ms CLARK - What I'd like to close with is to say the work of this committee is very important. It's great to see a whole range of our parliament here, because this is such an important issue for our state and for our kids. I wish you well with your work. I'm involved in renewables because I passionately believe in the opportunity for Tasmania, and TasRex exists because we have founders who see this extraordinary opportunity that our state has. We don't want to waste it and we do want to see Tasmania flourish on the back of the resource and expertise we have .I wish you well with your work. Thank you.

CHAIR - Thanks, Bess. If the committee has further questions, can we put those in writing to you?

Ms CLARK - Certainly.

CHAIR - Thanks for your appearance today.

THE WITNESSES WITHDREW.

The committee suspended at 10.29 a.m.

The committee resumed at 10.31 a.m.

CHAIR - Welcome, Christine and Bruce on behalf of the Bob Brown Foundation. This is a public hearing of the Energy Matters Committee. We have the submission, and we thank you for that, and welcome your further comments on that.

This is a public hearing. It's being streamed and will be transcribed. Everything you say before the committee is covered by parliamentary privilege; that may not extend should you say things outside this committee process. I'm sure you particularly understand that, Christine. If you want to provide the committee with anything of a confidential nature, you can make that request to the committee. Otherwise, it's all public.

Do either of you have any questions? No? Okay.

I'll ask both of you to take the statutory declaration, and then ask you to speak to the submission.

Ms CHRISTINE MILNE AO, PATRON, BOB BROWN FOUNDATION, AND **PROFESSOR BRUCE MOUNTAIN,** VICTORIA UNIVERSITY, WERE CALLED, MADE THE STATUTORY DECLARATION, AND WERE EXAMINED.

Ms MILNE - Thank you, Chair. I would like to take the opportunity to make a few introductory remarks, and then we'll invite Bruce to do so before we go to questions, if that's fine with the committee.

First of all, I concur that this is a critically important inquiry for the future of Tasmania - not just the energy system but Tasmania as a whole - and I think it's incredibly important as a whole-of-Tasmania assessment of cost-benefit as was announced in the Budget. But, given that that cost-benefit will be released only a month before the anticipated final investment decision, I'm concerned it will be another attempt to retrofit a rationale for the government's 200 per cent renewable energy plan and not a serious analysis of Tasmania's energy needs or the economic viability of what is being proposed. I hope I'm wrong.

The serious problem here is no one has actually asked the Tasmanian community how it wants energy delivered into the future, and how it might benefit from the renewable energy transition. It's not a question of no new generation in Tasmania; it's a question of appropriate generation and affordable generation.

Now, the Bob Brown Foundation is an organisation profoundly concerned about the accelerating global heating emergency, and species loss and collapse of biodiversity in the sixth wave of extinction. The need to transition to renewables is unquestioned. But it cannot and must not be done at the expense of biodiversity.

It's a failure to consider both in energy planning by AEMO (Australian Energy Market Operator and the Tasmanian government that is of major concern to us, and that is how the Bob Brown Foundation then approached Professor Mountain in the first place some years ago to answer some questions for us. Namely: was the energy that was proposed necessary for the transition on the mainland? Would it bring down emissions? Was it economically viable? And the answer that Bruce gave us back was no on all counts - but he will speak to that in a moment.

With global heating, we're facing extreme risks like fire and storm, and TasNetworks have told you $21 million was the cost of the recent storm in Tasmania.

We're looking at changed rainfall patterns and intensity, and that has ramifications for our dam catchments; our inflows are considerably down in some years. So, what does Hydro say about the long-term economic viability of some of its infrastructure compared with perhaps replacing ageing infrastructure with something else in terms of generation?

Also, there's the growing list of critically endangered species in Tasmania and, in particular, you're looking with Robbins Island, for example, the orange-bellied and swift parrots, the wedge-tailed eagles, and the Tasmanian devils.

When we look at new transmission infrastructure, new renewable energy infrastructure, we have to realise there's a lot of land and a lot of sea that is being talked about, with severe ramifications for biodiversity. There must be another way - and in my view, there is another way.

In the face of these twin crises - climate and biodiversity loss - the future energy system needs to prioritise meeting the realistic needs of Tasmanians for a secure supply of renewable affordable energy, and the maintenance and restorations of ecosystems. In other words, energy be prioritised as an essential community service in a changed world where nothing is as predictable as it was, and resilience is everything. You can't assume that even a NEM (National Electricity Market) will exist in another 20 years. You can't assume anything at the moment. The world has drastically changed.

When you come to these proposed Marinus Link, Battery of the Nation, the hydrogen hub, the transmission extensions, they're not about planning for the needs of Tasmanians for energy in the most cost-efficient and environmentally friendly and sustainable way. I found it ludicrous that there's a proposition that the saving on annual power bills, on average, will be $30 to $50 between 2030 and 2050. Are we seriously suggesting that we can predict a saving of $30 to $50 a year by 2050? I mean, it is a ridiculous proposition.

It's also not about reducing emissions. All it is - the 200 per cent plan - is a government and developer-led economic growth strategy. That's it. That's what it is about and AEMO is the enabler. I think it's really important people understand AEMO is not an independent government statutory authority. It's a private company: 60 per cent shareholder of the governments and 40 per cent shareholder of every major energy company in the country. It enables what its shareholders want. The Tasmanian government goes to it and says, 'We want this', and then they enable it with whatever strategy they come up with. It's a 'Back to the Future' jobs and growth strategy based on the premise that the world hasn't changed since hydro industrialisation mark I.

It is not modelled or costed with any rigour and we still have no idea - in spite of excellent National Electricity Market data - what the impact of repurposing the hydro system to meet mainland demand means for the future profitability of the GBEs. What does it mean for the hydro in the future to introduce all this additional wind? What does it mean for run of the river and what does it mean for farmers and irrigators? Well, you've heard from them. What does it mean for erosion in the riparian systems. What does it mean for Tasmania to have less and less control of the hydro? Tasmanians rejected the sale of the hydro once. Now we're going to see Tasmanians' control of the hydro seriously reduced.

Every new government initiative that we've talked about is retrospectively backfilling a rationale, whether it's a renewable energy zone, or an amendment to the coastal policy, or the announcement of an offshore wind zone. They are all retrospectively fitted to what the developers want. They are not coming from the Tasmanian community.

Herein lies the government's internal contradiction, and it's built into its new ministerial charter. On the one hand, it assumes that meeting energy needs for Tasmanians is the same, or compatible with, developer-led economic growth, and it isn't. They're two entirely different things. Tasmanians don't need energy demand artificially inflated or the Hydro repurposed to be an energy trader. They need to be asked how they would like to see energy delivered and there is endless opportunity and excitement about rolling out rooftop solar, community-based batteries and so on, micro-grids. There's a huge opportunity for Tasmania to involve Tasmanians, bring down power bills, build resilience in the system, if we looked at it from the point of view of what's necessary not what the actual developers want.

That is essentially the conclusion of the Bob Brown Foundation, that Tasmania's competitive advantage in a world with disrupted supply chains, disrupted weather and the whole lot is losing species, is to actually develop something that suits Tasmanians in the long term and builds a circular economy, doesn't depend on the old jobs and growth model of exporting our resources.

With that, I'll just hand on to Bruce.

Prof MOUNTAIN - Thank you, Christine. Tasmania joined the NEM in 2006 - 2005 formally but 2006 the export started, or the trade started to happen in a meaningful way. Since then, residential electricity prices in Tasmania, despite no growth in electricity consumption over that period, have grown more than in any other region of Australia. I think joining the NEM and building Basslink is now quite evidently a major strategic mistake in Tasmania. Basslink lost a great deal of money for the owner, but I think, according to the sums I've done, has lost even more for Hydro Tasmania and hence for the Tasmanian people.

I think Tasmania is at a crossroads now with potential to compound on that error by building a second interconnector to the mainland, which I think will cost at least $4 billion for the interconnector as well as for the onshore development.

In addition, Tasmania does not have spare energy or power capacity to share with the mainland beyond what it is able to export on Basslink now, and that's evidenced by the pattern of production. For example, during this last period of winter, Tasmania, unlike previous winters, has been a substantial importer of electricity from Victoria.

That additional production capacity and storage in Tasmania will cost around $6 billion. At the least, Tasmania, through the government, through consumers and through investors, will be up for $10 billion out the door. The question, therefore, is how will Tasmania be able to compete, relative to the other sources of energy, for the services that it's going to provide?

Firstly, in terms of energy production, Tasmania has no meaningful advantage relative to the mainland on clean energy production. Its wind production has, on average, a slightly higher yield than Victoria, but it's considerably more expensive to build wind farms in Tasmania than it is in Victoria. Solar itself has no advantage per se. Although solar is inexpensive, but there's

no ways you could justify cost of building a new interconnection on the basis of exporting either wind or solar energy, in which there is no advantage.

That then comes to energy storage. Tasmania has an enviable hydro storage system which is well adapted to the Tasmanian demand, but does not have the capacity, either in power or in energy, needed to serve Victoria. It's therefore necessary to expand that capacity. Tasmania faces competition in that service from batteries, chemical batteries, for regular service of shifting electricity from one time of the day to another. Batteries are now mainstream in Australia, as they are in many parts of the world, and they are completely dominating the market for the provision of regular storage.

There is, however, another storage service where Tasmania could have a potential advantage. That's essentially seasonal shifting of electricity, by providing rarely-used lumps of electricity during a solar and wind drought on the mainland. That, according to our modelling - and we've done extensive work on this - is extremely rare. When it occurs it is valuable, but it is rare, and it would not be cost-effective with current technologies to provide that from any technology, either chemical battery or pumped Hydro, simply because it is so expensive and so rarely used.

I've run the economics on this, and there is absolutely no ways that Tasmania can cost-effectively compete in the storage market on the mainland by virtue of Marinus Link, essentially the huge costs of that.

The question, therefore, for this inquiry, as well as for the Tasmanian government is: who will pay for Marinus Link in the first instance? Not the capital outlays. Not the lending. Those are easy to finance once you have a regulatory right to impose it on customers. The critical variable is, who's going to accept the regulatory right to impose it on customers? It can't be determined by the authorities. It needs to be determined by the governments. The question is: why would Victoria be willing to pay a penny for any storage service that it can meet itself at a fraction of the cost of what it can get from Tasmania? Tasmania does not have the storage resource now. There is no free resource available. Even if it was, the enormous cost of the interconnection needs to be amortised.

I do not see how a final investment decision can be made in absence of that. I do not think that Commonwealth has the authorities to grant that money to Tasmania, and it would be quite obviously against the national interest to do that when a much cheaper source of that storage can be found.

I implore you to engage in the technical content of these issues. I would like to write a submission to you. I apologise that I have not been able to do that prior to this session, but I would like to write that for you and set it all out on the public record, so that it can be in the public domain and you can think of it further. Thank you.

CHAIR - On that, the committee is happy to receive further information from you, so that's not a problem.

I will lead off on a couple of points which cover a lot of the areas you've talked about. In the submission - there are no numbers on the pages - but it says:

> All the rhetoric about building energy generation in Tasmania to address global warming and assisting in the transition to renewable energy on the mainland is just talk and not supported by any evidence. Mainland Australia does not need Tasmania's renewable energy.

Bruce, you were just addressing your mind to that.

> Renewable energy generation and battery storage is cheaper on the mainland than Hydro Tasmania can offer given the cost of the interconnector Marinus Link and the cost of its use.

That feeds a little into what we've been talking about here. If that's true - I'm not saying it is - why is the Victorian price so high? You know, it's where we make our money - trading into that market, obviously. We will go to that first, and then I'll come to the second part of the question.

Prof MOUNTAIN - Firstly, average Victorian wholesale electricity prices, the load weighted average of prices over time, is not higher than Tasmania. In fact, in many years it's lower, and an average from 2012 to now, it's lower.

What Basslink has tended to do over its years is import in the summer and export in the winter, as an average. However, over this winter, it's also imported. Within that average, there's been monthly changes and there's been daily shifts of electricity. Basslink overall has imported more into Tasmania than it's exported, but Basslink can perform a useful storage service. That's what it's tended to do in the context in which Hydro Tasmania has had a surplus of production at certain times of the day and year, and a shortfall of energy production in others. So there has been an arbitrage or a trading service.

However - and I've run these numbers and I'll put them before you - the value of that service is way inferior to the cost of the transmission line. Hydro Tasmania has lost a great deal of money since it has entered into a contract, under the Tasmanian government's will, in order to operate Basslink. The value of that arbitrage transfer service is nowhere near the cost. There is a net economic loss to Tasmania as a consequence of it, but it does perform a useful service - nowhere near the cost of the service.

It's also useful to understand that's Basslink and Hydro Tasmania now - it's used up the available storage and power capacity of the Hydro Tasmanian system. To expand by 750 megawatts, which is Basslink times another half, you need to massively expand the Tasmanian system in order to get any meaningful use out of it. We're not talking about more arbitrage or better trading - we're talking about a massive expansion of production and storage in Tasmania in order to make use of the interconnector.

CHAIR - Which may or may not be regulated. We still don't have an answer on that - on Basslink, I'm talking about.

Prof MOUNTAIN - Yes. The AER was due to issue a final decision on the eighth. I think it's extremely problematic. APA is seeking, as a present value, $1.2 billion, which is $108 million a year for the next 20 years. That's how much Tasmania pays for electricity transmission now every year.

CHAIR - You did make the comment that you don't believe that the Commonwealth has the capacity to currently - laws can always be changed - to implement what might be seen by Tasmania as a fair and equitable system in terms of who pays for Marinus Link. The Victorians, obviously, have their own views. I understood there was a rule change that was made, but maybe that hasn't gone far enough. Can you talk us through that a bit further?

Prof MOUNTAIN - Yes. The essence of the rules is that regulators can't impose an allocation of costs. It has to be by agreement of the states. That didn't really need a rule change, the states can derogate anyway. It is substantively up to Victoria - essentially, New South Wales, Queensland and South Australia will say - 'Thank you very much but no thank you at all' - it's up to Victoria to agree to make a series of payments every month for the next 50 years to pay for the operation (either partially or fully for the financing, operation and maintenance of Marinus Link) it would be up to the Victorian government.

Under the existing Commonwealth funding arrangements for the clean energy transition, there is no authority that sits with the federal minister to decide to allocate the rewiring the nation funds or the CIS funds in a way that would pay for the use of the asset. It can make a loan to the Tasmanian government and hence to Hydro Tasmania, which needs to be repaid, it can take an equity investment, which is going to require a return. Both of those, in a sense, are trivial. Those funds, either equity or debt, can be found as long as there's an obligation to make a series of payments to finance the asset over its life. That's the critical variable and the Commonwealth doesn't have the jurisdiction to impose that on Victoria. It doesn't have the jurisdiction itself to choose to impose that on taxpayers generally and so I think, as it stands, it's a matter of agreement by Victoria - and CIS funding or Rewiring the Nation funding means nothing to that investment decision.

CHAIR - With the final investment decision that has been pushed out a bit and I do share the concern about the short timeframe between the whole-of-government business case and the alleged delivery of both of these documents, matters only a month apart. You're saying, Bruce, that we even in the whole-of-government business case and in the final investment decision, we won't know what the agreements are between Victoria and Tasmania, basically, as to who is going to pay for what percentage, or will we know that?

Prof MOUNTAIN - I can't understand how the Treasury of Tasmania can produce a whole-of-government business case without confidence on who's going to make the payments. How can you make a final investment decision and assess the investment unless there's an understanding of the relative distribution of the revenue recovery as between Tasmania's taxpayers, its consumers, Victoria's taxpayers and its consumers. That information would need to be publicly available. I think it's of critical public interest -

CHAIR - Were you expecting it to be publicly available before this point?

Prof MOUNTAIN - I can't see how the Victorian government could enter into an agreement without a public announcement. If it intends to impose that on electricity consumers, how can it possibly do that without announcing that to consumers? If it intends to impose it on Victorian taxpayers, they will hear an outcry in Victoria and it'll be on the front page of *The Age* and *The Sydney Morning Herald*: $200 million a year payment from Victoria to Tasmania for what? Can't we provide this ourselves more cheaply? What is Victoria getting as a contractual commitment? Of course, Tasmania can't contractually commit to anything. The fundamental

problem here is the economics are dreadful. There is a sea between Victoria and Tasmania and it costs a very great deal of money to bridge it. That's the cast iron reality.

CHAIR - When we look at the energy transition away from fossil fuels, even if we don't get in any new industry in, any new energy, significant energy customer or load, we've still got to decarbonise the transport sector, industry, agriculture, a whole range of others, as we're aware of. In in your view then, is Tasmania in a position where allowing for some new load to come in - because it always could, you could also lose some - but can Tasmania manage that without having that back-up?

Prof MOUNTAIN - Yes, I think Tassie has always had, in my mind, an enviable first-rate electrical system. It was built over decades when there were constraints on capital and Tasmania need to do a lot of very clever engineering things, which it did. It lived within its means and it engineered an incredibly clever electrical system at environmental cost but nonetheless, from an electrical engineering point of view, a very smart system.

At that time, solar was not a proposition. Solar is now ubiquitous and growing everywhere at leaps and bounds. Tasmania, like the rest of Australia, has enormous wodges of empty household and factory roof right close to its regional towns and cities. The fantastic opportunity for Tasmania - one that the rest of Australia could give its eye's teeth for - is hydro storage in which you can utilise the solar to meet production, hold the hydro back in the summer, use that production in winter when hydro production in Tasmania will be a quarter to a third of its summer, utilise the hydro capacity. What a fantastic asset.

Tasmania can go a long way to providing clean, firm, secure, inexpensive electricity by growing that rooftop resource. It's always stuck out like a sore thumb that this was the golden opportunity that Tasmania was not taking advantage of. It is still there. I see more and more houses with rooftop solar every time I come in to Hobart but there is so much to do. It is so inexpensive to do. It brings social goods to the individuals and the businesses on whose roofs it sits. It brings added benefit to the community by sharing. Most of its production is exported to the grid in a hydro system that can utilise that without any incremental need to expand battery storage that the rest of Australia needs.

CHAIR - How do you see that system affecting power prices for Tasmanians, residential and business, not the big ones?

Prof MOUNTAIN - It will absolutely bring them down in Tasmania the way it has in Victoria. One reason why Victoria relatively has no higher time-averaged wholesale electricity prices is because of the growth of rooftop solar. Tasmania can do that and, as I say, it doesn't face the additional cost of firming it up because of the Hydro capacity it has. Perhaps one of the reticence and the reason it hasn't happened in Tasmania is because Hydro Tasmania has feared it and TasNetworks has feared it as a competitive threat. I think that's changing. They can add value to it and there's such a public benefit to it. It's the job of government to overcome those frictions.

Ms MILNE - If I can just add to that, one of the things I can't understand that Hydro isn't doing is building a virtual power station on the roofs of suburbs in Tasmania. The huge socio-economic advantage would be in the low-income suburbs, where if Hydro decided that it would run a power station by rolling out the infrastructure itself and then -

CHAIR - Putting the solar panels on themselves?

Ms MILNE - Putting solar panels on the roofs of a couple of suburbs and then the people who live in those houses get a percentage of discounted power or however you want to organise that and Hydro maintains the asset, replaces the panels over time and so on, and that also enables those suburbs to become electric-vehicle-ready into the future. That is already being done by energy retailers in other parts of the country, not government-owned utilities, but it could be done here in Tasmania because of the way Hydro is dominant in this market. There is just no reason we couldn't be doing that.

CHAIR - Wouldn't Aurora do it as a retailer? Hydro's a generator, not a retailer.

Ms MILNE - You could work it out so that they would be a generator in the sense that they would be the ones paying for the rollout of a new generation asset that isn't just one big power station, but is a power station made up of x number. They'd have to work that out between them. It's a huge opportunity for Tasmania and that's what I mean when I say that definitely we need to electrify transport, we need to electrify agriculture, we need to have more energy into the future, but we can provide it in a way that is better for Tasmanians. It's just not developer-led, which is the problem.

The second thing I wanted to mention in terms of the 54 per cent of the energy that's currently used by the four bulk power consumers. Nobody is talking about what happens if one of them fall over or more than one of them fall over. There's a whole lot of energy there that could be repurposed. The one that I'm thinking of at the moment is TEMCO. The Gupta family group are in trouble, they bought TEMCO at the same time as they bought the Whyalla steel mill. Whyalla steel is now in serious trouble. There's talk of it going into administration. What does that mean for TEMCO, which before Gupta bought it, was teetering on the brink of closing down at that point?

That is a big load of energy sitting there. You've got talk of Norske Skog wanting another 50 megawatts. TEMCO has 60 megawatts, just as a point of comparison of what's going on there. So, we need to be looking at the long-term mix of what do we need in Tasmania and what do we need it for and how can we best deliver it for the benefit of the community, not just because a developer comes along and says 'I can build this here and there and I want to and you need to subsidise it'.

Mr BAYLEY - Thank you both, and I certainly, Bruce, would be interested in reading your submission. I was going to start there with the energy future. I mean you start talking about that there's no threat to energy security in Tasmania. Energy demand has been relatively stable. You've talked about some of the major industrials. We've had a submission from TasNetworks that predicts a doubling of energy demand by 2032. How do you reconcile those two perspectives?

Ms MILNE - I'm really glad you raised that because that is typical of what happens with all those consultants' reports. Yes, TasNetworks says there'll be a doubling by 2032, that's eight years away. When you go to the footnote and find the consultant's report that they based that on, their projected increase to 2032 is from increased connection and the rollout of electric vehicles. Seriously, are we going to double in Tasmania in eight years on the back of electric vehicles and new connection? I don't think so. When you look at the last 10 years, and that's where the figure of no discernible increase or decrease comes from, is from the Energy Security

Commissioner's report, where he sets out the figures and shows there's been no discernible difference in 10 years. Are we going to say in the next eight we're going to double it. To me, this is more of the hype that you just get a consultant, you tell them what you want, they give you a figure and you run around saying this is going to happen. Let's have some ground truthing and some realistic assessment of that particular thing for a start.

Mr BAYLEY - And, in that context, I mean you've talked about the Hydro or one of the public agencies rolling out rooftop solar and the opportunities there. When it comes to Hydro, we know they've got a billion-plus-dollar maintenance program across dams, which the committee has gone to see some of their plans and heard a lot more about that. What's your thoughts on the reinvestment in the that dam infrastructure? I mean, we know very clearly, Christine, your view around Pedder and understand that, but more broadly in terms of the dam infrastructure and what you think needs to happen in that space.

Ms MILNE - Thank you. Yes, the dam infrastructure in Tasmania is ageing. We haven't built a new major dam, the last one finished in 1994, I think, so we're talking 30 years. And we have to accept that the Hydro infrastructure is ageing and dams don't last forever, which is news to some people, but they don't and, so, increasingly, we are going to have to spend considerable amounts of money maintaining those assets for a relatively small amount of energy, and the Pedder impoundment, I know, is 57 megawatts is produced, and yet we're going to be spending $100 million in the next few years rebuilding Edgar, strengthening Scotts Peak and so on. My question is: why haven't we had an audit of the whole of the Tasmanian Hydro system, identifying where the weaknesses are, how much each particular asset generates, what it's going to cost to maintain and might we be better to decommission some of those assets, certainly not all, some of them are good into the future, but why wouldn't we decommission some and use that investment money to go into like a virtual power station or a solar farm or whatever Hydro wants to build as a new generation asset - especially in the face of global warming and reduced inflows to those Hydro assets. So, we are already seeing we're going to be paying more to maintain them and they're going to have less water in them and less valuable in the system.

So, I just think assuming that they're always going to be there doing the same thing as they've always done is really not telling the Tasmanian community the truth about the state of the Hydro. And the second thing is Hydro hasn't put aside the money over time to do the maintenance, and in part that's because government has required such a high dividend from them they just haven't had the money to do what they might have needed to do. So, we are looking at a system with serious problems, a lot of money being allocated to maintain it. Is that actually the best way to proceed?

Mr BAYLEY - There is the argument that's put to us repeatedly about Marinus and how that will significantly increase the value of the water resource here, and - notwithstanding your comments earlier, Bruce, about Marinus more broadly as a proposition - what do you say around that in terms of being connected with the mainland and being able to capitalise on high price times to sell our power and the responsive nature of hydro generation here?

Ms MILNE - I'll let Bruce go to that, but that's what we were told about Basslink. I'm old enough to remember all the hype about Basslink. Arbitrage was going to be it. We were going to build this interconnector to the mainland and make a motza. We lost. It went into administration. It was a complete failure and they fabricated the business case for Basslink at the time. Hydro deliberately, in my view, minimised the facility fee that would have to be paid and as a result it's been a failure. I've heard it all before and, as Bruce said earlier, it's all very

well to say we've got storage capacity, but it can't compete with the mainland. So, Bruce, I'll leave it with you.

Prof MOUNTAIN - If you imagine that Marinus Link's costs were completely covered by someone else in Tasmania, would you say, well, you know, we would welcome Marinus Link? Even with that, I'm not sure you would, because you're going to need to invest to expand on Hydro Tasmania's capability to make it useful. It doesn't have the spare power - the rate of change, the peaking capability or the energy, the amount that you can share over the period of time now available - to meaningfully use a new interconnector.

The question then for Tasmania would be: if you gave me the interconnector for nothing, would Tassie, nonetheless, welcome the interconnector? I don't think it would. It would have to say, 'How do we compete now, re-engineering the Tasmanian power system in order to compete with the alternative, which is battery?' Even using CSIRO's figures, four-hour battery is a much cheaper capital outlay and much, much cheaper operating costs than pumped hydro with much lower round-trip losses. So, you will be building an asset that can't compete for the service that it's going to need for the vast bulk of the time.

There is a service that deep storage can provide that's very rarely demanded - the period of a few days in early winter or winter in Victoria when you'll need consistent production. But there's no way you could justify the billions of outlay on something like that. That will not happen in Australia generally. It will be diesel engines and gas turbines, and, on a greenhouse gas and an economic measure, by far the cheapest way of doing it for the foreseeable future. Maybe things will change but that's the storage market in which Tasmania is competing.

Even if you got someone else to cover all of the Marinus costs, I don't think it would be economically sensible to do. I think it would be a wasted investment for Tas Inc. I don't think Hydro Tasmania of its own accord would choose to do that.

Mr BAYLEY - Just one more, Chair, if I may. We don't have excess power, you say. How do we reconcile then, the notion of Marinus plus a big green hydrogen hub and a whole lot of new massive industrial draw on the system?

Prof MOUNTAIN - Yes. Hence I said my estimate of the Battery of the Nation plus Marinus is at least $10 billion. You need to massively expand additional production in Tasmania and you need to build much more storage. So, you can't see Marinus, or hydrogen, or even just Marinus.

CHAIR - And transmission.

Prof MOUNTAIN - Yes, a further $1.5 billion onshore Tasmania, which, to be clear, more than doubles the regulatory asset value of all the transmission that exists in Tasmania now, in order to service Marinus, in order to get the production, the new energy production around Tasmania and then to the border with the sea.

On every measure. I'm at a loss for words of how Tasmania could decide to go ahead with the investment. Even if Marinus was completely covered by someone else, which is not going to happen.

Mr BAYLEY - So, would Marinus make green hydrogen onshore here unviable? Would that be one of the precluding factors?

Prof MOUNTAIN - I think -

Mr BAYLEY - We're seeing investors not deliver. Would it be because Marinus is on the table?

Prof MOUNTAIN - Yes. I can't see Marinus adding incremental value to green hydrogen production in Tasmania.

CHAIR - I might go to Craig because we're running out of time. We might have to have you back, Bruce, after you've provided more information.

Mr GARLAND - While we're talking about hydrogen, can you tell the committee what is happening in the green hydrogen market in Australia and internationally and whether it is likely to be a realistic medium-term development opportunity in Tasmania?

Prof MOUNTAIN - Green hydrogen has been a source of a great deal of profit to Microsoft PowerPoint, frankly. There have been more consultancy reports than you can poke a stick at talking about the wonders that are green hydrogen. Enough water has passed under the bridge for proponents now to put up or shut up, and they are shutting up. That's the picture in Australia. That's the picture globally.

Australia, it's often said, has a competitive advantage in green hydrogen production, not from grid-supplied electricity. Australian grid-supplied electricity is extraordinarily expensive by global standards. Off-grids are supplied; perhaps in the Pilbara or in parts where you can access a great deal of land and a great deal of solar it has a proposition, but none of those are proceeding. If anything, all of them are being put on the backburner or being cancelled totally, so, I'm afraid I cannot point to a green hydrogen proposal of any size beyond research and development-type funding which is going to go ahead in Australia. The South Australian Government has proposed a green hydrogen factory. I can't see that happening.

Globally, I think there may be prospects of it in the Middle East with enormous solar farms. There will be a great deal of government-funded interest in it in Europe, but like us they have so many other pressing energy transition hurdles to get over first. We need to decarbonise the power system, which is a non-trivial task anywhere in the world and I think there's an increasingly major focus on that and I think the giant green hydrogen promises bubble is now pricked.

Ms MILNE - Can I add to that quickly? On the hydrogen hub at Bell Bay, there was talk that Iberdrola, the Spanish windfarm company, would be building an offshore windfarm to feed that. That seems to have gone on to the backburner. There's no talk of that happening anymore. The big problem is the government has not and neither have any of the energy utilities, the energy GBEs, explained how all this fits together. How does the hydrogen hub fit with the Marinus proposal fit with the Battery of the Nation proposal fit with the transmission line proposal? It's just a grab-bag of a whole lot of things which say we need to build more energy so, to me, it's artificially inflating demand to justify subsidising new private-sector developer windfarms and other major infrastructure.

Ms FINLAY - Dr Mountain, my question is around the suggestion of Hydro, or whomever, investing in generation on rooftop solar. I'm quite interested in that at a suburb level. Have you or Dr Milne seen any research about how much an investment like that might make and the cost-benefit returns of doing that to the community?

Prof MOUNTAIN - Yes. I've spent a great deal of my research time over the last decade studying rooftop solar expansion. Per capita in Australia, the mainland has the highest increase in the rooftop solar penetration, globally. It has entailed a great deal of public subsidy federally and at a state level, but relative to wholesale clean energy expansion, it's been about comparable. It's been a growing market that rides through whatever change of government there is federally. It's good economics and it's good policy and it's good politics.

Ms FINLAY - I might clarify that specifically I was interested in whether you've done any work or work has been done regarding around whether if Hydro in Tasmania were to invest in a low socioeconomic community for the benefit of Tasmania, how much that might take? What might an investment as a dollar figure look like for a community in Tasmania?

Prof MOUNTAIN - Let me talk a bit about a report that we put out about two months ago looking at rooftop solar on factory roofs. Our estimate then is the policy yield that you would get from suitable policy would be twice as good as the existing clean energy schemes. In terms of clean energy production for public subsidy, what Hydro Tasmania would be able to deliver and what the Tasmanian government could deliver per value of public subsidy would be orders of magnitude more clean energy production than it would through either Marinus Link or the Battery of the Nation or the sum of the two.

It would be hard for me to put a dollar number on 'x dollars buys you x kilowatts' because it doesn't quite work like that in terms of the allocation of the funding. It would be public support to achieve an expansion of capacity, most of which will be funded by the customer and they can bear because it would be a cheaper source of production than what they're paying for now. But I can say without a shadow of a doubt that in terms of the public benefit of public subsidy for expansion of clean energy rooftop solar in Tasmania, as in the rest of the mainland of Australia, would be by far the best but Tasmania has the advantage that you don't need to add lots of battery storage to firm it up.

Ms FINLAY - Thank you.

CHAIR - Are you prepared to table it?

Prof MOUNTAIN - Yes, I am happy to table that paper for you.

CHAIR - And we are out of time. There are a number of other questions I think members have probably got, so would you be happy to take further questions in writing? We also look forward to receiving the document you said you would table or provide to the committee and also your submission, if you like. It may be that we need to invite you back at a later time to speak to that submission, but I think in interest of time now we might close it off and if you're happy to take further questions through that process?

Mr BAYLEY - Can we invite Dr Mountain to attach any of these relevant papers to your submission as well because I'm sure that we would draw a lot of benefit from that.

Prof MOUNTAIN - Okay, will do. I have put a great deal of effort into writing this out for you clearly, because I think this is an absolutely critical issue for the Tasmanian state and I think your work is of fundamental importance.

CHAIR - Thanks for your appearance, and we look forward to receiving the other information.

Ms MILNE - Thank you very much, and I'm really pleased to have the opportunity to put the natural environment on the agenda here as well as cheap new energy sources. Thank you.

CHAIR - Thank you.

THE WITNESSES WITHDREW.

The Committee suspended at 11.19 a.m.

The committee resumed at 11.30 a.m.

CHAIR - Welcome to both of you, Mr Bailey and Mr Jones. This is a public hearing of the Energy Matters committee. We received your submission, two different submissions you've provided and appreciate that. This is a public hearing. It is being live-streamed and we'll be -

Mr JONES - I can't hear at the moment.

CHAIR - Can't you?

Mr BAILEY - I can hear you well, Chair.

CHAIR - Okay. We might let Ian sort his problem out. Can you hear now, Ian?

The committee recommenced at 11.36 a.m. [delayed start due to technical issues]

CHAIR - Okay, now that we've fixed that technical problem, thank you to both of you for appearing. It is a public hearing. Everything you say will be covered by parliamentary privilege while you're before this committee, but that may not extend beyond the committee. 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 it. Otherwise, it is all public and it is being live-streamed and recorded for the purpose of our records as well, and the transcript will be published on our website. Do you have any questions before we start?

Witnesses - No.

CHAIR - I'm going to read out the statuary declaration to both of you inserting your names if you could tell me whether you agree to proceed in that matter.

Mr MICHAEL BAILEY OAM, CHIEF EXECUTIVE OFFICER, TASMANIA CHAMBER OF COMMERCE AND INDUSTRY and **Mr IAN JONES**, CHAIR, CLEAN ENERGY TASMANIA, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - Thank you. I'll hand over to either of you to open and make any introductory comments speaking to your submission and the members will have questions.

Mr BAILEY - Perhaps, Ian, you can start as chair of Clean Energy Tasmania?

Mr JONES - Thanks, Michael. My name is Ian Jones. I'm Chair of the organisation called Clean Energy Tasmania, which is a division of TCCI, being the Tasmanian Chamber of Commerce and Industry. Clean Energy Tasmania was formed a year ago to progress investment and development in clean and renewable energy in Tasmania and to provide a voice to relevant state and federal government departments, regulators, and other relevant organisations. Our membership covers developers of projects involving on and offshore windfarms, solar farms, grid-scale batteries, e-fuel manufacturers, hydrogen producers and the interconnector.

We believe the need for renewable energy and energy in general in our state outweighs the state's ability to provide it, and under the AEMO Step Change, electricity consumption in Tasmania is forecast to increase by 48 per cent by 2035, and 55 per cent by 2050 when

compared to last year's actual 10,468 gigawatt hours growing to 16,000 gigawatt hours by 2050.

Businesses want to expand but cannot due to energy limitation and we've probably all heard the Norske Skog requirement for an extra 50 megawatts, which Hydro could not provide. This makes it hard for existing businesses to expand and even harder to attract new industries to Tasmania due to energy uncertainty - and large data centre operators find Tasmania attractive due to our cooler climate and our green energy, but, unfortunately due to the demands of artificial intelligence, so much processing power is required that it could prevent this business sector investing here.

We believe that energy will become our biggest export for the state in the next 10 years. Over last year, Hydro returned over $100 million dividend by Basslink, and once you combine Marinus 1 and 2 with that, there could be the capacity to generate $400 million to $500 million in dividend within the next eight to 10 years. Looking 15 to 20 years out, if Marinus 3 and 4 eventuate, that figure could well double. We're often spoken of as the 'mendicant state'. Well, it would be great to remove that label forever.

One of the other big advantages of us moving to fully renewable is that we reduce our sovereign risk. In the event of a major international dispute that prevents fuel from being imported to Australia, Tasmania only has a few weeks of fuel on the island. If we can convert everything over to electric vehicles, we can have hydrogen for our heavy transportation and we can have our e-fuel manufacturers providing carbon-free fuel for our vehicles, then we can have our own transport system. We're not dependent upon anything else. We have the best meat, the best vegetables, the best wine, whisky and beer. We'll be completely self-sufficient.

We look forward to the government being more able to assist and be able to roll out the renewable energy projects that we're proposing in the near future. Thank you, Michael.

Mr BAILEY - What Mr Jones said is certainly in line with the TCCI generally. The TCCI has a policy committee which has looked long and hard at energy and energy needs in Tasmania. It seems to us that government policy doesn't necessarily line up with government delivery. The government policy to reach, you know, 200 per cent renewable just doesn't match the delivery that we see on the ground.

We seem to have real difficulty in getting projects to land in Tasmania. That seems to be due to a whole range of reasons, one being - according to many of the people that are sitting around the clean energy table - apparently the difficulty in Tasmania seems to be greater than other states and indeed, other parts of the world. They consistently tell us that we are the most difficult place to get a project up and running.

It seems to us, too, that the EPA process has become in some ways weaponised by the environmental protest organisations. They are very well-resourced. They have millions set aside to essentially slow projects down, and through a range of different mechanisms, particularly legal mechanisms, are able to delay. The intention is to delay till death. We believe we need to look at that.

As a state, obviously for us, Marinus Link is critical. I don't think the government or Marinus Link have done a good enough job in explaining to the community why it's so important - that firstly, it gives us security and our own energy. Because energy isn't a

consistent thing - it's lumpy - we use energy at different times than the mainland states use energy, which means that we can sell and buy at different times, to maximise benefit for Tasmania.

What we know is that the peak usage in Tasmania - right now, we don't have enough power for Tasmanian industry. We don't have enough power for growth. We certainly don't have enough power that lines up with other government policies like, for example, the EV policy. Now, there's no way we could charge the sorts of numbers of EVs that the government is really pushing hard to move towards. As Ian pointed out, too, with Marinus in place - and again, it's using those settings carefully - we can generate far greater revenue for Tasmanians through Hydro. I think that sometimes that's forgotten - that the money we receive through Hydro pays for nurses, doctors, teachers, roads - all those things that are important to us. I don't think we communicate that well enough. From our perspective, firstly, obviously Marinus is critical, because without Marinus we don't have the business case for a lot of the big projects that Tasmania is going to need.

We also know that we need to do better at getting those projects up and running. To us it seems crazy that Robbins Island has sat for 10 years now, and it's spinning its wheels, waiting for some sort of help to get it going, in a place where the owner of the property wants it desperately. The proponent is very well-funded and ready to go with it.

An island that's been a farm for 200 years somehow is now been made to look like it's pristine wilderness, which just isn't true. It sits 10 nautical miles away from Woolnorth windfarm. In that time since Woolnorth has been commissioned, we've seen an increase in bird life in that area in Tasmania and an increase in some of our threatened species that travel through. To somehow have the environmental protest organisations picture this as being the epicentre of all bird life is just ridiculous. We need to do better than that as a state.

From our perspective, we need to do better in planning, we need to do better in communication. I think that's a fundamental thing because, for this to all work, we need to have great transmission, great production of energy, and also a great delivery. For us to achieve those things, community needs to be on board. Community can only be on board if they're given the truth, and they're given the truth in a fair and gentle way that enables them to have a part in what is going to be a pretty exciting time for Tasmania.

We feel at the moment that our opportunity is kind of sailing off into the sunset a little bit. Other states are far ahead of us now, as far as their ability to deliver. We note with interest the Victorian changes to legislation a month-and-a-half ago that saw two or three projects approved within two or three weeks of that legislation going through. Other states are realising that different processes need to be streamlined to get these projects up and running.

We have a great future ahead of us, but we feel that that future is beginning to slip through our fingers. The opportunity, I think, in this really important committee is to investigate that, and certainly from industry's point of view, to find a better pathway forward that not only will turn off coal-fired power stations in the mainland, but also give us an economic advantage in Tasmania.

CHAIR - I might just lead off. Just with regard to the certainty of supply issues, I mean, you both mentioned concerns we don't have enough energy at certain times and certainly, the Norske Skog example was put. How frequently has the TCCI or CET received feedback from

your members or others about being denied connections or their ability to upgrade their existing connections or energy requirements?

Mr BAILEY - We have several examples. Obviously, many we can't talk about due to commercial-in-confidence reasons. The Norske one is probably the public one that the state's aware of, where they were literally told that there were no electrons available to be able to transfer their coal-fired boiler to an electricity boiler. My understanding is that their coal-fired boiler uses the equivalent of 20,000 cars' worth of emissions per year. They desperately want to upgrade that - they're told that they're unable to, there are no electrons available. For Tasmanians, what's important about that is that the electrons available bit is at the peak of the usage. So when we're all using energy, that's what we're talking about.

We know of other major industries that scale back when we're reaching peaks to help to manage that, and others that desperately want to grow that are told they're not able to. In fact, we've seen hydrogen proponents leave the state because they couldn't get access to energy. I would really be interested to find out how some of the major developments that the government is chasing so hard are going to be powered. I just don't see how that could happen at this point in time.

That's not good enough. We know that, at this point in time we're at 78 per cent renewable, because we have the gas-fired power station going, we're drawing more energy across Basslink than we would want to, so for us it's a frustration. We have, as we've said many times in the media, literally $20-odd billion dollars' worth of projects sitting around our clean energy table wanting to spend their money here, without needing government funding, and they can't get a go. It's crazy.

CHAIR - Ian did you want to say something?

Mr JONES - No, that's okay. Thank you.

CHAIR - You've identified in the submissions, as other people have, that increased or high energy prices are a significant factor on household budgets and certainly a significant challenge for many Tasmanian businesses as well. In either of the organisations, have you done any work on looking at, if we'd have spent the Tasmanian equivalent of the three-point-whatever billion dollars investment Marinus Link would be, in on-island generation and in other infrastructure to support increased renewables on-island, what that would look like?

Mr BAILEY - Ian, do you want to go or do you want me to go?

Mr JONES - I was just thinking, that amount of money would basically, if you look at the investments that some of the windfarm proponents are looking at, that that amount of money would probably only get you about 1.2 or 1.3 gigawatts, which I don't think would be enough. Michael, you may have a perspective on that.

Mr BAILEY - Oh, look, I agree with that. I think, to us, the opportunity, firstly with Marinus we have to think of that as being an enabler. It's a bit like the Midlands Highway. The Midlands Highway doesn't make Tasmania money but the things that travel on it do make Tasmania money. So, it's an enabler. With Marinus in place, it allows us to not only have the energy development to support Tasmanian industry but, in some ways more importantly, it

allows us the energy to be able to fund the sorts of things we need in the state by selling power to the mainland, because what we know is that - and I know it's an often-used line - but the sun doesn't always shine and the wind doesn't always blow, and that's the beauty of Tasmania's Hydro.

We're so lucky that our forefathers, who would not be able to do these things now, built dams in Tasmania, and those dams are essentially massive batteries. Every drop of water we keep in a dam is a piece of energy waiting to go through a turbine. So, with more clean energy on island, we're able to store more of that water.

When the price is right, we're able to then sell to the mainland. In fact, at the moment, Victoria pays us to take energy that they offload when it's really sunny because of the numbers of solar panels they have on roofs and then we sell it back to them at vastly increased cost or profit for us when they need that energy back because we can store it in our dams. So, the opportunity cost is that money that would then flow into hydro that would then fund doctors, teachers, nurses.

Also, the extra energy on-island brings the price down for Tasmanian users, which is something that is beneficial for us. Plus, also the insurer decision with the Australian Competition and Consumer Commission (ACCC) shows that you need to have industry where the production of energy happens to claim that it's clean, so, the more we are able to claim 100 per cent to 200 per cent renewable the more industry we can bring to Tasmania to be able to claim again their clean energy credentials. So, you have to be at the place of generation - that was the ACCC ruling essentially.

Again, we don't see a downside. We don't understand why we're not able to get this message out into a way that Tasmanians can truly understand. We believe that all Tasmanians do, but, again, it's a difficult one for people to understand, because I believe we've also been led to believe for a long time that we have endless amounts of energy in Tasmania. It doesn't matter; we just turn a couple more power stations on if we want to generate some more energy. People don't realise that we're actually very much at, if not beyond, the tipping point now with energy in Tasmania.

The good news for us is that we have all this private money ready to go, to build all these windfarms, biofuel plants, solar plants, hydrogen plants et cetera, we just need to find a way to tick the box to allow them to start.

CHAIR - Mike, you talked a bit about revenue and we can sell back into the market at a higher price and make more money for Hydro.

Do you believe that electricity generation transmission assets in Tasmania should primarily serve Tasmanian interests or should they belong with the broader Australian objectives in providing, for example, a battery in Tasmania?

Whose interest should be prioritised in this?

Mr BAILEY - I think they are one and the same, Chair. I really do. Again, every gigawatt that we sell across on Marinus or on Basslink goes back into Tasmania's pockets. Hydro is owned by us. The dividends that come out of our GBEs go back to us. So, they're one and the same.

The window of opportunity is that the nation needs our energy. So, it's not about theirs versus us, it's about everything comes back to us. If we have surplus energy and we sell it to mainland users, that comes back into our pockets. Thankfully, we still own Hydro and we own that asset. It's the same argument. It's one and the same. So, from my perspective, your question is actually the same question. Every door you look at is a door that benefits Tasmania.

Mr JONES - I believe if it serves the nation's interests then it'll be serving Tasmanian interests as well.

Mr BAILEY - Financially, absolutely it serves Tasmania's interests.

You're right, Chair, in that there is an investment up front, like doing the Midlands Highway. There's no doubt without the Midlands Highway Tasmania would be a worse place. If we were trying to get the Midlands Highway up now, would we get it up? Probably not. Is it good for Tasmania? Absolutely it is. Did the government show courage to build the Midlands Highway back in the day? It absolutely did.

What we need now is government right across parliament to be brave, and we're seeing that with Labor and Liberal, who both get it and they understand why this is so important.

It's really pleasing you're holding this inquiry too, because I think this will help not just the Legislative Council but also Tasmanians to understand the benefit to us is really waiting. We just need to tick the box and get it moving.

CHAIR - You want to go?

Mr BAYLEY - Yes, I'll go. Thank you both for your submission. Look, Michael, I guess I would like to challenge you, in the first instance, around your sort of rhetorical flourish, I guess, around the claims and the work of environment groups. I mean, I would welcome the opportunity for you to present to the committee here where environment groups have described Robbins Island as pristine wilderness, for example, or the epicentre of all birdlife. I mean that's the kind of rhetorical flourish I think that's not useful here.

I mean, absolutely environment groups have raised issues to do with the orange-bellied parrot and we indeed went to some important habitat areas on Robbins Island when we were there a month or so ago with the committee. It is a matter of fact that it's an important sanctuary for disease-free Tasmanian devils and it is absolutely a place of an incredibly valuable mudflat for migratory shore birds. It's important, but it's not the epicentre. I think that's really unhelpful in this context, but I guess what you're pointing to, you're saying it's being delayed to death. The assessment processes are a problem for renewable energy more broadly.

What exactly are you proposing? Do you not accept there's an important role for the community to scrutinise, to comment and also to have the rights of appeal if it believes that a decision-maker has got a decision wrong in this instance? What are the kind of reforms - you've talked in your submission about planning and approval processes needing to be simplified and streamlined - what exactly are you proposing there and how would removing community rights of appeal be a positive step in this regard?

Mr BAILEY - From my perspective, there's community rights to appeal then there is again the professional protest organisations who are very well resourced who use every legal opportunity to delay, which is what we consistently see with this project and it just seems delay after delay after delay coming through. Their lawyers, which is, you know, I'm not sure that is democracy in play, to be honest with you.

Mr BAYLEY - You had the EPA join the appeal. I mean, you had the EPA join the appeal.

Mr BAILEY - To me that actually shows how bad our system is in Tasmania, where the EPA actually sued themselves because of an approval that they had given earlier on in the piece.

So, it is so complicated that even the EPA, a, either can't get it right or, you know, had to take themselves to court to sort out an issue that they had found from their own approval. You know that's crazy from our perspective, you know, looking at what other states are doing is where Tasmania now needs to gaze as well.

And they're all doing the same thing, they're all looking at better ways, more streamlined ways to be able to give these important projects that again, it seems many of the environmental protest organisations forget are helping the planet - by turning off coal-fired power stations, you know, to actually give them a way forward.

So, from our perspective, this project sitting now for over 10 years with more legal challenges coming at it from a very well-resourced professional environmental process organisation is unfair and doesn't represent the community.

Mr BAYLEY - Can I just ask at a principal level, then, do you believe that important biodiversity values can and should be sacrificed in order to deliver renewable energy and, you know, commercial and investment and economic development.

Mr BAILEY - That, look, that's a loaded political question I'm not going to answer. But what I will say is, having been to Robbins Island and having spoken to the owners of that island and their cattle farm that's been there for near 200 years, I share their frustration, and also I'm very proud of the work that the company has done to manage the environmental issues that were seen as being fair and reasonable, including having tracts of land put aside for devil habitat; including tracts of land put aside for maintaining sands so that they could be investigated into the future; including reducing the way that the windfarm actually was laid out to make sure that it was more palatable for local bird life.

So, having been there and spoken to them, I'm very proud of what they've done, but I'm not going to get involved in that sort of political question.

Mr BAYLEY - And what about just one last, Chair? I mean, Aboriginal heritage protection, one thing that is completely agreed across the parliament, including by the minister, is that the *Aboriginal Heritage Act* is woefully inadequate. That doesn't actually work, it doesn't protect Aboriginal heritage. The Aboriginal community are united in their concerns about - they don't unite on many things, mind you - but they appear united in their concerns about this development and its impact on what is a fundamentally important Aboriginal cultural landscape. Do you have a view on it being assessed against the *Aboriginal Heritage Act* and

approved against the *Aboriginal Heritage Act* at the same time as, over three years ago, that act in parliament was acknowledged by the minister as being unable to protect heritage and needing urgent reform?

Mr BAILEY - I don't have a view on that, but what I do have a view on is again the company that has spent the time with the archaeologists looking at the pathway that Tasmania Aboriginals followed and believing that they have that area well and truly clear from any sort of development. Bearing in mind that cattle have walked across that land for 200 years, which seems to be conveniently forgotten by many in the community. Again, it frustrates the farmer who said to me 'I don't understand why I can farm cattle but I can't farm wind', which is a very interesting question. It's made to sound like Robbins Island is wilderness and I heard a senator say the community of Robbins Island are up in arms about this development. Well, the community is actually the farm and the farmer and his workers. So it's quite a bizarre situation.

Having been to Robbins Island and having taken members of my board to Robbins Island, we were very impressed with what they've done in that space. But again, that's one project of many. Whaleback Ridge is another one that's sat waiting for a lease from government for almost a decade now. There are a range of other projects across the state. Getting bogged down in one is probably unfair, and I do agree with that Mr Bayley, that every project will live and die by its community and by its economic credentials, I suppose, but every project in Tasmania is held up in the same way. The environmental protest organisations seem to be taking every project in the same way.

Mr BAYLEY - I don't think that's necessarily true though, is it?

CHAIR - No, well let's just -

Mr BAILEY - Okay.

Mr BAYLEY - That's not true and, I guess, just to put to you and, I guess, we can leave it at this point but -

Mr BAILEY - So, Mr Bayley, which project do you support? Which project do you support then, Mr Bayley?

Mr BAYLEY - We support the Connorville solar project. We support projects that can be done in a way that don't impact on biodiversity, Mr Bailey.

Mr BAILEY -What about wind farming, Mr Bayley? What about wind farming?

CHAIR - Can I just, order. Order. Order.

Mr BAYLEY - Robbins Island has been described as the worst possible place to build a windfarm.

CHAIR - We're getting stuck on one particular project. Michael, you made comments earlier in your contribution that the system takes too long. What do you suggest needs to change, not just on - let's not talk about Robbins Island or any of the others, but just talk in broad terms.

Mr BAILEY - Without getting specific, I think the Victorian legislation is worth looking at. Certainly, it's really pleasing to see how well that's working in Victoria. Queensland and New South Wales are both forging ahead in simplifying their planning processes. Tasmania needs to do the same and we'll certainly, as we have, continue to argue for such.

CHAIR - What were the major changes the Victorian legislation made that have made the difference?

Mr BAILEY - Ms Forrest, I'll let you look at that. I'm not going to go through that legislation here now.

Mr BAYLEY - That's what you've put to us.

Mr GARLAND - Michael, how are you going? You state that further investment in both transmission and generation will put downward pressure on power prices by increasing supply and providing the capacity. We just had Professor Bruce Mountain here, and he was basically saying the opposite. What do you know that he doesn't?

Mr BAILEY - Look, I suppose, all we can do is take the advice we've given from major GBEs in Tasmania and also the minister. I didn't hear his presentation, so I can't make comment on that.

Mr GARLAND - Okay. To streamline and get to that space quicker, I heard you mention Whaleback Ridge. There doesn't seem to be too much objection about that. There are no migratory shorebirds, there are no Aboriginal cultural values. You've got Reece Dam you can plug straight into. Why aren't you pressing the government to move along in that space?

Mr BAILEY - Look, we are. We've been pressing that for some time. We've had commitments from the government over the last probably two years about that lease being provided and we still wait for it. You're right. To me, it seems an absolutely logical one. The transmission is much easier, the local community are clearly happy, et cetera, so for us it's an absolute frustration and we continue to push for that.

Mr GARLAND - And also, you state that the local community are supporting Robbins Island. I live in that area. There are overwhelming objections to what is being put forward there. Maybe you need to get out and see a bit more of the community instead of just directly the Hammond family. I would suggest it all comes down to the right location. If you want to get things moving quicker, put it in the right location. Here we have a classic of one that is obviously the wrong location for a number of reasons, and the other, which is the right location for a number of different reasons.

I think the broad-scale approach that we've got wind - let's put it everywhere - is a failure and is contributing to the stalling and stymying of us getting into that renewable space. I would suggest we would get there much quicker if we picked the right location and had taken the community on board.

CHAIR - Have you got a question there, Craig?

Mr GARLAND - Yes, just pick the right location and push that. That's about all.

Mr BAILEY - I don't disagree with that too. I think as far as Whaleback Ridge, it seems to us just crazy it hasn't got up. That's a valid point with communication around the Renewable Energy Zone, which I know a lot of work and effort went into. But from our perspective, what does that zone actually mean? If it is a zone, does it mean you can put a windfarm in there or does it mean you go back through the planning processes? Perhaps, what government could also look at doing is pre-planning for areas so that you have the community absolutely understanding what is going to happen in that space and the developer able to walk straight into the space and get going.

I don't disagree with any of those comments, and certainly, Mr Garland, from our perspective, and having spoken to members and ex-board members we have in Smithton, they do have a different view, but it doesn't mean that's right. I certainly agree with your assertions that we need to bring the community on board and that's going to take some work. It's going to take a more concerted effort from government and also from proponents, too, to actually explain why this needs to happen.

I do think there's an understanding in Tassie that's not true: that we have abundant energy; we have all these dams; we have plenty of power; everything's great. We need to explain better why that isn't the case and for us to have the sort of future in Tasmania we all want, we need to have more power generation in Tasmania.

Mr EDMUNDS - Thank you both for your submissions. I wanted to ask about prices, but acknowledging that in your membership you would have members who, as you've spoken about, are keen to invest in new projects in Tasmania - and probably more established members who, like us, probably are watching power prices like hawks. Would you, if you could, please, from the TCCI perspective, speak about your confidence level - and I know you talked about this in your submission - that investment in new energy can actually put downward pressure on power prices? So, there's juggling those two competing priorities of the need to invest, but also the need to have a shield around power prices and how that can work together.

Mr BAILEY - Yes, I think the only way you're going to get cheaper power prices is by having more generation on-island. We also argued, as part of our energy policy for some time, that the government needs to consider Tasmanians in this, too. Tasmanians should have the benefit of these projects in Tasmania. There should be a Tasmanian price for Tasmanians, essentially, is our view.

We, firstly, own our Hydro assets. We will be allowing other development in Tasmania and, again, Tasmanians should get a benefit from that. In other parts of the world, the government will provide dividends to community based on the sorts of revenues that their energy produces. I know that the profits go back to Tasmania through Hydro and through dividends, but I also do like the idea of either a guaranteed lowest price in Australia or a dividend or something of that sort to make sure that Tasmanians themselves get something in their hand for the work that the state is putting in; again, from our perspective, probably once-in-this-generation opportunity - no pun intended, but it was a good one.

CHAIR - Can I just follow up on that one, Luke, if I might?

Michael, you said a Tasmanian price for Tasmanian customers. If we were truly to ring-fence that, then we wouldn't be connected to the NEM because we would generate it all on-island. We would build our own low-price wind and solar that are a low price once they're

established. There are still the capital upfront costs, of course, but if you take that really to the full extent, that means we disconnect.

Mr BAILEY - Yes, I'm not sure that's right, because if you disconnect you also doom us to have to pay for the Hydro assets ongoing, so Hydro will fast become the third cheapest form of energy after solar and wind. So, if you do that, you do muster the most expensive energy prices into the future. Now, the benefit of Hydro is being able to sell when the price is right. The need for Tasmanians to have other energy production on-island to use as much as possible and, again, ideally only use Hydro when the price is right on the mainland.

So, essentially playing the energy spot market, and that's how we've got such big dividends out of Hydro over the last umpteen years. I think last year $122 million went back into state coffers. The modelling that we've played with looks like it would be closer to $500 million going back into state coffers with Marinus in play, so, that is where we see the benefit for Tasmania. I'm not sure that cutting off from the National Energy Market, although it sounds good, I don't think it would have the cost benefit that many would think it would have.

CHAIR - On that, then, if you assume Marinus is built - at the moment Basslink is a merchant link, like, it's not a regulated link. Marinus link is to be a regulated link, which will mean there's very little likelihood of generating more revenue, because there won't be any price arbitrage opportunities, which will disappear with a regulated link. So, I'm not sure that that completely stacks up.

Mr BAILEY - I don't think - we can't think of Marinus. Look, we don't think of Marinus as being a revenue generator in itself - a bit like the Midlands Highway comment. I mean, it doesn't necessarily matter who owns Marinus or who builds Marinus, as long as it's there. We would argue it should be federally funded; we would argue that it's national infrastructure that the feds should be paying for. The benefit for Tasmania is the revenue that we generate by being able to sell across Marinus. So, that's where our benefit is.

CHAIR - We've still got to pay the regulated fee. It's not like once it's built, even if we didn't have to pay for it, like it was funded by some, you know, fairy godmother - federal government perhaps. But in any event, once it's commissioned and is regulated, then there's a networking fee charged by the AER on the basis of its regulated assets base. So, that's not going to be zero.

Mr BAILEY - No, that's right. But again, it's not going to be $500 million a year either. So, I mean, it comes down to the business case. And, again, we're all waiting for that business case, I suppose, Ms Forrest.

CHAIR - Back to you.

Mr EDMUNDS - Thanks. Just to sort of look back to what I was asking about with power pricing, and I think you touched on a few of these, but I'm interested in ideas around policy settings that you'd like to see that would put downward pressure on power prices.

Mr BAILEY - Look, I think, again for us firstly, again, more generation on the island is going to be key for that. We argued strongly for the energy rebate that the government put in, so a percentage of dividend of Hydro goes back into Tasmanians.

I know the state - many years ago - we pushed for a Tasmanian price to be set. I know that turned out to be quite a difficult thing because of the National Energy Market. But, again, the government has done that before with funding the difference, which essentially is a dividend going in a different way. So, I think there are a whole range of mechanisms.

The National Energy Market does make some things a bit more complicated, but my understanding, talking to people in Canberra last week, is that there is an appetite in Canberra to look at different settings. So, perhaps that might be something we could look at in the future; how we might actually use and run assets better; because we are unique - I mean, we own most of our energy-generation assets currently - so it's a pretty unique position we're in.

CHAIR - I'm still on the energy pricing sort of matters. You sort of have asserted or suggested that additional energy generation and transmission assets will drive down electricity prices and we're noting that new energy assets also incur fixed costs. Isn't it the case that any potential price reduction would only occur once these assets are fully amortised, which could take a long time because they're big assets?

Mr BAILEY - Well, it certainly could.

From the supply and demand perspective, obviously, the more supply we have the better. We know that Victoria currently pays us to take their energy. We know that that's not passed on to the people of Tasmania, necessarily. Hydro flattens out their charging across the year, so I believe that there could be other ways of doing that.

Again, as I said, it's likely right now that Victoria's offloading solar power, if it's sunny in Victoria and it's likely that we're being paid to take that.

Is there a way that we can make that benefit more visible for Tasmanians, if that's the right way to put it?

CHAIR - Yes. That's not quite how prices are set though, is it?

Mr BAILEY - It's not, that's exactly right. That's not how prices are set. That's kind of like my point that we have this even price. If you look at the profits that Hydro has made - again, there are different ways you can get that money back into the community, aren't there?

The first way is going to dividends into Hydro. The second way is to say, 'Well, hang on a minute, essentially that's a tax on Tasmanians. We could pass that in a more fluid way back to Tasmanians at the time of Victoria paying us to take their energy, God bless them.' You are right.

CHAIR - That doesn't have any impact on the networking charge.

Mr BAILEY - No, that's right.

CHAIR - As you know, the networking charge is pretty much a fixed charge and a significant portion of the energy bill.

Mr BAILEY - It is. One thing we have said too, consistently, is that we believe that the federal government has a responsibility to support Tasmania more greatly with the networking charge that will come in with Marinus.

As we've said, and I've said it before in the media, it's not okay to pay for the power cord and then not pay for the power point.

I believe that the federal government has a responsibility there, and we'll certainly be pitching very hard at the election next year for that to be realised.

CHAIR - What do you actually mean by that, Michael, because I know they are the largest share owner of the proposed Marinus Link with Tasmania being the smallest and Victoria the next. The setting of the prices, though, is not done by that entity; it's done by the AER.

Mr BAILEY - No.

CHAIR - I'm trying to understand what you're saying what the role of the federal government is here. Is it to ensure that Tasmanians are subsidised?

Mr BAILEY - Firstly, what I'm saying is that I believe they should pay for the development, say, the North West Transmission, for example, and I think there's an argument for a change in the settings to be able to smooth out that sort of networking charge to the nation. This is nation-building infrastructure. The majority of the energy produced by our windfarm fleet will go to the mainland, therefore I believe there's an argument for a change in that regulation.

CHAIR - Michael, if the federal government said: 'No, we're not going to fund it, we're not going to put more "free" money into the North West Transmission Developments and, no, we're not going to fund the cable. We'll pay for the lot and then you'll pay for it through the regulatory costs'. Would you then still continue to support Marinus?

Mr BAILEY - I would wait for the business case. From our perspective, again, as a business group, you always come down to the business case. So, you're waiting for that final business case to come through. Each one to this point has been really good for Tasmania but the final business case, we're all waiting for. If the business case didn't stack up, then we'd need to look at plan B. I'm not sure if we have a plan B, which is another interesting thing.

CHAIR - So, you're expecting in the business case that it will be clear who's paying for the cable and how our prices are going to be set? Like, how much Tasmanians are going to have to pay for the privilege of being on one end of it and how much the Victorians will pay for the privilege of being on the other?

Mr BAILEY - I would hope so. It would seem to make sense.

CHAIR - There's a bit of uncertainty about whether that's actually going to be a known thing at the time of the business case. Anyway, we look forward to seeing the business case.

Mr GARLAND - In your submission, you raise concerns about the lack of headroom in the energy market.

According to current data on MarketWatch, from the third quarter in this financial year there is headroom available. Once again, how do you come to that conclusion?

Mr BAILEY - I'll let Ian speak to this as well. I know he has more knowledge about this than I do. Certainly, when we wrote that submission, AEMO had listed that Tasmania did not have head room, and hadn't had head room four quarters before that as well. I think it was the four quarters previous, as well as the next quarter coming as well. Ian might have more around that. I'd note also we're at 78 per cent renewable at the moment, because we have the gas-fired power station going. We're also drawing energy across Basslink.

Mr JONES - I think the fact that we have the gas-fired station running, and taking that energy in, indicates that we don't have the head room as an ongoing facility.

CHAIR - The gas fire's been turned off for a while now, but it was running when you wrote the submission. It has been turned off for a bit.

I want to go back to the Victorian legislation, because we can only report the evidence we get, so I do need you to talk to me further about this. You've made the point that, you know, investors have raised concerns. You talked about that extensively. From the Victorian experience, you mentioned a couple of projects that have got going after the legislation was passed - can you explain more fully why that increased as a result of that? I'm trying to understand what the barriers are to progress here that this legislation, allegedly, has removed, if you like.

Mr BAILEY - Ian, if you want to talk to that and I'll just forward a copy of that report through in the meantime.

Mr JONES - I'm not much of an expert on the Victorian legislation, but it's called the DFP (Development Facilitation Program). It came into effect sometime in March and it was designed to create accelerated planning approvals. Projects already in the planning system were eligible for it, as well as new projects. It basically meant that projects in Victoria were designated as significant to economic development and qualified for a fast-track approval pathway.

I know we did have input to the minister's office here regarding the process that became REAP in our state, and that the case management facility be established; and two case managers have been employed and assigned to projects. We are of the belief that there should be more of these case management personnel that interact between the proponent and the various government departments and GBEs to try to cut through the red tape.

I don't know much more about the Victorian legislation, but I know that I heard their head of - I guess their equivalent to ReCFIT - say at a conference recently that three projects had been approved in the few months since the legislation was passed.

CHAIR - Ian, you might not know the answer to this - it's fine if you don't - they were three projects that were on foot already?

Mr JONES - I don't know, sorry.

CHAIR - Okay. I'll be interested to see whether it's pushing through projects that are on foot or whether it's actually encouraging new projects to come forward. Do you have that evidence or not?

Mr JONES - I have anecdotal evidence that there was a solar farm, a new one, that went through the process. I think it was nine weeks, wasn't it, Michael, that we were quoted?

Mr BAILEY - I think so. That's my understanding, certainly.

CHAIR - I don't personally have any other further questions. I will invite you to provide any other further information that you want to say now that we've had some questions and information provided. Is there anything else you'd like to say before we wrap up?

Mr BAILEY - I'll just say I will find that legislation and forward it through to you. I've got it on this computer, actually. I'll forward it through to you via email.

CHAIR - If you have any information from similar bodies that provide support for the claim, if you like, that this has increased not just those that are on foot and perhaps had been slowly progressing, but in new investment - you know, investments come online, or at least into the system, since that. I'd just be interested to know what alleged barriers have been removed, to understand it.

Mr BAILEY - Yes, will do.

CHAIR - Do you want to finish with anything, either of you two?

Mr JONES - I'd just like to thank you, Chair, and the members for convening. I've sat through quite a number of the sessions and found it very informative. I believe what Tasmania is doing with energy, and what we're capable of, is something amazing. I wish you all power to the cause.

CHAIR - No pun intended.

Mr BAILEY - I'd echo that and say thank you for the opportunity. It's a really interesting, diverse group around the table, which I truly respect, and in the centre somewhere is going to be the right solution for Tasmania. Thank you all for putting your great intellect towards such an important problem.

CHAIR - Thank you. Thanks for your time today.

THE WITNESSES WITHDREW

The committee suspended at 12.26 p.m.

The committee resumed at 1.33 p.m.

CHAIR - Welcome Hydro representatives to the Energy Matters public hearing. Thank you for your submission in a previous iteration of the committee, but this is all carried forward. This is a public hearing. Everything you say is covered by parliamentary privilege while you're before the committee; that may not extend beyond that. If there's anything of a confidential nature you wish to share with the committee, you can make that request and the committee will consider it. Otherwise, it is all public information. It is being broadcast and transcribed and will form part of our records. Do you have any questions before we start? I think you've all done this before. So, I'll invite you each to take the statutory declaration there and then if you'd like to speak to your submission and add any further updates to that, then you're welcome to that and we'll have questions.

Mr RICHARD BOLT, CHAIR, **Ms ERIN van MAANEN**, INTERIM CHIEF EXECUTIVE OFFICER, and **Mr JESSE CLARK**, EXECUTIVE GENERAL MANAGER ASSETS AND INFRASTRUCTURE, HYDRO TASMANIA, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - Thank you.

Mr BOLT - Thank you, Chair. I'll get straight into it. We welcome the opportunity to have this dialogue with you. I'll make some brief opening comments and look forward to your questions.

I'll start by saying there has been much debate about whether we and other GBEs are acting in Tasmanians' best interests. We've always sought in Hydro Tasmania to meet economic, social and environmental expectations. For example, we're currently negotiating contract extensions with major industrials to preserve jobs here. We encourage young people into STEM jobs, including young women. We manage lake levels and river flows to support recreational fishing and even a regatta. We operate our assets to enable endangered fish to spawn and eels to migrate, and we're currently exploring additional ways to support recovery efforts for the Maugean skate.

We also seek to make a good financial return, which is not in direct conflict necessarily with those other objectives. That's also to the benefit of Tasmanians because, of course, we're government-owned and so the revenues go to government and can be used for general services or, as currently, for electricity bill relief.

We have a new charter, as you're aware, through which the government has set us some important additional expectations to enable the lowest possible prices to Tasmanian consumers to meet growing demand, create jobs and support economic growth. These two objectives we see as related. Our biggest lever over prices to consumers is to maintain our current assets in good condition and encourage new renewable generation to be built. That will help match growing demand with sufficient supply and keep prices under check and certainly keep them lower than they otherwise would be.

We are tackling this particular challenge in bringing on new wind and solar in two ways. One of them is that we're in negotiations already and have been for some time with developers and are hopeful of concluding an early power purchase agreement. We are developing a framework in parallel with those negotiations to tell the public and the market how we will

explore and negotiate partnerships with other developers into the future. Beyond this initial round, we're also in negotiations to secure existing industries whose contracts with us will expire soon, and proponents of new industries. The framework I've just mentioned will explain how we propose to ratchet up the power we buy and the power we sell, as well of course the power we generate ourselves, in a way that benefits the state while also earning good returns for the Tasmanian community. It's important to say it won't be mandatory and can't be mandatory for developers of new renewables and industries to contract through us, but the option will be attractive to some. Now, this strategy is intended to help the state grow; it will also allow Hydro Tasmania to provide more value from our assets by firming a growing state portfolio of wind and solar.

Our unique hydro system will be a crucial foundation of this energy transition and that's why we're intent on maintaining our current assets and deepening our storage services and our firming services through the Tarraleah and Cethana projects. It's important to stress that we can't acquit these new functions without good proposals from the market and close cooperation from other parts of the Tasmanian energy sector and government. That's why we've played a very active role in creating and taking part in a forum that involves all of the relevant parties so that we are working as much as possible in close collaboration with them so that networks and our projects and other aspects of what's required to get this transition to happen are done in a reasonably coordinated fashion.

I guess that's probably enough from me to start. We're happy to explore any of those themes and, of course, many other things that you've been asked through your inquiry and look forward to the discussion.

CHAIR - I might start with a high-level one in many respects. There's been some suggestions made that should Marinus go ahead, acknowledging that Basslink already exists to create some degree of trading in the market in a way that's more profitable for Hydro Tasmania, there are suggestions being made that Hydro will become more of a trader with a focus on making money for the entity as a priority. What do you say to that?

Mr BOLT - We will certainly look to get the maximum value from our assets utilising the advantages of Marinus, no question about that. Some of that value will come from Victoria, of course, to which many of our services will be provided, but we're not going to sacrifice those other things I've just mentioned to that particular objective. We're looking to get the right balance of all of those things so that we can, in a sense of the objectives, have our cake and eat it. We can make those wider objectives while at the same time making a decent return. I can only repeat the point if we make a good return, that's also to the benefit of the Tasmanian public because it goes to them; it doesn't go to a private shareholder and it goes to the benefit of the community here.

Ms van MAANEN - To add to that, what I would say is probably to address any misconception that there could be by some that Hydro making a greater return for the flexible hydro generation may translate to higher costs for consumers. Actually, it's about getting the lowest cost mix of generation to meet supply in Tasmania. Being able to add new low-cost generation from, say, wind and solar, and complement that with hydro using it to its best effect, can result in both a lower-cost energy mix for Tasmanian consumers and an increase in return from Hydro. The two coexist; it's not one at the expense of the other.

CHAIR - Is Hydro then, as part of that whole picture, considering the construction of new renewable energy? Not necessarily dams - we'll come to the maintenance of those shortly. There's been a suggestion that Hydro should, perhaps, be investing in other renewables like wind and solar - whether it be a solar farm, a windfarm or rooftop solar in community settings. Do you have any views on that and, if it isn't, why it wouldn't be part of Hydro's considerations?

Mr BOLT - Well, we are looking at all kinds of partnerships. The quickest and currently most effective way for us to help renewables get on the ground is to offer power purchase agreements, and get developers who are already well advanced in their projects to achieve finance and proceed to construction. We wouldn't rule any other form of partnership out, but that looks the most prospective in the way that possibly will gain the greatest confidence of the market. We'll have more to say about that when we publish the framework, and we'll be looking for responses as to what is our best role in partnering.

CHAIR - When did you say that would be published, did you say?

Ms van MAANEN - We're working through the development of the framework at the moment alongside, as Richard said, looking to see what immediate projects could be enabled. We're looking at early next calendar year to start to socialise that with key stakeholders and get feedback on it. It's not something we want to set and finalise in a vacuum. We want to make sure that we engage with key stakeholders, including proponents, including government stakeholders, before we look to finalise that.

I believe it's really about understanding where we can best enable outcomes, but also what the broader market, if you like, can do itself as well. As Richard said, we wouldn't rule out any particular action at this point in time. We are very conscious that, yes, we have a history in wind development and an ongoing interest in that through a joint venture. There are proponents who have been actively developing projects in the state for some years. Those projects are in varying states, but are much more well advanced than us starting to develop a project today.

We're looking at wanting to meet growing demand in the near term; then seeing what we can do to enable projects that others are developing is important. It also means that we can, I guess, share the load across the sector in terms of the investment that's required to build our projects that are needed for future demand. Our competitive advantage, our focus and our expertise is in flexible hydropower, so that's where we're focusing our direct investment, and then looking at arrangements to work with other proponents on broader projects, at this stage.

CHAIR - With the purchase agreements, we know that the one with the Woolnorth windfarm has been onerous, more often than not, and that's obviously not necessarily the ideal position for Hydro Tasmania to be in. I know it isn't this year, so you might like to explain why it isn't this year. Also in terms of you, one of your key levers, I guess, is to enter into power purchase agreements with proponents who are already progressed or progressing with their projects. How do we ensure that we're not signing up to a whole heap of onerous contracts?

Mr BOLT - It's a good question. Clearly, with the best information at the time we enter an agreement, we look to strike one - possibly more than one as time goes on - that's in the money, not onerous. You can never guarantee that market movements in the future will always keep it there. Futures markets, forward contract markets, are fairly volatile, so you'll potentially get swings. You'll always get some swings in the valuation of any contract. The main point is

to do your due diligence as best you can before you enter into it. Then the future, unfortunately, will be what it is, but you seek to be prudent before you actually 'sign on the dotted line'. I don't know if anyone wants to add to that, but that's essentially it.

Ms van MAANEN - Certainly, the process we've been going through in recent months and working with proponents has been to understand - what are the opportunities to enter into arrangements that have positive value from our portfolio perspective, but also look to align to desired outcomes in terms of generation progressing in the state. The estimate of a positive commercial value from the transaction is certainly something that we are focused on in looking at which projects we could progress with. We look at that from a portfolio perspective as well, so we're looking at coming back to that point about how do we best use the Hydro assets.

You may remember from the briefing we did in the office where we were talking about what we're seeking to balance and when we choose to generate. Having additional generation isn't something that's kind of on the side. We look at how it complements the portfolio as well. Then we say, from that, 'Is it a positive? Does it have a positive value when added into the portfolio?' That's how we assess that.

I think it's also important to say that the commercial lens is not the only element we're looking at. When we're kind of screening and assessing projects, we're looking at things like how soon they could be on the market, what are their deliverability risks, including with respect to connection and transmission. Also, what are the environmental and social considerations around those projects - will they be supported - and that broader Tasmania benefit. We're looking at that mix of things. We definitely want to pursue a good commercial outcome, but looking at it more holistically as well. That's all part of the process that we undertake as we progress projects through that process, if you like.

CHAIR - Just before I go to you, Vica, there was the other question I sort of embedded in the middle. What's occurred in the market that has made the Woolnorth Wind Farm power purchase agreement no longer an onerous contract?

Ms van MAANEN - Generally speaking, when we enter into power purchase agreements, they're often a flat price. It'll be a particular price at the start of the agreement and then it'll escalate in a straight line, if you like, over the life of the project. There will be ups and downs in the market over that life. We're looking to say, 'Does that have positive value across the full contract term?' There will generally be times where the market moves above or below that level, and that's when you see the contracts go in or out of the money, as Richard put it, or become onerous or not onerous. That's happened both with the Woolnorth contract and the Granville one.

Mr BAYLEY - Just before I go to where I wanted to go, on those onerous contracts, you can be directed by the minister, can you not, to enter into them? You have in the past?

Ms van MAANEN - Yes. We've had a CSO in the past, a Community Service Obligation.

Mr BAYLEY - Yes. Does that worry you, into the future, that a lot of these justifications that you're giving the committee, I guess, they come to us as sounding like it's an active decision that Hydro makes, but in actual fact, you can be directed to do this. Do you have any concerns about direction in the future, or what that might mean?

Mr BOLT - I think it's a legitimate role for government to decide that there are some things that they value that we wouldn't see purely through a commercial lens or wouldn't see being within our scope to decide for government. We're not here to spend their dividends for them. Obviously, it would be helpful to have directions kept to a minimum, but they are a legitimate tool. They're provided for in the legislation and we would leave it to the judgement of government as to whether it's the right time and the right thing to do at any particular point, and simply comply with it. I know it was a broad statement. We don't have in-principle concerns about that. That's our job to comply with those, when government decides it places a value on something, but we can't legitimately decide for them.

Mr BAYLEY - You talked about flexible hydropower, and we understand that capacity to dispatch and so forth, but how much of your generation is run-of-the-river and has less flexibility around it?

Ms van MAANEN - There's certainly a mix across the portfolio. We have the two major storages behind Gordon and Poatina power stations, and that's where we have the kind of between-year flexibility where we can build them up significantly. At times, they reduce, particularly when it's low inflows, then we have the intermediate and run-of-river. In terms of the percentages, within the portfolio, that might be something Jesse can comment on.

Mr CLARK - Yeah, I was just trying to think, to do the sums in my head. I guess it's important to understand that there's certainly those two big storages - Gordon storage and the Great Lake feeding through Paotina - that do provide inter-seasonal, inter-calendar sort of big storage. Then there's a bunch of the next layer - the Lake Echoes, the Lake King Williams, the Lake Burburys - that do provide a lot of flexibility as well. Then right down to some of the smaller storages.

I'll do some calculations as we go through, but I guess it's important - when we say flexibility, the run-of-the-rivers, the headwaters on each of those do provide a good buffer through the summer. If you're looking at something like the west coast, Lake Burbury or Lake Mackintosh, we will look to have that cycle through Mackintosh two or three times a year over the winter period to fill up, and we'll draw it down, we'll fill it up again. Ideally, coming into late spring, early summer; full, and that will provide us substantial generation throughout the summer period, with a lot of the heavy lifting being done by Gordon and Great Lake, so it's not on or off with it raining, there is much more flexibility than that. Some of the smaller ones, when we start, that cascade flows right through.

Mr BAYLEY - I guess the committee has heard a lot about the flexibility and the ability for Hydro to capitalise on the spot markets and peak prices and so forth. In the context of that, I'm trying to understand what percentage of your sort of portfolio - and I appreciate it probably fluctuates so perhaps an average - but what percentage of your generation, therefore, is that flexible component and how much of it is run of the river and is always happening? Because I think that's a really important point for us and it probably goes to my next question - so, I'd love some direction around that or some sort of thoughts on that.

Mr CLARK - I guess, if you're happy with some rough figures, if you take Gordon-Poatina and then Trevallyn downstream Poatina, there's around 900 megawatts pushing towards half of our generation as a start. But then you've got those bigger storages like Lake Burbury another 144 megawatts with John Butters; Lake Echo and then from Lake Echo, once

you start releasing that water, it's down the cascade through Tungatinah, through Liapootah, right down. So, some water is held there to be able to use right through at the right time.

Mr BAYLEY - Is it something you could produce on notice with a little more specificity? That would be great.

Mr CLARK - Sizing?

Mr BAYLEY - Yes.

Ms van MAANEN - We can certainly indicate that one third of that capacity is in the majors, but it's also the point of how it works in the portfolio in that when the must-run is running, if you like, you're holding back the majors. And, so, from a portfolio perspective, it's highly flexible across the year because we can be choosing between the storages and what we're running when. But we can provide some more specific -

Mr BAYLEY - Because it sort of goes to where the Chair started as well in relation to profitability and Marinus, and have you done the modelling over a longer term about the impact of Marinus and of increased wind and solar and other generation assets in the state, have you done any modelling on what that would mean for Hydro's bottom line?

Ms van MAANEN - Yes, certainly. We, as I guess a normal business planning function, look at how we would forecast our revenue across longer-term time horizons. We obviously have our corporate plan, which is a document that we submit to the government, which is a slightly shorter-term kind of that four-year window. But then we look for internal planning purposes and long-term horizons but, obviously, because the future is not certain, there's a range of scenarios that we need to look at within that.

There's, you know, which projects will proceed and also what the market will look like generally in the future. So, we generally do that from a scenario planning perspective where we're looking at multiple potential futures. And we've been working closely with Treasury in terms of the work they're doing on the whole-of-state business case and providing some support to that. So we expect that will be the key document that lays out all of that analysis together.

Mr BAYLEY - Is there anything you can tell the committee now about what that looks like, you know, a Marinus or no Marinus scenario?

Ms van MAANEN - I think certainly what we can say is there is a material positive benefit to our revenue base from the connection of Marinus. And that's something that, as I say, there are many scenarios for the size of that benefit, but we've been feeding scenarios into that work. But, to some extent, detailed information around that is more commercially sensitive, but it is a material positive.

Mr BAYLEY - Is that weighed up against the increased rollout of battery technology on the mainland and the reduced cost of battery installation and what we might be seeing on the mainland over the coming years as well?

Ms van MANEEN - Yes, absolutely. From a national perspective, if you look at the estimates that are put together by the system operator in the integrated system plan, the need for storage as renewables increases to the 82 per cent target and beyond is quite immense, and

that sees a significant role for both battery technology and that kind of shorter - at the moment it's kind of a two- to four-hour contemplation.

Yes, there may be advances in technology where that gets longer, but batteries are more focused on shifting kind of solar generation overnight and then long duration storage is much more about that deep storage for energy reliability and particularly when you get sustained periods of low wind and also just about balancing supply and demand most efficiently across the market.

Certainly, the scenarios where you see more technology advancement in batteries either from a duration perspective or a cost perspective, but there's still a substantial need for that deep storage in the future market.

Mr BAYLEY - How much of an impact does that technological change and cost change and rollout on the mainland impact on your bottom line here? Or, how much of a worry is it for you? Does it create a level of uncertainty that becomes uncomfortable?

Mr BOLT - There's a level of uncertainty, of course. There, you go.

Ms van MAANEN - I was only going to say, I mean, from our perspective, when we look across the range of scenarios, we see upside across that range and then it's a question of quantum within that. It really comes back to how significant and the scale of the task in terms of what needs to be done to meet future energy needs, both more so on the mainland, but also that we have an interconnection with that that's expanding.

Mr CLARK - Yeah. I think the sheer volume of fossil fuels coming out of the market means that there need to be lots of projects flow right through, there would need to be significant development and a significant cost in batteries for us to be competing directly against each other. At the moment they complement each other well. I think our hydro storage and batteries play a good part coexisting and there's a lot of build-out that needs to happen to replace all the retiring fuel and the growing demand.

Ms van MAANEN - The other aspect of comparison is when we're talking about hydro power assets. We know that the asset portfolio we have has been operating around that 100-year period and will continue to operate with the right maintenance and investment. When you're talking about battery projects you're talking about an approximate 15-year life at the moment. Again, this isn't about one or the other, but if you think about what's the mix of things needed for the market, investments in hydro power are things that will become a backbone component of the grid through a period where there's continued rebuild and replacement of assets like wind, solar, and batteries, which have much shorter asset lives. We have that enviable position in Tasmania where we have the benefit of that today versus other regions where they've got large asset retirements they need to replace

Mr BOLT - If I can just add one thing, the fossil fuel stores are extraordinary storages, it's the one good thing about them. Take those away and, really, the hydro storage system is about the best asset the country has by way of really deep, long-term storage and it would take an awful lot of battery investment and exorbitant price to be able to replicate that. It is largely complementary, but, nonetheless, we do have to have regard to the fact that there's some competition at the margins. When we get to the point of considering a serious investment in

pumped storage, then we'd obviously take our best view of that future risk. We're not going to ignore it.

Mr BAYLEY - And just the last one on the modelling, if I may, Chair. I guess the other side of the same coin is modelling the inflows. What can you tell us about the mid-to long-term prospects and expectations when it comes to inflows?

CHAIR - Crystal ball just there

Mr BAYLEY - You've done that modelling I presume?

Ms van MAANEN - Yeah, I was going to talk to uncertainty again. Absolutely. I mean we have specialist resources internally. We also work closely with UTAS, with CSIRO and like organisations, and the BOM (Bureau of Meteorology) around forecasting as well, and certainly we have seen a long-term small decline in inflows that we're getting to the system. We're also seeing -

Mr BAYLEY - Small decline? It's only small from your perspective?

Mr CLARK - On average.

Ms van MAANEN - On average.

Mr BAYLEY - On average? Right.

Ms van MAANEN - What we have seen are also big swings between years in terms of the level of inflows as well, and we can only guess whether those two things would continue or not.

I guess what I would say is continuing to invest in flexible capacity gives us the resilience to deal with those circumstances and interconnection. If we contrast the dry period we've had this year to the two previous dry periods, it's been a very dry year from a calendar year perspective, but we've been in a position with the system that we have and the use of important export via Basslink to be able to stay above the prudent storage level, so managed -

CHAIR - But also using gas to achieve that.

Ms van MAANEN - Yes, using some gas, managed environmental and social factors around water levels as well and still continued to deliver a positive return. We see it as a very positive outcome for the year and that's the kind of resilience we want to ensure we carry forward in the system, that we have both. From an energy perspective, there's enough energy being produced each year to manage, at least to average demand, and that we've got the flexibility to manage reliability when there's lower inflow periods.

Ms FINLAY - When I put my hand up, it was for a conversation quite a long way back now, so I'll backtrack a little bit.

CHAIR - Sorry.

Ms FINLAY - No, that's fine. I'm just explaining why I'm looking to go backwards.

There was a lot of talk about PPAs and the process that you're working through now that maybe there'll be some clarity on early next year. I'm just wondering if there's any active sort of direction or anything that's preventing you from currently engaging in any PPAs or whether you've got - you don't need to disclose what they are or who they're with - but whether you've got any active negotiations underway at the moment.

Mr BOLT - Yes, that's what I was attempting to say, obviously not clearly enough, but yes, we do. We're not at liberty to divulge with whom and on what terms. As I said before, we're hopeful that something can be done in this area. The only constraint is the value of the deal, as far as I can understand it, but Erin can clarify.

Ms van MAANEN - Yes, and I think I talked earlier about those criteria we've been looking at in assessing projects. We've been actively involved with proponents generally for many months now. We deliberately went out to engage with all of the known projects that we're aware of to understand where they're up to in their process and -

CHAIR - You proactively approached them?

Ms van MAANEN - Yes. The reality is, generally speaking, we have discussions from time to time with the vast range of proponents in the state as they're progressing their projects to understand where they're up to. Some come proactively to us but we did commence a process where we went out quite deliberately to engage with proponents to understand what could be delivered, with a particular focus on what could come to market soonest, if you like. That's one of the criterias we've been looking at through that process. As Richard said, we're actively engaged in that process. It's progressing. It is what you would call a negotiation, Janie.

Ms FINLAY - Yes, and just for clarification, I know that you can't disclose who you're talking to or where the deals are at, but how many are you in active negotiations with?

Ms van MAANEN - I think we would just say a range of proponents at this point in time. As that process has progressed, we have progressively shortlisted, if you like, within that pool, but we would share that when we reach an outcome.

Ms FINLAY - The other question I had at that time when you were raising those around the criteria for assessment, that sort of filtering process that you've spoken of, is that something that you develop uniquely for each proponent or is there a fixed set of criteria that you do - you listed a number of those things - or are they a fixed set of criteria that they're all assessed against?

Ms van MAANEN - Yeah, it's very important to us that we deal with all proponents on an even-handed basis. Yes, we set the criteria specific to a process that we then assess all projects against in the same way.

Ms FINLAY - And if I might, Chair, a completely different set of questioning but it came up. I think it was the Chair that raised it in terms of the potential for Hydro to go into generation. We've got the history with wind, some history with solar and others. Somebody who just presented earlier talked about community-scale rooftop solar and they specifically mentioned Hydro in terms of a potential investment in Tasmania's energy system where you didn't need so much grid to transfer the energy. Has Hydro ever considered, particularly in our

lower socio-economic communities, it might be a community-scale roll-out of rooftop solar. Has that been something that Hydro has ever done any assessment of the potential of investing in that?

CHAIR - As a generation plant, the proponents were suggesting.

Ms FINLAY - Yeah, that's right. Scaled to the point where it would be seen as generation, as opposed to just installations, I suppose.

Ms van MAANEN - I guess the straightforward answer is not from a mainland Tasmania perspective. We're not a retailer in Tasmania. Generally, that kind of investment would be done by retailers or in the case of community, batteries or community resources potentially through network businesses. It's not something that generally a generation wholesale participant would progress. We have certainly been investing in solar on the Bass Strait islands. There's certainly the opportunity for that in Tasmania, but it's not something that would naturally be our role. But we do expect that solar generation would increase over time in the state and that would be a part of that resource mix.

Mr BOLT - And probably a better role in that would be to provide the firming that would make that work for Tasmania. I think what we've seen is that the propensity of households to invest in solar on their own initiative and reap the benefits from that often and generally with some kind of government support, is very strong. It's world-recognised that Australia does have a high take up rate. I guess it's not something we would see as where we would necessarily be welcome or needed and we're better off focusing where we are.

Mr BAYLEY - Why's that? Why do you not see it as your role if it could be an important part of Tasmania's energy mix and facilitate a whole lot of benefits for Tasmanians and particularly in low-socioeconomic areas. Why wouldn't it be something that the Hydro could or would consider assisting and facilitating with?

Ms van MAANEN - I guess the main reason for my response is in the way the market is constructed, if you like. That would be a more natural role for a retailer who has that direct customer relationship with the individual households, which is not something we're permitted to do in Tasmania.

Mr BOLT - It's also on the mainland, having to invested in one myself, it's also something that an entire installation industry has developed around, driven by the subsidies, and they're very agile and they're very skilled at what they do. It's a specialist kind of activity with low barriers to entry that's something that the market seems to throw up quite easily. Given that we've got an enormous role to play through assets that only really we can develop and given that that could be a quite considerable investment task, then it's a better use of our time, management, resources and so forth to focus on the things we absolutely specialised in doing and allow markets that do these things very well to develop around solar deployment. It really has taken off when the incentives are right and the households tend to be very on-board with that.

Ms FINLAY - Would you mind if I had an additional question to that? I hear what you say absolutely and that makes complete sense. I suppose it was raised in this previous session, not necessarily at an individual level as though it was customer-to-retailer relationships. It was more saying that if Tasmania had a policy that said all new subdivisions, in terms of regional

extensions of new housing developments or new social housing developments, say, Legana, for instance, which would be thousands and thousands of new homes. If there was a policy that it was a government position to deliver solar to all of those as opposed to just people who chose it, where it would then be, at scale, seen as a way of generating electricity? Even though it's used by the user as opposed to that individual relationship, I think it was how it was presented. Maybe my question could be, at what scale would something like that be needed to happen that it would be seen as generation? Is there a scale that could warrant that?

CHAIR - Can I clarify what they were suggesting, Janie? What was being suggested was a large-scale, almost a mini-generation system, for a whole suburb or community that was run by an operator - Hydro was the suggestion - whereby you weren't dealing with the customers, the people who lived in the houses, they were not the customers. They got a subsidy on their energy prices for the privilege of hosting your assets on their roof. That is what I understood they were saying.

Mr BAYLEY - Yes. Essentially, a virtual power station. You worked together and distributed.

Ms van MAANEN - That's certainly the VPP model that's in its infancy, maybe, but progressing on the mainland through our retailer that operates on the mainland. We have some exposure to that.

CHAIR - Momentum is doing some of that? Is that what you're saying?

Ms van MAANEN - It is, yes.

CHAIR - In Victoria?

Ms van MAANEN - In mainland NEM states.

CHAIR - Sure. Can I just go back to the power purchase agreement matter? This may seem like a remedial question but there are no silly questions, I understand, including from me.

If you are to enter into a power purchase agreement with, say, a wind farm or a large solar farm, knowing that currently a lot of the energy that we buy across Basslink is at negative prices during the day when there's solar and wind feeding into it - I can't get my head around this - if you're purchasing that power, unless you're purchasing it at not very much when often it will be sold into the market at negative prices, which would have to be the assumption, surely, how can you enter into a power purchase agreement that is not onerous?

Ms van MAANEN - This comes back to the point I was talking about before, about how we look at it from a portfolio perspective. Certainly, there are times, you know, in middle of the day in particular, when there's low demand in Victoria that we're able to import either at negative prices or at very low prices. Where the value comes in is because we've got that flexibility in terms of our storages. Essentially, in those time periods, we're looking to pull back generation from everything we can from a Hydro perspective so we're not generating at that time. If we look across and it's different seasonally, depending on how much it's raining and how much generation we have in that kind of run-of-river or smaller storage stations, what time of year it is in terms of hot and cold and hence energy demand but there still are periods of the

year where we are generating from our Hydro assets that we could be holding back if there was more additional -

CHAIR - Are you saying that potentially if you had a power purchase agreement with Forest Wind Farm, the wind's blowing and always does especially in some parts, but you would only contract that wind in when it was a positive price?

Ms van MAANEN - We'd be looking at the blended outcome across the forecast across the year. There may be time periods where it's the particular hour of generation that the market price for that is below that flat price we contracted, but then there's the other times where it's of higher value. We look of what's the average price -

CHAIR - I understand that. But overall, what we're seeing is a lot of - if you look at how the prices are stacked - the first half dozen or more bidders into the market are the wind and solar. They're often at negative prices to get in because they're going to be generating anyway. I'm not sure, maybe I'm not making myself clear.

Mr CLARK - I think you are, but I guess at the moment the constraint can become, in those negative prices, our ability to import with Basslink at the moment. We could take further advantage of that if Basslink had greater import capability or there was further interconnection during that gluttony of renewables in the middle of the day, lots of solar, et cetera. We could essentially use that energy for Tasmania at those times and -

CHAIR - I'm talking about renewable on-island that you're buying a power purchase agreement, or entering into -

Mr CLARK - Okay, sorry, if I just continue that a little bit. At the moment if there was more, whether it's further interconnection or more on-island renewables during the middle of the day, that could then offset some of that storage, that ability to hold back our hydro generation - use more renewables in the middle of the day for solar or when it's windy and hold that storage back, so then that's more valuable at different times when you're firming, you know at the end of the day, overnight, et cetera. There's a time shifting -

CHAIR - Your power purchase agreement may actually be selling into a negative market?

Ms van MAANEN - At times.

CHAIR - At times, but overall, you're saying that it would, because you take over the whole -

Mr CLARK - From a portfolio point of view, you can hold back water that then can be used in other times, that's a greater value elsewhere -

CHAIR - I understand that, but surely when you're entering into a power purchase agreement with a wind farm, there must be a consideration that often when the wind's blowing, it's also blowing in Victoria. Not always, but often it is, and so if there's an excess in the NEM at that point, then whichever way it's flowing, it's likely to be negative.

Ms van MAANEN - Yes, at times when there's that level of excess. I guess part of the value comes from the fact that in a region where you didn't have the storage and the hydro system that we have here, that would be simple that it would be more generation at a time where you didn't want it, whereas in Tasmania we can timeshift that generation using hydro to another point, another time of day. That's why there's portfolio value as well as the direct value from -

Mr BOLT - It's across the business and over a long enough time period that you judge the viability of this. In any particular instant, you might not be trading optimally, but it's over time and over the portfolio, that's how we have to judge the opportunity.

CHAIR - The higher prices you get for your hydro generation offset negative prices that you might get from the power purchase agreements you've got from wind farm?

Mr BOLT - Yes, and in one five minutes it may be that you're making a loss, but overall taking a period over a month or whatever the timeframe is, you're actually ahead. That's the -

Ms van MAANEN - I think the other point to note because these are long term agreements, in Victoria in particular, which is largely where this price effect is coming from, as the coal progressively retires there won't be the same shape of price as well. That middle of the day is really driven by the fact that you've got coal that can't turn off. As you know, Yallourn will retire later this decade and other coal in the 2030s. When we're talking about long-term agreements, we're forecasting our expectations around price over that period. It also supports Tasmania having sufficient on-island supply so we're not reliant on that excess supply from Victoria as well.

Mr GARLAND - Back onto power price agreements, how will Tasmanians be able to know the impact power price agreements are having on the financial performance of Hydro Tasmania?

Ms van MAANEN - We report on that through our annual report and that's where people have made the observations around where contracts may have become onerous in the past, that becomes visible through our annual report. The impact, at least at the portfolio level, of what our revenue outcomes have been, will be reported on a regular basis.

Mr GARLAND - All right. I've got another couple. Regarding Marinus, what are the lessons to be learned from Basslink?

CHAIR - Don't cook it.

Mr BOLT - That's definitely a good lesson. I think one thing we would say if you look at the first six months of this year, is just how vitally important and valuable interconnection can be in a system. We've been talking before in response to the question about how our rainfall levels are declining, what's much more significant is how they vary year-to-year. It's quite a large variation. You can have really good years and you have a lot to export and that's valuable then to have an interconnection to do that.

Other years, you might be more dependent upon imports to keep your dam levels up, like this year, and so the value of an interconnection can be enormous. It can forestall the running of gas, even though we've had to this year, we have to do it a lot less as a result of having access

to a wider market. As more renewables go into the system, that value will become even greater. One of the lessons, I think, is that it's a kind of a dry run, if you'll pardon the expression, of what Marinus can offer at a larger scale.

Basslink in general, I think, has been pretty positive. Yes, it comes with risks. One of the lessons from Basslink is it did fail and there was no backup. A second cable would have meant that we weren't suddenly plunged into a crisis back - in 2016, was it? - at that time. The redundancy that's available by having two, maybe three, and even more in the future, without wanting to go too far into the future, is very valuable as a supply security backup for this state. It's also an opportunity for us to be gaining value from our assets by providing some reliability to other states as well.

CHAIR - It's a fairly expensive insurance policy, one might say.

Mr BOLT - It's really what's the next best alternative when you've got carbon constraints, when you're looking to take the country down to the coal closure and the minimal use of gas and diesel. Bearing in mind this state has still got all of its oil and its gas consumption to decarbonise, which is essentially going to be through electrification for the most part. That's going to require a large addition to the renewable complement of both Tasmania and the interconnected states that we'll be trading with. Interconnection will become more important at greater volumes as that process proceeds. It's a question of what's the next best thing? In a renewable world, it's a very important investment. Obviously, there's work to be done to make sure that it's value for money and we're not here to try and tell you that we know what that answer is going to be. That's in the hands of others but we can see the strategic value as being very high.

Mr BAYLEY - Basslink went broke as well though and was sold.

Ms van MAANEN - Yes, and that's probably not for us to comment on. I guess, the particular commercial factors around it, where it's now in its third ownership model but what it does have is a revenue stream that supports the project and its continued operation and also arrangements that maximise import and export between Victorian and Tasmania. In terms of the benefit that it's been able to provide to Tasmania over its life, that's what as a Tasmanian, I would be more focused on, than kind of what individual investment decisions its owners have made.

Mr BOLT - The question was who paid for that and that's probably another discussion.

I think, no one can suggest, in the great uncertainty of the next 20 to 30 years, that there'll be no single investment that anyone makes anywhere in the country, that it won't at some point prove not to have been as good an investment as it looked at the time it was made. That's the inevitable. I'm not suggesting Basslink's in that category though, and looking at the value now of an asset that was built and yes, it's gone through commercial gyrations, it's gone through a failure, but its value is very high now.

Ms van MAANEN - Just back again on this past year. When we talk about the benefits of Marinus and further interconnection and its costs, one aspect is what are those upsides - including upsides for Hydro and hence returns through to Tasmanians - but also how does it protect against downside risks.

You mentioned gas generation earlier. In the future, in periods where there are low inflows or there are reliability constraints, particularly with growing demand, what further interconnection allows is that balancing of resources and the ability to access that excess generation, for example, from Victoria, when it's needed. With less interconnection, then you're in a scenario where you're relying on things like gas generation, which can be at times very expensive. We still see that there's an important role of that for energy security, but we want to be drawing on it as little as possible.

Mr GARLAND - Battery of the Nation is seen as being an indispensable component of Marinus Link. What's the latest cost estimates to construct the Battery of the Nation related infrastructure?

Ms van MAANEN - I guess we can talk through the two key projects individually. With respect to Tarraleah, you may be aware that we completed the preliminary business case for Tarraleah last year and that had a cost estimate at the time of $1.05 billion. We've been working through - since the preliminary business case - a process to complete a final business case and that's something we'd want to do with a much stronger level of certainty and robustness around the cost estimate.

We're still undergoing that work and that includes both looking at what are the opportunities to ensure that we're delivering the right balance of the scope and the cost at which that can be delivered, and how it can be delivered; to really interrogate that cost estimate and understanding what we expect, what the movements have been in external markets with respect to inputs, and labour materials, et cetera; to really get as robust an estimate as we can and ensure that we're testing that that option is in the best interests of Tasmania for progressing the project.

We're still working through the process of finalising the updated estimates as part of that final business case and that's the point at which we'd be updating the cost estimate.

Mr GARLAND - One more. The CEPU have suggested that re-merging Aurora, TasNetworks, and Hydro Tasmania would allow for cross-subsidisation and the maximisation of operational efficiencies. Would you comment on these benefits and pitfalls as you see it?

Mr BOLT - Well, first of all, those are deeply policy matters and we'd be talking up our own book to offer a view. I'd certainly suggest a couple of considerations that are important to that idea. One is the confidence of the providers of other generation that we would be controlling the network at the same time - controlling access to the network as well as having access to the network for our own purposes. You want to have a market that is confident that it's going to be treated in a non-discriminatory way and the whole idea of separating generation from networks was to increase that confidence. That's one consideration.

Another one would be the amount of effort involved in merging organisations, which as an official I've done enough of to understand what that takes. It can often set you back a long way in time terms, it's a very costly thing to do, very difficult to do well.

That's not to suggest that governments in their wisdom might think there's some value in that, but there are some reasons to, perhaps, take the current structure and make sure it works together really well, which was the point I made at the conclusion of my remarks earlier, is that what we can right now do is get the team game going between those organisations.

I know the CEPU is making a different point that they think there are some overheads that can be reduced as a result of the merger. Right now, there's something of an urgency - isn't there? - to get the ball rolling and, I think, not to be spending a huge amount of time on organisational mergers would certainly assist us to get the ball rolling more quickly.

Mr GARLAND - I've got another one if no one else has. The government, in its submission to the committee, says it is removing legislative constraints on Hydro's ability to help develop the energy Tasmania needs. Do you know what this involves and what do you think it will mean for Hydro Tasmania?

Ms van MAANEN - There's a couple of elements to that and we've talked to the steps we're taking more broadly to seek to progress new generation. There were specific aspects in that related to thresholds for the need for Hydro Tasmania to seek parliamentary approval in respect of its projects. The intent there was to lift that level so that there'd be more flexibility to progress projects that would be in the interest of Tasmania with, I guess, a clearer and more efficient process, obviously still with due governance and transparency, but basically to make the steps to progress that more straightforward. I would just note that with respect to Tarraleah and Cethana, that doesn't change that case and we fully expect to go through parliamentary approval processes for those projects, which will be an important part of ensuring that there's broad involvement in the decision making to ensure they're in the best interest of Tasmanians.

Mr BAYLEY - Can I just ask on that for the record, then, for the community, what projects does that relate to? It's lifted the threshold by 750 per cent that in relation to parliamentary approval, that's a hell of a lot. What projects are we talking there? Wind is excluded, Cethana and Tarraleah are named up specifically in the regulations. Why is this happening?

Ms van MAANEN - Largely, the change would be with respect to solar generation projects and I think it was really part of broad efforts to look at what are some of the constraints and how can how can they be alleviated so it has some benefit in that space.

Mr BAYLEY - Have you got any solar projects on the table? It's certainly not rooftop solar by the sounds, but any other solar projects on the table or being looked at?

Ms van MAANEN - We're not actively developing our own generation program.

Mr BOLT - Not as an equity provider, not as the owner, no.

Mr BAYLEY - Did Hydro -

Mr BOLT - Open to solar from that PPA point of view that I mentioned earlier.

Mr BAYLEY - Did Hydro ask for those regulations to be increased?

Ms van MAANEN - Certainly, government policy is something they look to develop with input from key stakeholders, including GBEs. But it's not, you know - we're not in a policy making position.

CHAIR - Were you consulted on the policy change?

Ms van MAANEN - We certainly engage with the government through our regular interactions and processes to understand what we're doing as a business and that's information that they can take under consideration as they're developing policy.

Mr BOLT - We understand why it may or may not wish to do that and why some projects might be excluded and others and we will go with the accountabilities and the powers that we're granted. We're not even seeking to critique them or to, as I said, second guess them. We understand the landscape and will be accountable within that landscape.

Mr BAYLEY - Just to be clear, the parliament's being asked to raise the threshold of, effectively, parliamentary scrutiny by 750 per cent, but you've got nothing on the table or on the books that you're working on that would require that to actually happen?

Mr BOLT - Not at this time. That's not to suggest we never would.

CHAIR - Question for the minister.

Mr EDMUNDS - Thanks for both your submissions to our previous enquiries and for coming today when we're together. I'd like to go back to your initial comments about the new charter and perhaps if you could elaborate a little bit more on the stuff around the cheapest possible power prices for Tasmanians and what active steps in the lead-up to the new charter, perhaps, when you knew it was coming and sense that you can point to around that that KPI or whatever you want to call it?

Mr BOLT - I'll probably defer to Erin to elaborate on the point that we're making that the - bearing in mind that prices to the small consumer in Tasmania are regulated and therefore we don't directly influence those as they are basically a wholesale of electricity to those consumers through retailers. Given that, of course, we do have contracts with major industrials in which we seek to get a decent share of the of the rewards divided between us and them. We essentially can do the best for Tasmania by helping to ensure there's sufficient supply to meet the demand of a growing state and that having a decent supply compliment tends to moderate prices. Otherwise, you get into what is called an economics business 'scarcity pricing', and that's the thing that I think government is very keen for us to help avoid.

Mr EDMUNDS - I think that comes back to your comments earlier, when you were saying investment in new renewables is what you are hoping will lead to the lower prices. We've thrashed this out with a few other witnesses, and I'm keen to hear your perspective on how that new investment can flow through to cheaper prices for customers. The context around that is that one of the enquiries is specifically set up around power prices for Tasmania. I'm just looking to collect a body of evidence around that, from your perspective, and others.

Ms van MAANEN - Certainly, I understand. There are probably two key ways that we look to support lowest possible power prices, noting, of course, that we don't directly set them. In terms of our current assets and generation, lower power prices are supported by operating them as efficiently and effectively as possible so that they continue to operate in the longer term and assets don't need to be replaced with more expensive generation. The more value, or more generation, we can get with the right balance of investment from the existing assets into the future certainly supports that underlying base of generation assets and the cost of that we have in the supply mix in Tasmania.

Then the other element about it is in terms of what additional generation will come online, or how future demand is met getting that lowest possible cost mix, because that flows through to market pricing. Certainly, we see that, seeing a level of new generation developed by wind or solar, and hence why we're taking steps to enable that, then firmed by hydropower. We're also taking steps to increase the capacity we have available in the existing hydropower system through upgrades, and then additional projects like Tarraleah and, potentially, Cethana for future additional capacity, as well as how interconnection feeds into that.

Essentially, this lowest-cost mix and the external evidence from the market operator and from CSIRO supports that view that new wind and solar is the lowest-cost form of new generation, and then firmed by hydropower is the lowest-cost form of storage to complement that. Again, interconnection brings some additional benefit in having access to that excess power from the mainland. The steps we're taking to progress our own investments, and to enable investments by others to get that lowest-cost fuel mix for the future, is really the focus that we have that will support lowest possible power prices for Tasmanians.

Mr EDMUNDS - If I'm hearing correctly, having that mix of wind and solar and, indeed, interconnection like Marinus or Basslink allows you to manage the Hydro asset further into the future, run it at the best times and have less cost involved, which means that people pay less?

Ms van MAANEN - It's a kind of symphony, if you like, of different renewables coming together to create that outcome.

Mr EDMUNDS - You want to run the cheapest stuff harder and the more expensive stuff less, but at the most efficient time?

Ms van MAANEN - I think that's a great summary.

Mr BOLT - It's also selecting the right projects, looking at the offers available and making sure we're selecting the least-cost partnership opportunities. It's selecting the right pumped hydro projects. There are more expensive and less expensive configurations, depending on where in the state you go. Then it's tendering, for example, to make sure we get the best value out of the market for constructing the projects that we're actually building. All of these factors go into getting the best value for the Tasmanian consumer.

Mr EDMUNDS - When you're not particularly involved in the investment decision for those projects, how does that sort of - I think you understand where I am going?

Mr BOLT - We get the offers and we compare them.

Ms van MAANEN - It's important to note that we are not the total power system in Tasmania. Obviously, we generate around 90 per cent of the energy in the state, with ambition to expand some of that. Although there will be new generators that will come in, there are different roles that each entity can play, and the government itself. We're looking to do our part, but also to coordinate well with the government and with the other energy businesses to get good outcomes as well.

Mr BOLT - Yes. For example, if we start building things that are way away from the current network, it might be very cheap for us, but TasNetworks pays a lot and the consumer

pays for that. We need to ensure that all of these moving parts sort of speak to each other and we do get that perfect symphony that Erin mentioned.

Mr EDMUNDS - Do you feel like the coordination at a Tasmanian level, both with the private sector and other energy businesses, is going well?

Mr BOLT - I believe it is strengthening very well. I think what you're seeing is an increasingly open exchange of information and increasing alignment of views, yet no group think either; I think that the different parties are playing the team game increasingly well. There's further to go as the entire process gets more complicated, but it's a very good start, I believe.

CHAIR - Right, pick another part. You're right, you go.

Mr EDMUNDS - I just have one more, but it takes us back a bit. If you want to go on?

CHAIR - Just in terms of price. This is not about energy prices but the price of water. You've talked about banking water, saving your water, so notionally it's more valuable; you sell it at a higher cost into the market. I assume you probably looked at the evidence from Tasmanian Irrigation, some concerns about the potential cost of the water they would then be purchasing. Can you speak to that and assure, perhaps, the farmers of Tasmania that they're not going to have this massive, big - they might be able to afford their power bill, but they won't afford their water bill.

Ms van MAANEN - Yes, absolutely. That's something that we listened to in previous sessions. I guess one of the things that we wanted to emphasise is that when we talk about changing when we're operating and when we're generating, that does not have a direct bearing on water pricing for current irrigators. We have a methodology that we use to apply to set that water pricing under existing arrangements. It's linked to market electricity prices, but not that - I guess, the waiting on when we are generating.

CHAIR - It's the overall price. It doesn't impact it? No matter what the value of the water in the dam is when you use it, it doesn't impact the price of the water?

Ms van MAANEN - No, it's referring back to that general regulated wholesale market price, as opposed to the price that we're achieving based on when we generate. If we're changing our running profile, that will not change the outcomes in terms of arrangements to existing irrigators.

CHAIR - If you're to believe some of the comments by you and others that Marinus Link has the potential to reduce energy prices, then we should see the price of the water fall if it's linked to the wholesale energy price.

Ms van MAANEN - When we're talking about Marinus' effect on prices, it minimises prices to what they otherwise might be. I don't know that that's a categoric statement about where prices will move over time, because that's influenced by a whole range of things. In terms of those arrangements for existing irrigators, that won't change based on the pattern of when we generate changing.

We have a relationship with Tasmanian Irrigation and we've since been looking, and we all look, to engage with them further to understand those concerns and work through that, so we can ensure that there's not a concern about the impact of that.

Mr EDMUNDS - We had some previous evidence around investment in infrastructure around the energy industry, in particular talking about skills - and thank you for your time in the highlands recently and obviously, you've got a lot of skillful people that we met there. I'd be interested if you had any comments around keeping skilled people in renewable energy in Tasmania, both from a workforce pipeline locally but also the competition that's starting to come with the mainland and other parts of the world, I suppose, getting on board with renewable, whether they're targeting people from Tasmania or holding on to the workforce, et cetera?

Mr BOLT - There is going to be intense competition for skills, and it's already happening. The initiatives that we're taking, I think, are an attempt to maintain our purchase on those skills, but Erin can elaborate.

Ms van MAANEN - Yes. I don't think we can be naive in saying that there won't be challenges with future workforce. The reality is that all across the country, people are looking to develop similar projects, as well as internationally. Now, there might be some shifts in that with recent events, but we're certainly very alert to the fact that this is an area we need to invest in.

We do invest significantly through a range of different programs. Our own graduate program, scholarship programs with UTAS, and around trades as well. Certainly, we're focused on and working with industry associations and the like, to really kind of maximise both the profile of the industry in attracting people generally, also from probably what they might call untapped talent - so more diversity in the workforce that might not have looked at jobs in this space before. Then for Hydro Tasmania specifically down to working on what's our employee value proposition, how does that show up, and how do we attract people in to work in our business?

Mr EDMUNDS - How you put a shield up to people being plucked away, I suppose.

Mr CLARK - If I could jump in. I think it's a crazy, crazy space for us to try to compete in at the moment. I guess since COVID, we're certainly seeing an unprecedented change of roles. Things have settled down a bit for us, but all of a sudden, through that change, the world's available to people instead of just competing - talent pathways and job opportunities in Tasmania are much broader. We've been on this journey for a long time, though. Apprentices, maintenance assistants, trainees, graduates have been the foundation of our talent pipeline and that career pathway. Not just that, I guess to jump back, for a number of years now we've had an education program where we have people going into schools to try to do incursions and excursions to our power stations that to try to get local Tasmanian communities involved in STEM and falling in love with assets early and seeing that right through. Try to get people in college with fewer dropouts, then more people going through university - that's how there's a bigger pipeline. Then it's about keeping them, isn't it? It's about keeping exciting pathways and career opportunities. People are spending far less time than they previously did in the one job, they want to jump around. We use the term 'jungle gym' rather than a 'ladder' to try to describe that career pathway here. You can do a bunch of different career opportunities in the one business and, at times, people leave, they go, but hopefully they come back because they

enjoyed the experience and they have more value to add, having some time in a different business.

Mr BOLT - They're more likely to come back if their roots are here.

Ms van MAANEN - On that retention point, just to note, we've actually seen reduced turnover in the last 12 months, which is back to kind of a pre-COVID level. We certainly saw more mobility through that period, but as a business, we've invested heavily in recent years around our internal culture and evolving that, as well as leadership development and we have quite strong engagement and inclusion scores, which we know from regularly surveying our people. We work on both the pool in, but also on retaining people once they're here to the extent we can.

Ms FINLAY - Thanks. My question again, just from a conversation a little bit before, but you spoke positively about all the things that are Hydro are doing in response to the power price question that can support efforts towards maintaining or lowering prices over time. What do you see as the greatest risks - given your predominance in the market, what do you see as the greatest risks that could happen in Tasmania over the coming years that could cause prices to rise? We talked about all the good things that could happen to help it stay low, but what do you think the greatest risks are to price increases?

Ms van MAANEN - I think the first one that comes to mind is probably that a lack of progress is one of the biggest risks. We know that demand is increasing. We know that there are other risk factors around where the markets are heading or whether it's uncertainty in a range of different things. There's the risk that you then take longer to make decisions to progress the investments that need to be made to ensure we have the future energy supply mix that we need. We have an advantage in Tasmania. We're coming from a very good base as we don't need to replace retiring assets, we're already renewable, but we need to keep building on that to ensure we can meet future demand and take other steps to remove reliances on things that could be volatile. The fact that we're using water, wind, and the sun as inputs is good because there's not a global market for some that can make it shoot up like a gas or coal price, but I think, for me, it's around making sure that we're making timely investments. By the same token, you don't want to move too early and make a decision before it's needed, but we also shouldn't move too late. Richard, do you want to -

Mr BOLT - No, I think that answers it on - maybe I'll just reinforce it by repeating it, if I could. It's being coherent and strategic and also highly disciplined in making the right choices, procuring things the right way. Not moving too early, so that you create a whole lot of assets that aren't being used that people have to pay for. Then not moving too late and getting a scarcity of supply and you end up with prices spiking. It's just a management of many, many decisions. It has to run very well and very coordinated across the Tasmanian landscape of actors, which is not a very easy answer, or very - not an answer that's easy to get your teeth into. I'm sorry, but it's probably -

Ms FINLAY - No, and it's more about - sometimes these exchanges are more about confirming that you're clear on where things are at, rather than seeing if you've missed anything, right. Yes, it's a complex answer, but it is a complex system and what you've just navigated there is that it's a very thin line between going too early and being too late. That's the challenge, isn't it? There's precision and significant decisions that do need to all be made at the moment concurrently for us to have the best possible chance to capture everything that's here and for

the decisions to be in everyone's best interest, whether it be proponents, or the community, or you guys as GBEs, or whatever. Yes, I know. I appreciate the answer. Thank you.

CHAIR - Can I just perhaps follow on from that a little bit? Being ready to move if you need, but also recognising what might and might not happen as much as you can - we know we have got some very big energy users in this state that use the lion's share of our energy. If one of those was to pull out, what impact would that have on Hydro?

Mr BOLT - It would obviously free-up some capacity. It would also, for the people involved be a pretty difficult time. To start with, the impact on the Tasmanian community is a lot more than it would be on Hydro, but it would change our planning assumptions for sure. It depends on who you're talking about and on what other loads are coming in. It's a hard question to answer in the abstract but, generally, it will lead to a lower required pace of investment and generally some price moderation at the expense of jobs and community impacts, which would be quite high, or could be quite high. It depends who -

CHAIR - You haven't modelled this sort of situation, where a major user withdraws from the state?

Ms van MAANEN - We certainly look, as part of our planning, at different scenarios including those. I guess, as Richard indicates, the financial impact is one thing. Obviously, we seek to have market-reflective pricing in all of our contracting arrangements. It's probably more around assumptions around how might that load be taken up, whether it's by other industry, or it's through electrification or, at least in a transitory period, by greater export, if there's a surplus in the state. It's not as though we're then getting no return for that generation. It would be going to a different user, if you like, so there'd be some price impact of that. I guess, we do know that there's a range of different industries either looking to enter the state or increase their consumption, so we think there are reasonable prospects.

CHAIR - That's my next, I'll come to that one if I can.

Mr BOLT - Just one thing I want to say is that we do look at various scenarios of load growth and, implicit in that, is that you might have lower load growth because you have some new industries lodging here, but others, or one or two others might be closing. We are looking at the broad effects of different levels of growth in industry.

CHAIR - Just to try to separate things out a little bit for a minute. Acknowledging that there's an energy transition that is underway, but there's still a lot of work to do in that with decarbonisation of transport and industry generally. If one large energy user pulled out now - went into administration, closed down, made a decision it was no longer commercially viable for them to be in the state and wound up the business, or whatever - the impact on that, with or without Marinus, have you looked at that? What difference it would make with or without Marinus?

Ms van MAANEN - Yes, certainly, with more interconnection, you have more options for where the energy goes. From a Tasmanian perspective, you want to see that supply taken up in terms of demand in the state because that means there's more activity, jobs, development in the state. I guess, the simple physics of it is that if you have more interconnection, there is more that you could be exporting if you had excess.

CHAIR - Your job is really about energy, not about workforce matters, that's a matter for government. That's fair to say, yes?

Ms van MAANEN - Yes.

CHAIR - Let's say that no big energy user pulls out, but we've already heard published in the media that Norske Skog asked for a significant extra load - 50 megawatts, I think, from memory - to basically decarbonise their business. They were told that there was not the available energy. Can you explain that more fully to the committee?

Ms van MAANEN - In terms of the current generation picture in Tasmania, roughly the same amount of energy is generated each year as is consumed in the state. That's not to say that you can't add demand and have energy supply that demand. It's just that incremental load that you're adding now, that generation would come absent, before any new generation is added, it would be coming from increased imports and/or running additional generation that's not running now, then it's a question of what's the cost of that supply and reaching an arrangement that works.

CHAIR - Notionally, we could have turned on Tamar Valley Power Station and given them the energy?

Ms van MAANEN - Notionally -

CHAIR - Yes, technically, we could do that?

Ms van MAANEN - Yes, but that generation is at a high cost, so then there is a question of whether there is a willingness to pay that cost level and that was at a time when gas prices, historically, were at quite a high level as well.

CHAIR - You have a commercial disincentive. You also have an environmental disincentive here. They would try to decarbonise a business, so why would you put another carbon source into it?

Mr BOLT - Well, it was. I think they're using coal currently and this is about electrifying -

CHAIR - It's less?

Mr BOLT - Probably. Let's not argue the toss.

CHAIR - No, that's right.

Mr BOLT - You're right to say that, of course, it would come at some kind of carbon penalty compared to if it was fully supplied by renewables. I believe Erin's point is that we haven't run out of power, there is the opportunity for more power to support more load. The question really is more about whether the price is right, whether you can match the expectations of the industry with those of the supplier of the new energy.

CHAIR - Is it also to do with the timing of the requirement of the energy user?

Ms van MAANEN - It can be, depending on the particular circumstances. We can't go into too much detail in terms of the time of individual conversations, but we have a regular engagement with all of the major industrial customers and, really, it's about - we're seeking to balance - wanting to reach a mutually beneficial outcome that sees a good return for Tasmania, but also supports industry in the state.

CHAIR - Have you done any modelling then, to look at what requirements there are to decarbonise the transport and industry sectors? What has your work shown you in this, in terms of the demand for what the hydroelectricity is going to be?

Ms van MAANEN - I don't have the specific numbers in front of me right now. We look at external forecasts, particularly around electrification and appetite for new industry, and also pair that with what we're observing, based on those who engage with us. We see that there's a range of expected outcomes, but a significant increase in demand in Tasmania from the variety of those sources in the coming years.

Mr CLARK - Yeah, I think that demand links back to your earlier question around if a major industrial were to leave and you were to replace a big major industrial that has a fairly flat load with something - as an interim into exports or something - when you can do that with the current dynamics of the NEM or as a new load comes on, what's the shape of that; what does it look like; is it a lot more EV charging; is it a lot more electrification in homes, et cetera - how that plays into an overall growth versus a major industrial coming on.

Ms van MAANEN - But as a hydro business, the advantage we have is that because we have that flexibility over when we generate we're not a baseline provider that says, 'We need to find another flat load'. We're able to look at how we can support different load profiles.

Mr BAYLEY - Thank you. You mentioned before you were the lowest cost storage but, of course, there's not no cost and we've heard evidence earlier today, even from one organisation, around a view around potential alternative investments. There's $1.6 billion that I believe Hydro's forecast to invest in its dams, and around the world dams are being decommissioned. Have you done cost-benefit analysis about the alternative - decommissioning those dams and alternative use of that money in an alternative generation capacity or format that could be put into the grid?

Ms van MAANEN - There are a couple things I'd say there. When we look at the investment in our assets and the $1.6 billion is over our 10-year strategic asset management period, we're looking at both the maintenance and upgrade of existing assets. When you say 'dams', it's across our power stations, our civil assets - that's across the whole asset portfolio. It's a range of different assets in that, generally, the investment decisions are driven by one or two factors. One is risk-based factors, so looking at what the risk is, how do we need to maintain those assets to reduce any asset risks that they have, but also when we're looking at upgrades and the like, it's looking at whether that has a positive commercial value based on market price. If you think about that for a second, that does provide, I guess, a bit of a proxy for whether you could build something else or do something else at a lower cost. If the market price has a positive return for that work, that's suggesting that you probably couldn't.

Mr BAYLEY - You do that work, though, you make that assessment and do that cost-benefit?

Ms van MAANEN - Yes, it's part of working through both the asset management plan itself and individual asset decisions when they come through. Also, I think it's really fair to say that the incremental costs to maintain existing assets is substantially lower than the cost of building new storage assets in the case of this example.

Mr BAYLEY - New storage assets, not necessarily new generation?

Ms van MAANEN - Yes.

Mr BOLT - But because of the firmness of them, it's a maintenance regime rather than a complete replacement and therefore it's intrinsically cheaper than starting again. To get such a depth of storage by any other means than building more dams - I can't see how you would, really.

Ms van MAANEN - Just noting the time, if I may, I'd like to come back to your question earlier and provide an answer on that with respect to the proportion of generation.

Mr BAYLEY - Just before we go there, on those cost-benefit analyses, we've had it put to us that this committee should make a recommendation about the release of them. Is that something you would be prepared to release, the cost-benefits of that asset management strategy and individual assets?

Ms van MAANEN - That's something we'd have to give consideration to. There are certainly aspects of any commercial analysis we do that are commercially sensitive.

CHAIR - Perhaps we could write to Hydro about that and see what you're able to provide to the committee.

Mr BAYLEY - Sure.

Mr BOLT - To give you a more considered response, we can certainly do that with due regard to sensitivities.

CHAIR - Don't forget we can also take evidence in camera and it will remain confidential.

Mr CLARK - That $1.6 billion, that's all our assets. I just want to point out that that includes some investment on things like Bass Strait islands, et cetera, where it's about trying to find the lowest cost of energy mix to provide, so it's certainly not a revenue-generating aspect.

Mr BAYLEY - Understood.

Mr CLARK - And similar with some of our community benefits like our campgrounds, boat ramps and some of those things which are also in there that certainly don't return a profit but add a lot of value to the broader community.

Mr BAYLEY - Is that where the funding for the hydrological modelling regarding Macquarie Harbour and the skate sits as well? Is there anything you can tell us?

Ms van MAANEN - That would be more operating costs.

Mr CLARK - That's in the operating costs.

Mr BAYLEY - Can you tell us just quickly before you go to that last bit, there's an implied criticism of Hydro quite often levelled from other industries about not doing your bid. Can you tell us about that modelling and what you are doing in that space?

Mr BOLT - On the skate in particular?

Mr BAYLEY - Yeah, on the skate.

Ms van MAANEN - Absolutely. I'll start by saying that as an organisation we're fully committed to environmental sustainability and the conservation of threatened species. We're part of the Maugean skate recovery team and are certainly taking steps to enable and support activities that are looking at the future of the skate.

Mr CLARK - Our first point of call is really understanding the water flows and the modelling in the harbour, both from the oceans and the rivers, so that we can make some good decisions on what will best benefit the harbour health and the skate as a result. We've done a lot of instrumentation work, everything to be able to provide the inputs into CSIRO's modelling to be able to make those calls, and we're absolutely committed to sort of understanding and making sure that with the backup of the science of the water flows and everything, we can play our part in the best health of the harbour and what dynamic changes we can make in any given time that would assist. At the moment, we actually don't know what that could look like and will look like, so we really need the science of those flows to help work out how to recharge the harbour with highly oxygenated water, et cetera.

CHAIR - I might just pull that up because it is a matter more that you can follow up in the GBE scrutiny; you've got Hydro this year. Have you got a quick question, Craig?

Mr GARLAND - Yes, I have a really quick one. Isn't the largest risk to Tasmania that demand suddenly increases or supply decreases in Victoria?

Mr BOLT - That's a good question. I don't know how we'd answer it at this stage.

Ms van MAANEN - I guess whether it's a risk or it's something we need to contemplate when we're looking at what is the right time to make investments. I think any projects that would significantly increase demand wouldn't be turned on in a single day. Certainly, when you think about some of the industry players looking to come to Tasmania in certain areas as part of that, they look at what energy arrangements they can enter into and then work with potential generators as part of making the case to make that investment and add that demand. That's why when we talk about actively taking steps today to look to how we can enable the generation projects to progress in a timely manner, we're doing that because there's an expectation that demand will increase. At what exact size, we don't know, but we certainly see it as important from a Tasmanian perspective that you want to see the two ratchet up side by side, if you like, rather than get significant mismatches. I think we can acknowledge that a mismatch presents some risks and that's why we want to take active steps to assist in seeing that new generation come online.

CHAIR - I'm conscious of the time. We will write to you with a couple of things that we had a discussion about which would require some further clarification information, but thank you for your time today. Depending on what happens over Christmas - because things happen all the time in this sector and everywhere else - we might need to invite you back at a later time, but I know you will be scrutinised by the other House in December as well. Thank you for your appearance today.

THE WITNESSES WITHDREW.

The committee suspended at 3.02 p.m.

The committee resumed at 3.05 p.m

CHAIR - Welcome, Aurora representatives, to the Energy Matters committee. We appreciate the submissions you provided previously and your appearance today. This is a public hearing. Everything you say is covered by parliamentary privilege but that may not extend beyond the room, so any comments you make outside the committee may not attract that privilege. It is a public hearing, but if you wanted to share anything with the committee of a confidential nature, you could make that request and the committee would consider it. Otherwise, it's all public. Do you have any questions before we start?

WITNESSES - No.

CHAIR - I invite each of you to take the statutory declaration there and then invite you to speak to your submission, and then we'll have some questions for you.

Mr NIGEL CLARK, CHIEF EXECUTIVE OFFICER, **Mr JAMES CHISHOLM,** CHIEF FINANCIAL OFFICER and **Mr ALISTAIR BURKE**, CHIEF OPERATING OFFICER, AURORA ENERGY, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

Mr CLARK - Good afternoon. I'm Nigel Clark, CEO of Aurora Energy. Joining me today is James Chisholm, our Chief Financial Officer, and Alistair Burke, our Chief Operating Officer.

We're pleased to be here today to explain the role and significance of Aurora Energy to the Tasmanian community. We are a proudly based Tasmanian business owned by the people of Tasmania. We are the customer-facing entity that encapsulates the broader energy supply chain. We act to support Tasmania's interests, to seek to keep our component of the energy price as low as possible, and seek to look after vulnerable Tasmanians during this energy transition engulfing Tasmania, Australia, and the world.

There is a risk that people are left behind in this transition and we have a strong voice for consumer interests. We look forward to answering your questions today.

CHAIR - Okay. If anyone else wants to jump in and go first this time?

Mr EDMUNDS - I don't mind. Just on your opening comment around vulnerable Tasmanians during the energy transition, I'd be interested if you could elaborate a little bit further on where you see Aurora's role in protecting those people.

Mr CLARK - Sure. It plays out in many spheres. One is the work that we do with vulnerable customers through our YES program. Our YES program is dedicated for those people that have been identified in hardship or vulnerability. We have a dedicated team. We have dedicated programs that work with people that find that they may be in that situation. That can stretch into many tools such as payment plans and extensions. We also recently started a debt forgiveness program for people that were highly vulnerable and reality had built up historic debt that had no chance of being cleared. That's at least north of $300,000 now that has been through that program as forgiveness. We also do things like match payments for people that are on a payment program. I think there's over $200,000 in the last year through the YES program.

There's a range of things we do with people that have been identified as vulnerable. There's also a range of things we do in the likes of funding financial counsellors into various organisations. We also have done two donations of $200,000 a time to the Salvation Army to go into the Energy Relief Fund, and then we do a range of other things in the community from things like the NIL scheme that funds energy efficient appliances in the home. Aurora's been a long-time supporter of that scheme - donated over $3 million in support and the funding in NILS is probably recycled around about 18 times in helping vulnerable Tasmanians. There is a lot that we do within the realms of what we can afford to do in helping those people.

Mr EDMUNDS - Specifically, in terms of the transition in the years ahead, what's your approach to that? Is it to keep the current settings or are there things you're looking at expanding?

Mr CLARK - It's a combination. Some of those programs I've mentioned will be absolutely still in place for the vulnerable, but there's the work that we do on bringing technology to Tasmania to help them and understand their energy usage and control it. We have been rolling out the smart meter program in Tasmania. We're one of the more advanced states in the NEM now; we're about 83 per cent rolled out. By having the technology, connecting it to the aurora+ app, we help people understand their usage every day, figure out what tariffs they are best on. Technology is one application and the growing next transition in Australia of what we call 'CER' resources, that is, in the home batteries, solar, EVs. A range of things there once again on how can we help people lower their cost.

Mr EDMUNDS - Obviously, you have been quite nimble like during the pandemic. Personally, I do remember dealing with Aurora during that process. It was fantastic.

What about for the sort of customer group - and we often hear about this when there's talk about concessions and things like that - that there's a customer group that is very much struggling with cost of living, et cetera, but might not have concession cards, et cetera. Is it more the outreach that you do in terms of trying to get people managing their bills proactively or do you do anything differently for that sort of cohort, that sort of your vulnerable customers?

Mr CLARK - No, I might let Alistair touch on this one a little bit, but absolutely getting people that are entitled to concessions is really important. We have a very high rate of Tasmanians that are entitled on concessions. Alistair, maybe some of the daily processes.

Mr BURKE - Yes, that's right. On that point, we do regular cheques to make sure that customers that are entitled to concessions do have them. That is really important. There's also a part of that which talks to literacy, energy literacy more generally, and for customers to understand what they can be entitled to. A big part of our focus, both through COVID-19 and since that, is getting customers to engage with us. That's been one of the challenging things that we've experienced even when establishing our COVID support line, $5 million and looking for opportunities to support customers with that fund. Part of the challenge is actually getting customers to engage in the first place so that's been a big focus of us over the last few years is how can we support early intervention and ultimately assist customers as early on as possible in their debt cycle before they accrue large debts, which we know takes a significant amount of time to try and pay off. We've done a number of things.

One of the key ones is a higher investment in, as Nigel said, our YES program, the number of outbound calls that we now do to customers, we have a specialist team that calls customers within a few days of going past their due date. Since we've established that team in early 2014 across all of our outbound proactive campaigns, we've made approximately 130,000 calls to Tasmanians. The key purpose of that, as I said is to speak to these customers as early as possible and actually educate them on the support options that are -

Mr EDMUNDS - Proactively saying - so it's less of, 'Your bill is late', it's more of a, 'We've noticed that you're late, what can we do?'

Mr BURKE - Correct, absolutely. We found since launching that campaign that a lot of the feedback from customers has been positive. It's not done in a way, as I said, to push customers to pay if that's beyond their means. It's really to understand their circumstance, just to let them know the reminder that they have had a bill due and then to utilise that as a trigger to introduce that YES program, introduce that payment plan options or one of the other various support measures that we have in place.

Mr EDMUNDS - One more on that, if that's all right? Have you noticed the sort of number of customers who require this sort of - assistance is the wrong word - but is it steady, is it going up? Did it peak in COVID and sort of back where it was? What observations have you made about that, if you're able to share?

Mr BURKE - We've seen the numbers in our YES program increase, particularly over the past 12 months. Approximately 1300 customers have come on to the program, or the total customer numbers, I should say on the program have increased by around 1300 over the past 12 or so months. Again, part of that is the proactive work that we've been doing. That in itself we see has a significant impact on the number of customers that enter our program. There's no doubt that the customers do need that support and have increasingly over the last few years and that's why it's something that we're very focused on.

Mr EDMUNDS - Great, thank you.

Mr CLARK - To add to that, overall debt metrics are actually coming down. Alistair can expand on that further today if need be. The other point to make there is we would have been disappointed if our numbers in the YES program hadn't actually gone up because by getting to people earlier, we are taking away the stigma and the embarrassment of calling us. We expected that we would go up in numbers and that's what's happened. We're pleased because then you have the engagement and you can work with the customer.

Mr BAYLEY - Thanks for your submissions. I'm interested in your experience as the government retailer in an increasingly competitive market. I think your submission says there's now eight retailers operating in the NEM.

CHAIR - In Tasmania?

Mr BAYLEY - Sorry, yes, in Tasmania. How does that impact on your business? How do you insulate yourself? How do you compete and also, how do you protect yourself from being over-competitive? We hear often, and even just this morning, heard about challenges in that telco space of upselling and overcharging and vulnerable people. How do you protect your customers from the pressures from an increasingly competitive market?

Mr CLARK - Firstly, we don't shy away from competition. Competition makes you sharper and deliver a better service, so we compete very hard. We call it competition-fit and we'll compete to hold on to every customer we have. Losing one is one too many is my mantra, so we will work hard to develop products and services to give Tasmanians a reason for staying with Aurora. Our purpose is to make energy easy and our vision is that Tasmanians choose us for their energy future. For us, the criticality of our size is important for us to have economies of scale, so we compete unashamedly very hard to stymie our competitors in the market as much as we can.

There is no danger of us underpricing. As you know, we have a regulated price regime and 99.9 per cent of our customers are on the standing offer tariff. We are regulated on very fine margins and fine costs to serve, so we don't sort of have the head room to play games with massive undercutting or the like. What we aim to do is deliver a strong service to customers. We've been improving our product suite. We've got our loyalty program, Power Hours, where we give away free hours of power. We do a variety of things to give Tasmanians a reason to be proud of us and what we do, looking after vulnerable Tasmanians that we've just spoken about, but also we're homegrown and we get Tasmanians, so we find all those factors combine for us to maintain a strong market position. At the end of the day, that's maintaining the value for Tasmanians in the ownership of us as a business.

Mr BAYLEY - What's your experience in terms of maintaining market share? Where are you at and what's the trend over time? Is it static?

Mr CLARK - We're holding a strong static position.

Mr BAYLEY - You said you don't resile from the fact that you compete hard and you seek to out-compete, but you're constrained in the context of price, so what are the sorts of things you do in that competitive space? We've spoken about vulnerable Tasmanians -

Mr CLARK - When profit is not your overall major motive, you have a different mindset on how you operate. You're not driven to screw the last dollar out of every customer. You'll have a more empathetic approach to people who are struggling in the community. It plays out in things like we are the retailer of last resort and also the standing offer retailer, so we can't turn away a customer. We will take all customers. Private retailers can pick and choose who they want as a customer. They'll disconnect them if they end up in hardship. We find that people will stick with Aurora because of those many reasons, including the work we do in the community. If you look at the investment we make in supporting community programs as a percentage of our profitability, I think you'd struggle to find too many other businesses that have that community outlook as part of their DNA. We find that Tasmanians resonate with that in staying with us.

Mr BAYLEY - Would a lot of those things drop away if all providers were privately owned? Do you think that's a direct manifestation of being a state-owned company?

Mr CLARK - I think you only have to look at the broader NEM where most of the retail market was privatised and you see ever-increasing regulation year on year by the AER trying to police the market. I think the evidence is there to be seen that when you go down a heavily privatised path, it's not always beer and skittles as to how it plays out. We think there are better outcomes for the Tasmanian people by having a strong state-owned retailer.

Mr BAYLEY - Do you have any fears of privatisation? Privatisation of GBEs and state-owned companies is a bit of a talking point at the moment. Has there been any conversation with you or do you have any fears around the future of the company and its state-owned status?

Mr CLARK - We've obviously just recently received the government's -

Mr BAYLEY - Review.

Mr CLARK - The Government Business Governance Reform review. We will make a submission to that for sure, calling out what we believe should be the principles that should be looked at in reviewing whether you maintain ownership of an entity like Aurora and any particular points relevant to Aurora. We would hope to make a strong case that we think, at this point in time in the energy transition, I don't see merit in looking at privatising Aurora. That's not to say in the future if Marinus and other things happen in the market, you've got to have an ongoing review, it's not set and forget, but we would probably argue at this point in time, it's best left in state ownership hands. We are delivering a good product at a good price and we have a good customer take-up and engagement with us, so I'm not sure why you would look to cut across that.

Mr BAYLEY - Notwithstanding the review and your intention to make a strong submission, has there been any approach from the government? Have there been any conversations about the future status of Aurora as a state-owned company?

Mr CLARK - We've got the document just like everyone else. We'll work through that with our board in the next few weeks and then put in a submission.

CHAIR - On energy pricing, I notice in your submission you talk about how the retail percentage of the price stack has been falling. For the purposes of the committee, can you explain the various components of the price stack that you have a part in, if you like, and how that works?

Mr CHISHOLM - Sure. The key components of the price stack are wholesale costs and network costs. The wholesale costs are set by the regulator. We don't influence those; that's based off of the regulated methodology. The network charges are passed through from TasNetworks. Renewable Energy Certificate costs are need-to-know obligations under the Renewable Energy Trading scheme. The impact that we have on those is obviously that we have to secure the certificates we need in order to meet our obligations. There are metering coordinator service charges which, again, are a pass-through AEMO market charges.

The piece for us is the retail cost, which is 11 per cent to 12 per cent of the cost stack, and that's where the regulator goes through and reviews our costs and does relevant benchmarking and provides us a cost to serve and retail margin allowance.

CHAIR - It is our state regulator, OTTER, that determines the percentage of the price stack that you can charge for retail costs. Is that right?

Mr CHISHOLM - Yes, that's right.

CHAIR - When you put forward your submission to OTTER about what you think you'd like to be able to charge for services, what services are actually covered in that retail component? What do I get for my 11 per cent in 2023-24?

Mr CHISHOLM - It's all the staff who provide the service as an end retailer, so that's people on the phones, all the IT systems to support that, the people who manage the wholesale component on behalf of customers.

CHAIR - I'm talking about meters and things like that, some of the hardware and software. Is that included in this cost? The meters themselves, the hardware.

Mr CHISHOLM - No. We get meter charges come through from the meter providers.

Mr BURKE - The costs that come through from the metering coordinators include the cost of the metering asset itself.

Mr CLARK - Just to clarify, OTTER doesn't set the percentage of 11 per cent. It's a factor of the two elements he approves. If network costs, say, are tracking up, our percentage of that stack could go down.

CHAIR - That said, is it because wholesale prices have been higher that we're now seeing this as a lower percentage? We've gone from 13 per cent two years ago - not a huge change, but it all counts to the person getting the bill - to 11 per cent now. What component has increased? Is it networking or wholesale energy prices that's taken up the majority of that?

Mr CHISHOLM - It's both. We've obviously had wholesale increases over the last three years. The last year they came down, so they've gone up and then come down. Then we've had network charges go up and that impacts our percentage of the overall cost stack.

Mr CLARK - In the last price change in July this year, for instance, it was close to zero, but buried within that were the two elements: wholesale came down 15 per cent, networks went up 15 per cent. They basically negated each other in that particular year.

CHAIR - When was the last determination? This year, was it?

Mr CLARK - No, our last determination was 2022. We're due again next year for a three-year.

CHAIR - Alright. There was an efficiency factor that was required. How did you meet that?

Mr CHISHOLM - The efficiency factor: that just flows through the cost to serve. It impacts the allowance we actually get. It started with a number, about $150, and then there was, I think, it was a 3.1 per cent efficiency factor that was built in. Our allowance pretty much decreased over the year. That's what flows into the prices we're allowed to charge to customers.

CHAIR - Did you have to do any cost-saving measures in the business to balance your books?

Mr CHISHOLM - Obviously, there's a focus on trying to keep costs down. Our costs have not sort of come down in line with that efficiency factor.

Mr CLARK - A good example would be IT costs.

CHAIR - They don't get cheaper, do they?

Mr CLARK - IT costs have been going up by 5, 6, 7 per cent. We have a chunk of our cost base that doesn't mirror that efficiency factor. As James said, we haven't been able to match that exactly.

Mr CHISHOLM - I think when the regulator set that efficiency factor they were looking at what that's seen in the broader NEM in terms of some of the AER reporting. There had been costs of retailers that have come down at that period when that sort of determination was made. The evidence subsequent to that is that the cost for retailers, broadly in the NEM, are going up. Obviously, bad debts, IT-related costs. That will obviously be one of the points as part of this next PD submission is what efficiency factor should be applied to us as a business, if any.

Mr BURKE - I think the other key factor, obviously, is the significant amount of regulatory change which impacts all market participants, but particularly retailers. Often, that has a significant IT or system element to it. Anytime there is a regulatory change which is, obviously, generally, for the right reasons, there is a material impact that that has.

Being a stand-alone retailer of a relatively small size in comparison to bigger NEM retailers, obviously the impact of regulatory change and the costs associated with that has a far greater impact on us as a retailer versus some of the bigger retailers across the country that have a greater capacity to smear those costs across a bigger scale.

CHAIR - Also, one of you mentioned proactively working with your customers in terms of helping them not to get in financial difficulty or intervene early. You also mentioned to make sure they're on the right tariffs. How do you actually go about that? Also, bearing in mind the literacy levels of a lot of people in many parts of our state, how do you help them understand how to make sense of it to make sure they understand why they're on the tariff and which tariff is best for them?

Mr CLARK - There are multiple ways. We have now over 108,000 Tasmanians using aurora+, our app. That's basically 108,000 people educating themselves with energy literacy on a daily, weekly basis. First of all, it is understanding what your usage trends look like.

Then what we do is analysis. Looking at where people may be better off on a time-of-use tariff versus a flat-rate tariff. Historically, more Tasmanians have come from being pretty much on a flat-rate tariff, but we know that a high percentage, north of 70 per cent, would be better off on a time-of-use tariff.

It's creating those discussions with Tasmania to try to de-stigmatise what time-of-use is about and to encourage those discussions to reach out with campaigns where we proactively will show what the analysis of the last year's usage looked like if you'd been on a different tariff - time-of-use tariff versus a flat-rate tariff.

There're multiple ways that we try to bring on that discussion, but -

CHAIR - Is this by direct contact with them or is this entirely through the app, the aurora+ app?

Mr CLARK - In some cases it will be direct contact. If we're allowed to contact them and market to them, it could be a letter or an email being sent to them. We do things like stand-up hubs in shopping centres and going to old people's homes and different things and talk to people.

We have our energy literacy program that we've started last year, the Power People Project, working with the Men's Shed. That's training up trainers to educate people. There's a variety of ways that we're trying to tackle because understanding tariffs is not necessarily straightforward for people. The whole energy industry is not necessarily straightforward for a lot of people so we try to attack that through multiple ways.

Mr BURKE - It also speaks to some of the key benefits of the advanced meter fleet. Outside Victoria, Tasmania has now got one of the highest saturation rates of advanced meters. One of the many benefits of an advanced meter is that data that you get that you can actually look at over a period of time to assess what is the customer's behaviour, what is their usage in different periods and what would be the right option for them based on their behaviours and what are the options to shift some of that behaviour.

We've seen in other jurisdictions where customers have been moved onto different tariffs at the time of a meter exchange, for example. That's not the approach that we've taken in Tasmania. As Nigel said, generally we'll wait until we have around 12 months' worth of data and that way you can actually look back historically and say if you had been on a different tariff over that period, what would your costs have been versus what they were. That gives you real hard evidence and that's a conversation that we have with customers. The actual transfer of tariffs is only with customer consent, which is also different to what has been seen in other jurisdictions. That's a really important distinction, I think, down here.

CHAIR - There was a matter raised with a previous witness about local area network type arrangements with solar panels as a generator. We did discuss this with Hydro because their position was that Hydro could basically roll out over a whole suburb, like a new suburb, perhaps a virtual power station, if you like, and integrate into that system. But they would own the generation. Their view was that this is not in other jurisdictions, particularly; this is something that's more done with retailers because you have a direct relationship with the customer, the person underneath these solar panels. What's your view on this? Do you think there's a role to play for a state-owned energy retailer to engage in some sort of system like that?

Mr CLARK - Look, the broad topic of CER resources and things like community batteries and the VPPs is very much on our radar. We've been doing a major piece of research and testing our cohorts of Tasmanians' perspectives on what they may or may not be willing to do, whether they would want control in their home ceded to someone else and the like. Specifically, in relation to community batteries or the linkages into local networks, what you're seeing on the mainland, it's really a trifecta between the consumer, the retailer and the network company where most of the value being created is where it augments the network not having to spend money on their grid by putting a battery in an area. They then create a special network tariff that feeds back some of that benefit to the consumer.

So, for us to make it successful in Tasmania, and we've had some discussions in the last year with TasNetworks, that's really the puzzle that has to be unlocked to bring the likes of a community battery to fruition. Because if it is just plonking a battery in a suburb that does nothing because someone has to pay for the battery and then they'll trade that into the market and that potentially doesn't involve the consumer in any way. You need the network benefit to come into play with the retailer to bring that to the consumer.

Mr BAYLEY - Is that with a household investing in the infrastructure though?

Mr CLARK - Well, no, what you're seeing in New South Wales and then the likes of some on the mainland [inaudible], the consumer may have invested in their rooftop solar panel and then the network company is typically putting the battery on the ground.

Mr BAYLEY - Because this concept, you know, was pitched to us around the Hydro as a generator investing in the infrastructure, using the roof as a platform and nothing much more. Obviously, there's a relationship with that customer.

Mr CLARK - One of the things, moving forward, we've been looking at in the CER journey is exactly some of those aspects of, can we partner up with, for instance, equipment suppliers to bring more innovative types of products to customers. One of the biggest issues with some of these things is the upfront cost.

For instance, are there ways and means where someone could have a scheme of paying it off over multiple years rather than an upfront cost? That could be a product in the future that we bring to market because capital cost is a big issue.

The other thing around having virtual power plants and control that gets talked about with a lot of buzzwords today is, at the end of the day, you could spend a lot of money building these systems to orchestrate your home. For us, it's a question of, are you really going to save money and is it going to be commercial for us to do that, versus how do we assist you to get a solar system and a battery in your home or plugged into your EV, then you move your usage between peak and off-peak. That will create the greatest savings for most consumers - to save the energy in the middle of the day from the solar system - because energy is worth nothing in the middle of the day - and bring it out in the peak at night and have a time-of-use tariff. They're the sort of combinations that will give people the most potency in lowering their power bills. Me coming in and controlling that and using you as a virtual power station may not give you necessarily the same value benefit.

Mr BAYLEY - We're talking cross-purposes I think, slightly, in that the proposal has been pitched to us around the state-owned generator owning the asset, generating power - yes, there might be a benefit to the household, of course, but it's not all about that household investing in the infrastructure and deriving a benefit from it. It's a communal benefit in terms of energy generation more broadly to be put into the grid. As an alternative to other propositions -

CHAIR - But also less need for networking, like big transmission lines. If you can have a more localised area -

Mr BAYLEY - Resilience, in terms of climate impact.

CHAIR - energy security.

Mr CLARK - There's no doubt you'll see rooftop solar continue to roll out more in Tasmania over time. I think the question is who owns or funds the equipment. At the end of the day, I suppose it's a question of who has the best capability to do that. Is that a solar equipment supplier partnering up with Aurora or would a Tas Hydro be better investing in rooftop solar versus a hydro system? I would have thought that's not their main game, but there are many players in the solar space, for instance, that can fund and put equipment on the roof.

Mr EDMUNDS - To ask one more about that, it's not necessarily something where scale is - often you hear of buying power - it is potentially more beneficial at a local, at the micro level, like one house?

Mr CLARK - Of the actual solar system you mean or -

Mr EDMUNDS - Yes, in terms of the investment, you potentially get more benefit if 30 houses on the street all have their own system rather than one 30-house system. I am out of my depth, too.

Mr CLARK - If you start to talk microgrids, that's a slightly different concept again, where if you build a solar farm and plug every house within a subdivision into that solar farm, would that be a better outcome? That's a different economic proposition again and would have its own nuances, but these are all potential options that in the rollout of solar into the community. Our focus, as I said, is, to be honest, how do you get more people using those types of technology and help them avoid the upfront capital cost? That's one of the biggest barriers and that's not going away.

Mr BAYLEY - Another question sort of parallel to this to an extent, in terms of advanced meters, that we've been tracking for a little while is around - in the agricultural sector, where a single customer, a farm, has three or four different meters or more, perhaps has a renewable energy asset attached to one of them, an irrigation pump or on top of a dairy and wants to share that power across those meters using the existing network - not have to plug each of those meters in together, but to use the existing network and share power across its own meters and derive a benefit and advantages there because of the various tariff levels and so forth. I know this is predominantly a TasNetworks issue in terms of the constraint and the blockages. Do you have a view on that? Does Aurora have a view on that proposition? And, technologically, can you confirm it can be done with these advanced meters, where you can absolutely record what's coming in, what's going out, or what's coming through the meter in each direction and balance it out at the end of the day - it's easy to track, it's more a transmission issue?

Mr CLARK - Yes, I think I know where you're headed. We've been involved in a trial with an agricultural player in Tasmania who wanted to test out some of this thinking of multiple meters on a farm. It's been going for a little while now. This is on the energy combination of using out of the grid and their own generation. What we found so far is the net results of what has been going back to the consumer has been quite small to this point.

Mr BAYLEY - The benefit?

Mr CLARK - The benefit, yes. To this point. Now, that's on the energy play only; it's a different question if you start to get into trying to do something on the network side. To be honest, TasNetworks would need to talk to that. We have, as I said, been part of a trial on the energy, sort of netting the energy elements, I don't think it's created huge gains for the consumer by the time you balance it out.

Mr BAYLEY - Are the results of that trial going to be public? What's the status of that, given your involvement?

Mr BURKE - We're in the early stages of broadening that. I think what Nigel spoke to was an initial small trial. Ultimately, TasNetworks, as you said, is in the driving seat of this one. They're working closely with the relevant customers. I think our role, at this stage, given where it's at, is just to support that process in the role that we can play. Ultimately, it's a TasNetworks-led initiative at the moment that we're just supporting.

Mr BAYLEY - Can you confirm, given the level of advancement in meter technology these days, it's entirely doable to record power flows in either direction and reconcile them at the end of the day with the one customer and that sort of thing?

Mr CLARK - Meter measurement is fine, but whether you have a billing system that is capable of doing what you're talking about, not necessarily. What you're talking about is changing the traditional paradigm on how energy systems work, where you have a meter read and that is associated with the individual charges. Most billing systems, certainly straight off the shelf, don't have the capability of doing cross-netting and cross-sites. It's not a standard feature, no.

Mr CHISHOLM - So we're supporting it, but it's early parts of a trial. Obviously, there's manual effort in - we have the data, but it doesn't spit out the answer. We have to do a bit of manual intervention to find out what the net benefit is.

Mr BURKE - But to your point, the meter itself is not a barrier to those types of initiatives and, in fact, opens up the ability to test them. Whether or not they actually deliver benefits in the long term, I guess, is exactly why you do some of these trials. The ability to do them is there because of the data and the way that these meters are configured.

Mr GARLAND - If Marinus Link were operational tomorrow, what impact would that have on retail electricity prices in Tasmania?

Mr CLARK - Per what my colleague explained earlier, Marinus itself doesn't change the regime under which we operate. We pass through network charges and we have the energy price determination and those other elements. If a Marinus was built and was a regulated TNSP and those costs were passed through TasNetworks to us, then they would be passed through to the consumers. That's the only obvious thing one can say about a Marinus, if it was built. Other than that, we're subject to the regulation regime.

Mr CHISHOLM - We haven't done specific modelling around what that would look like, understanding that there's a statewide business case that's being pulled together to try to understand the overall benefit. Part of that, we understand, is looking at what customer impacts would be. But, there's so many moving parts. It'd be impossible to say exactly -

CHAIR - Are you feeding into that business case? Is Aurora providing input into it?

Mr CHISHOLM - No. We've had discussions to just understand what they are doing. I suppose it was important for us to understand that, as part of the output, they were actually going to produce - these are the impacts on customers. It was really just understanding what the scope was.

Mr CLARK - We don't feed into the business case.

CHAIR - If it's going to cost like whatever it is, $3.5 billion to build, acknowledging that there's more than one player that pays for the use of it, the regulator asset base, you think, would be fairly significant; so the cost of networking would be set by the regulator to reflect that. Is it likely, in your view, that we might see a greater percentage of the price stack to be taken up by networking charges?

Mr CLARK - Looking forward 10 years, we don't know what the wholesale side of the equation is going to be. Whether the overall net bill goes up or down, with a Marinus in or out - it would be speculation on our part. There are elements that get raised, but as to government mechanisms like the Renewable Energy Dividend where they may look to do some adjustments if you had network charges and other elements, so there's government policy in the future that will dictate, but, at this point, for us to predict what the net result to a customer's bill will be in 10 years - we can't.

CHAIR - A lot of people are making such assessments, saying that your energy will be lower, it might not be by very much, like $40 annually, which is not even a cup of coffee a month, hardly. I am asking, do you suggest that those figures are based on guesswork?

Mr CLARK - No, behind every business case there will be a consultancy firm doing the modelling and modelling the future of a NEM is extremely difficult and there are so many moving parts -

CHAIR - So Aurora hasn't done any of your own modelling to try to understand what this might look like from a perspective of the state-owned retailer that will be notionally on-selling electricity that would be transmitted across the link?

Mr CLARK - We more look at modelling that comes from some associated entities that we're part of, things like the AEC. And we also look at what AEMO pronounces, so, recently their CEO was talking about some expectations on future power prices and the like. We typically try to access those bits of information to see what the projections are. But, modelling of the NEM forward 10 years, as I said, is a very difficult task and one only has to change certain assumptions and you can move the result markedly. Coal in, coal out, nuclear in, nuclear out, CIS scheme in, CIS scheme out. All these things will have massive impacts on how the market unfolds.

Mr BURKE - Given the pricing regulatory framework that's in place, again, anything beyond that is speculation. Based on a current regulatory framework, pricing framework that's in place, that's ultimately where we spend our time and very much looking at our role in supporting customers through current challenges, but also any future challenges that will come through, transition. That's ultimately where we spend our time.

CHAIR - Aurora has to purchase large generation certificates, or you have had to. That system is to expire in 2030. I've seen a bit of media, which most of it's beyond me to fully comprehend, about what the new replacement system might be.

Mr CHISHOLM - REGOs.

CHAIR - Yes, REGOs or however you're supposed to pronounce that acronym - of which there are 5525 in the energy sector. That's not the exact number, acronyms I'm talking about. What does that mean for Aurora? Have you looked at that because 2030 is not far away?

Mr CHISHOLM - We are looking at regulation and regulation changes, but the way that scheme is going to land is unclear at the moment. We're currently just working to make sure that we can meet our obligations under the renewable energy trading scheme. If any new legislation came in which put obligations on us, we'd have to come up with ways, and then how we're going to manage that and then working with the regulator around how those costs would be passed through to customers would be a discussion we'd have to have.

CHAIR - The large generation certificates that you already own and potentially need to buy before 2030, is it your expectation that they'll fall in value the closer we get to 2030, and what does that mean for Aurora?

Mr CHISHOLM - It's hard to know exactly where the prices will go. We probably are expecting prices to potentially drop off as you get to the end of the scheme, potentially with less demand. A lot of the demand at the moment has been picked up by commercial-type organisations and, potentially, they would be relying on other ways to meet their corporate obligations, so potentially the price comes off, but we can't say for certain how that would play out.

Mr CLARK - The best indicator at the moment would be the forward curve, and the forward curve does show a lessening in price over the duration to 2030. That's probably the only visible indicator at the moment, giving some market price indication.

Mr CHISHOLM - But the market's so illiquid.

Mr CLARK - It's pretty small.

Mr CHISHOLM - [inaudible] sort of 28, 29, 30, nobody's trading. It is difficult to be doing. Different companies who have different ways to manage their renewable energy trading obligations, and depending on what they do and the positions they have, what positions they have with PPAs, and as that demand sort of works [inaudible] drives, where those prices end up. At the moment, it's just not liquid. Obviously, it is lower when you look at where the curves currently sitting.

CHAIR - We might talk a bit more about that in GBE Scrutiny.

Mr GARLAND - Have you got figures on how many people's power was cut off in 2023-24?

CHAIR - How many Aurora customers? They can only answer that.

Mr GARLAND - Yeah, retail, sorry.

Mr BURKE - As we said, our focus over the last few years has very much been on our customer support. What we have seen through particularly COVID-19 and beyond that - where standard debt collection processes were relaxed or ceased for a period of time. I think through that period for about 18 months, Aurora Energy ceased all electricity disconnections, and very much shifted our focus towards all of the broader customer support measures that were established; the $5 million fund. We also saw through that period that there was a cohort of customers who, as I said earlier, didn't engage with this and actually increased their debt quite significantly through that period. What we learned through that is, as I said, the collection cycle itself becomes a key trigger point to identify customers and move them into support options.

Over the past two years, we've started to re-establish, I guess, industry standard debt collection processes, which in some circumstances end in disconnection. I think from our perspective, it is very much a last resort type scenario, and we undertake a range of different contact points with customers, phone calls, letters, otherwise to engage with them before that actually happens.

The key initiative, I guess, that we've also looked at over the last 12 or 18 months with TasNetworks, is the Knock to Stay Connected trial, which is now part of our business-as-usual operations. That's one more step that we take with TasNetworks to actually knock on a customer's door and try and engage them before the power's turned off.

Unfortunately, even though all of that, there is a number of customers that do end up in disconnection. In the past 12 months, to your direct question, that increased to 295 customers across residential and small business. That equates to approximately 0.05 per cent of the small customer base.

CHAIR - That was for unpaid accounts, not because they were leaving the house or anything like that?

Mr BURKE - Correct. This is when a customer is in debt. As I said, we go through a range of steps over a number of months to try and engage that customer. If all of those contact attempts are unsuccessful, if there's no response to all of the communications, and there's no response to the Knock to Stay Connected, then some customers can be subject to disconnection. As I said, we do all within our power to try and avoid that scenario.

Mr GARLAND - I commend you too, because a lot of other areas, if you haven't paid within 5 minutes, they're on to you. I have a few friends that struggle and you've been really good with them; haven't cut their power off, and they eventually got it done.

Mr BAYLEY - Do many of them come back? As in, you cut it off, that shocks them into action, and they connect again or?

Mr BURKE - Yeah. We actually saw a reduction over the past 12 months in that statistic. Within seven days of those customers - the small number of customers that were disconnected - 29 per cent made a request to reconnect within seven days.

CHAIR - Is there a cost of reconnection at that point?

Mr BURKE - There is a cost to reconnect.

CHAIR - How much is the cost to reconnect?

Mr BURKE - The costs associated with reconnection really relate to the pass-through charges from TasNetworks. That's really the cost to attend site and disconnect. Off the top of my head, for a disconnection of that nature, it is about $170 disconnection.

CHAIR - You tell your customers that when you're trying to work with them that if it disconnects, you've got to reconnect or TasNetworks will hit you?

Mr BURKE - Absolutely. That's another reason why it's a last resort for all parties. Obviously, TasNetworks don't want to go to site unnecessarily, but we have identified that the success rate of the Knock to Stay Connected, if they're going to go to site to encourage customers to engage that final time as being a really successful. Part of that framework, we had 580 knocks across the last financial year with almost 400 or 377 disconnections being cancelled. Effectively, a 65 per cent success rate of going and knocking on people's doors and trying to help them at the last point.

Mr BAYLEY - Can you talk us through gas? You're a gas retailer as well. We've got almost 5000 customers. I know that some states are changing regulations and certainly from a residential perspective gas is no longer connected. I think I see Tas Gas here advertising quite strongly. Can you just unpack for us what's happening in the gas space in Tasmania?

Mr CLARK - Yes, we have a very small base. As I've said, we've circled 5000 small customers so we're a small player. It's fair to say it's not rapidly growing as a market. I don't think we have -

Mr BAYLEY - Are you trying to boost it?

Mr CLARK - No, we're not actively looking to grow gas connections but, having said that, we're not playing Big Brother either and telling you that you can't have this. Over time we'll obviously, I think, have schemes amongst all the things with the CER which I talked about earlier to try and work with people if they do want to try and electrify and come off gas and how can we work with them on that process.

At the moment, that's not an active program on our part. Our focus is just to try and deliver it as cheaply as possible. Gas is expensive in Tasmania, by the time you bring gas all the way from Queensland, through New South Wales, through Victoria.

Mr BAYLEY - Are you required to provide it? Is it a legislative function or something?

Mr CLARK - No.

Mr BAYLEY - Is there a point where you might come to the point where actually it's not viable anymore? Or do you have a commitment to those customers that means you'll stick with it?

Mr CLARK - I think like everything, if you got to a point where you were down to a certain number where it makes no economic sense and I think there's a tipping point where it's like every business where you look at it -

Mr BAYLEY - You have the freedom to do that - Aurora's got the freedom to do that?

Mr CLARK - We don't have any legislative requirement. For some people, that is a fuel of choice and we will support people in that journey. But we will point out the virtues of the seeking electrification and what we can do there.

CHAIR - Is there anything else you wanted to add that you haven't said that you think, 'Oh, we really should say that before we go?'

Mr CLARK - No, we've had a great discussion so I thank you.

CHAIR - Thanks for your time today and we'll see you in a couple of weeks. Thanks for your time today. I appreciate that. I don't think we've got any questions on notice to send so I appreciate your time.

THE WITNESSES WITHDREW.

The committee adjourned at 3.59 p.m.