

# PARLIAMENT OF TASMANIA

TRANSCRIPT

# **LEGISLATIVE COUNCIL**

### GOVERNMENT BUSINESS SCRUTINY COMMITTEE A

Hydro Tasmania

Thursday 23 November 2023

### MEMBERS

Hon Luke Edmunds MLC; Hon Ruth Forrest MLC (Chair); Hon Mike Gaffney MLC; Hon Dean Harriss MLC; and Hon Sarah Lovell MLC



#### WITNESSES IN ATTENDANCE

Hon Nick Duigan MLC, Minister for Energy and Renewables, Minister for Heritage, Minister for Parks, Minister for Small Business

Mr Richard Bolt	Chair
Mr Ian Brooksbank	Chief Executive Officer
Mr Tim Peters	Chief Financial Officer

#### The Committee recommenced at 3.45 p.m.

**CHAIR** - This is the scrutiny of Hydro Tasmania. I will invite you introduce the people at the table with you and then invite you and/or the Chair to make an opening statement and then we will move to questions.

I might just introduce my side of the team for the new Chair, if that's all right. Mike Gaffney, member for Mersey, Sarah Lovell, member for Rumney, myself Ruth Forrest, member for Murchison, Luke Edmonds, member for Pembroke and Dean Harriss, member for Huon.

**Mr DUIGAN** - Thank you, Chair. On my side of the table, to my left is, Mr Richard Bolt, Chairman of the Board, Ian Brooksbank, Chief Executive Officer, and Mr Tim Peters, CFO of Hydro.

It is an absolute pleasure to be here with you all this afternoon, GBE for Hydro 2023 the financial year performance of Hydro Tasmania. Hydro continues to perform a vital role in this Government's commitment to ensure Tasmania has affordable, renewable energy now and into the future. Hydro's pre-profit tax of \$168 million achieved through prudent and careful management of the state's water resources allowed the organisation to return a dividend of \$105 million to the state government. That is \$105 million that's being invested into the services that Tasmanians need, as well as a direct credit on energy bills through our Renewable Energy Dividend.

It was a strong financial result delivered in the face of a volatile energy sector and with an approaching El Nino weather event, Hydro Tasmania has prudently managed water storages. I was very pleased to see the financial year end with water storages at 40.4 per cent, well above the prudent storage level of 29.7 and the high reliability level of 21.7 per cent. Today, I note that figure is 46.6 per cent. I commend the hardworking staff at Hydro. Not only are they delivering the clean energy that powers our state today, but they are also planning for tomorrow. The pioneers who built the Hydro a century ago had a bold vision for the state's energy future and so do we.

Hydro power will continue to be the backbone of our state's power system, working with other renewables like wind and solar and critical transmission infrastructure such as Marinus Link. The redevelopment of the Tarraleah Hydro Power Scheme and New Pumped Hydro project will deliver more clean power, more storage and a more efficient clean energy system for our state.

In closing, I thank the entire Hydro team for a strong year ensuring Tasmania has clean, reliable, affordable renewable energy that has made us the envy of the nation. With those few words I will pass to the Chair for some opening remarks.

**Mr BOLT -** Thank you minister, thank you, Chair and members of the committee. It is a pleasure to be here. Echoing the minister, it has been a very strong year for Hydro Tasmania. You are well aware of the important role we play in Tasmania and as the minister has indicated, we had a very good financial result, a dividend of \$105 million paid to the benefit of Tasmanians. On top of that, we employ 290 full-time equivalent staff and one of the things that has impressed me in my brief time in this role is just how Hydro Tas touches the Tasmanian community, economy, environment in many respects and it is very proud of its stewardship role in that regard.

We recorded the lowest ever rate of injury in our workforce, which we are very proud of and is a testament to the uncompromising focus on safety across the business, starting with Ian Brooksbank as the CEO and through the leadership team and the staff of your organisation. Momentum Energy, our retailer, exceeded its target to make a profit of \$12 million and achieved strong customer satisfaction results as well. Our global consulting firm, Entura, is taking Tasmanian expertise to the world and helping communities in various locations transition to low-carbon energy, as well as providing vital services back to the organisation. It has improved its service delivery performance and demonstrated a strong commitment to clients, including back to us.

As the rest of the world transitions away from fossil fuels to renewable energy, Tasmania is a global leader. It has an enviable head start, because as a state we do not need to manage the closure of coal-fired power stations, which is causing a good deal of risk on the mainland. We can focus attention on building more renewable generation transmission and storage - as a state, not specifically Hydro - to meet the needs of the modern economy. Hydro is looking to play a central role by increasing our generation capacity and our efficiency in building more energy storage. I should highlight that it is easy to overlook that the depth of Hydro Tasmania's storage is another major advantage for the state and is unique in Australia, and really critical in a renewable future.

I will not say too much more because I know you wish to get on with questions, but we do plan to support the supply of more clean and firm power to Tasmanians as they electrify their lives and our industries, creating more jobs and more profits flowing back to Tasmanians through their government. We have identified the preferred option to redevelop the Tarraleah Hydro Scheme, and we can talk more about that. It will deliver 30 per cent more energy from the same amount of water and increase our peak capacity by 100 megawatts. We are developing the pumped hydro proposal at Lake Cethana, and that will help us deliver clean, reliable energy, in conjunction with the growth of other renewable sources, such as wind and solar, in the state.

I will finish by joining the minister in commending Hydro Tasmania's excellent staff for their achievements over the 2022-23 financial year. I am very impressed with their dedication, their skill, and their wide understanding of their social and environmental responsibilities beyond the immediacy of providing a firm power supply. We are looking forward to another strong year powering the state's economy, keeping our staff and the public safe, supporting electrification and playing our wider water stewardship role.

**CHAIR** - I will start by acknowledging the people who work for you. I note that this year's Hydro Tasmania report is much thinner than usual. It may be a decision of the new board? A very minimalist approach taken to the performance information as opposed to the financials, but the financials are very interesting and very complicated. Having said that, there are a few questions I would like to ask about the performance stuff before we get to the financials, if I might.

Starting with the people, in previous years, I believe Hydro - maybe not as diligently as TasNetworks - has given a gender breakdown of their workforce. Are you able to provide that now? Also, at each level within the organisation, the gender breakdown there.

**Mr BOLT** - Yes, I will ask Ian to go through the stats but we can give you the breakdown for our leadership team, our senior executive leadership team, and the staff at large. The organisation is very focused on being inclusive, being gender-diverse, and promoting gender equity. There is a strong focus from the board down on that. We rate it as a very high priority.

**CHAIR** - If you have a table that you could provide, it would be easier for us to look at rather than reading a whole sheet of numbers.

Mr BOLT - That is possible.

Mr BROOKSBANK - We do have a table we can supply, we will get that shortly.

**CHAIR** - That would be great. The other thing is do you measure the gender pay gap in the organisation?

**Mr BOLT -** As far as I am aware, the annual report does not talk about the gender pay gap, but we can talk about the gender pay gap.

CHAIR - Do you know what your gender pay gap is?

Mr BOLT - Yes, we do. I will ask Ian to run through the numbers on that measure.

**Mr BROOKSBANK** - We have recently undertaken a survey of our gender pay gap through an external organisation. We have identified where that gap is. I'll find the exact number, but it's about a per cent under the industry average, but that's still around 21-22 per cent gap. We have recently received that report and are taking a considered approach to the things that we need to do to address that gap. As recently as this week we've had quite a lengthy discussion with our executive leadership team understanding what the gap is, what's driven it and what we think might be the drivers. What we've identified is the national gender pay gap is currently sitting at 22.8 per cent -

CHAIR - In the industry pay gap?

**Mr BROOKSBANK** - National pay gap, so the whole, across all industries the national pay gap is 22.8 per cent. Hydro Tasmania's group median gender pay gap, using our total renumeration figures as the measure, is 21 per cent. That's based on financial year 2022 payroll data. The reason the data is a year behind the financial year is the commissioning of the report and the time it takes to progress. We are developing a comprehensive gender equality strategy to present to the board in the next coming months. When we've done that, we will release this information, together with the actions we're taking to address the gender pay gap.

It is a fact of our business that we are quite a traditionally heavily male-dominated working environment. Having said that, on our executive leadership team we have more

women than we do men; and in our senior leadership group we are nearly 40 per cent. We have an overall target, or ambition if you like, of 40-40-20 in terms of 40 per cent women, 40 per cent men and 20 per cent either/other, so we are taking this quite seriously. We've got a great deal of data from the report that we've received and need to take some time to consider that carefully, and will report back to the board.

**CHAIR** - I appreciate the fact that the work is being done, it's really a positive step so tick. We'll tick that one off.

Mr BOLT - The board is also 40 per cent women.

**CHAIR** - That is reported in your annual report, you can see that. I notice you've done some other things like your workplace behaviour and respectful interactions policy and leave policy, which allows employers to take leave at times that would suit their values and their needs. In terms of the workplace behaviour and respectful interactions policy, how did you develop that? Was there a survey done to acknowledge the new requirements under work psychological safety in workplaces? Sorry, psychosocial safety. Can you talk about whether you're addressing it through this process? Did that drive that, or was it a separate piece of work?

**Mr BROOKSBANK** - Yes, we've been undertaking a program of work over a number of years now to go through what our safety system should be focussed on and what we should be reporting and inquiring on. We have a system where we think about what is an incident versus what is a near miss, what's a hazard and then a safety interaction. We get a lot of information, as you can imagine; a lot of observations; it's become a focus of our business because interactions are leading indicators. It's becoming a focus of our business, not just getting interactions happening at a leader level, but all the way through the organisation.

We have taken a number of steps in our internal Work Health Safety Plan, which covers the period 2022-25, which is picking up on the broadening of the stream around psychosocial health and safety within our organisation. We have a number of milestones in place that started from mid-November 2022, which was the introduction of psychosocial health and safety within the workplace. We then, through December, January, February, understood what the internal organisational factors and external factors were that drive people's feeling of psychologically and socially safe, understanding the context within which that operates, understanding what the expectations for our workforce are. We do annual engagement surveys as well as entry here. Pulse surveys - through the comments give us some indication and themes of where the focus areas are during the second quarter of last calendar year.

We had a look at our OH&S policies, roles, responsibilities. We have worked through some consultation with our teams. We've conducted risk assessments within our organisation - and the way we do risk management at Hydro is multi-layered. Individual teams will do risk assessments and if they are doing a job right, all the way through to strategic risks. Then, in October, we have gotten into the final of the ISO clauses and identifying the challenges. The milestones ahead include implementation, developing the specific strategies for specific parts of our business, and then finally presenting that first draft implementation plan internally, which is for later this year.

**CHAIR** - So you have done a survey yourself outside of this work? I am going back to the workplace behaviour and respectful interactions policy. I'm understanding how that policy came into being; was there work that informed that, and how was that done?

**Mr BROOKSBANK** - Our people and culture team, where the organisational safety groups sit within, have conducted a number of conversations, reviews, within the various parts of the organisation. It will be more a consultation with workforce rather than necessarily a survey. I can get an external firm to ask 100 questions and come up with the results. Things we have done, for example, myself and Lisa Chiba, who is the managing director of Momentum, have joined the Champions of Change program for the industry. We have conducted individual - well, they are work groups; but I will go out with our lead in this area and sit down with the work group of women and just talk for an hour or so around what's showing up for them and how that plays out. That has helped inform some of things we need to do in this space.

**CHAIR** - Have you provided an anonymous way for people to provide direct feedback? For me to come and sit down with you, as an employee of Hydro - with all due respect, you are a white male CEO, head of the business, I am not likely to tell you what's really going on in my little world back here. Have you provided that sort of avenue for your staff?

**Mr BROOKSBANK** - That avenue has always existed. We have had a hierarchy of reporting of incidents or near misses throughout our organisation that is both starting with your direct leader all the way through to an external body. They are confidential, so unless the discloser chose to have their identity identified we wouldn't know who it is; but we will get information around what it is that have reported. So, yes, we do have an independent and secure private means of doing that. We also have our engagement surveys where we receive a great many comments, there are freeform comments-

**CHAIR** - Do you de-identify?

**Mr BROOKSBANK** - They are de-identified. The organisation that conducts that survey for us is completely independent of us. If somebody identified themselves in a comment, for example, 'thanks, Ian', then they are de-identified before the report comes into our organisation. That would provide themes as well. That's a completely anonymous survey that allows people to make those comments; but we do have a process all the way through our organisation.

CHAIR - When was the last one of those surveys done?

**Mr BROOKSBANK** - We conduct the annual one in March, and the results come through in June each year, and we have recently completed the six-month Pulse survey.

**CHAIR** - In your March one, was there anything coming up that was surprising to the organisation, in a bad way? Good news is always good; but it's the bad news I am interested in.

**Mr BROOKSBANK** - I think what we clearly identified is that there is an inability for people to kind of tell what they do and how it delivers to the strategy of the organisation, and the role of leaders in that communication path down to the teams was an area of focus that

we've identified. We have taken those and thought, 'okay, what does that mean?' Part of what, for me, was a surprise was that people questioned whether an organisation needed purpose, vision and strategy, as a broad comment.

We engaged anybody in the workforce who chose to engage in revamping, if you like, our purpose vision and strategy. Then, through that co-development, we didn't change dramatically the purpose of the organisation but some of the activities, some of the strategies if you like and then myself and the leadership team have then over the last three months, four months got into every work group in the organisation, talked about the purpose, vision and strategy, talked about how we link our roles to that purpose, vision and strategy, talked about what the big ticket strategic items are.

The Pulse survey has indicated that there is a recognition that that is actually doing some good, people say, 'I've got a better understanding of what my role does,' regardless of where they are in the organisation, 'how my role contributes to the organisation'.

**CHAIR** - Does the survey go more to the interactions between staff and if you were to identify bullying in the workplace or people who are really unhappy in their role for whatever reason, does that throw up during these surveys or is it something that you're more focused on the business?

**Mr BROOKSBANK** - It's an engagement survey, so it canvasses a lot of different areas, certainly comments if there is bullying or there is, let's say relationship difficulties, somebody just doesn't get on with another in the workplace then oftentimes you might see those comments come through in the comments of the engagement survey. In reality, I think most of the time they become conversations through the other reporting mechanism which, as I say, starts with your direct leader and then if necessary you feel that it's not been satisfied, you've got a mechanism all the way up.

CHAIR - And that's clearly understood?

Mr BROOKSBANK - Absolutely clearly understood. Yes.

**Ms LOVELL** - In relation to those processes and reporting mechanisms, is there any regular or irregular measuring of how effective those mechanisms are and whether people feel confident to report those instances or feel that they're able to speak up and report those things at all?

**Mr BROOKSBANK** - There is in the sense that you will see themes change through the engagement surveys and the Pulse surveys. We have, as I mentioned earlier, we have a very stringent and effective reporting mechanism for self-reporting so through our - it's within SAP - but through the SAP incident, hazard et cetera reporting mechanism, we will see those things come through. There are other less formal measures in the number of times it becomes a topic that has to be spoken at, you know, with me for example, because it's escalated that far or it escalates through anonymously to a report within the organisation, I have to say, are pretty limited. We have within the engagement survey a lot of questions that talk about, 'do you feel safe to talk with your leader, do you feel safe to engage with the workforce, with others?'

Also, we have a few - I think of them as more subtle measures in that we don't have offices, for example. We get out in the field as much we can. We have within the business we have a program called Expect Respect which has been around since 2019 and it enables leaders to understand how to interact with people when those difficult conversations come to them, because a good part of the challenge is, as somebody with an issue, it's hard enough for me to bring it up, but then the person receiving that has to be equipped to be able to handle the message, to be able to handle that conversation, so, that Expect Respect, which, as I say, has been in since 2019, is a big part of that as well.

**Ms LOVELL** - In terms of the annual engagement surveys and understanding you've most recently had results come through in June, what are the results showing you in those surveys in comparison to previous years, but also, where the workforce is sitting currently in terms of feeling safe to report things and satisfaction and all of the things that you measure?

**Mr BROOKSBANK** - With the survey, we've had a participation rate above 80 per cent for the last couple of years, so the first measure is people want to engage with us. We've also, within our program, have included an inclusion score and rating mechanism, so questions going to inclusion within the organisation, as I said, it is an annual and pulse.

The trend for the last couple of years, both through the annual and then pulse surveys, has been relatively flat for engagement, at the whole-of-business level we're sitting at 69 per cent, obviously, we've got a bunch of business units, that whole-of-business includes our Entura and Momentum workforces, and that's 3 per cent above the prior survey. What we've seen through the business is that questions or responses that are absolutely unfavourable, are quite low, there's barely 11 per cent there, then there's obviously the group of people who are reporting as neither engaged or disengaged.

It's an absolute focus area for us, I know I quote all of the clichés, but one of the things that we do know is that people get a large part of their engagement with the organisation they work for when they're engaged within their team and with their leader and when they can associate what they do with the direction of the organisation. We've certainly spent a lot of internal effort on both of those things in the last couple of years, helping equip our leaders to have those conversations.

Every workgroup that are large enough to receive their own score, if you're a very small workgroup then you won't because it's pretty clear who voted what or what the responses were, but every workgroup will have a conversation facilitated by People and Culture, if needed, to unpack the results for them and what might be driving for them whatever score they got, whether it was 80 or 50 and that allows a level of targeted actions or things at the workgroup level, led by that particular leader, and that is certainly strong.

**Ms LOVELL** - I just wanted to go back to the work you were talking about earlier, around the psychosocial risk assessment process and I think you said it was around January that you went through a process of understanding the risks in the business. I'm wondering if you can speak a bit more about how that piece of work was undertaken, what was involved in that, and what were the risks that were identified or what that threw up for you?

Mr BROOKSBANK - As I said, we had some level of data coming through from our existing processes, the real program of work was around identifying hazards, so helping

people understand what a psychosocial hazard is and then, through our normal hazard identification process saying, 'well okay, now that we understand this, let's think about the hazards in our workplace that are not physical, which would be where we've traditionally thought about these things,' so it's helped lift the awareness and risk assessment capability of the overall workforce in that space. There have been facilitated conversations, which through that, we have been able to identify what people consider to be a risk in their particular workforce. That has provided us with enough material, when coupled with the themes we see in engagement surveys and the like, to be able to - what I hope will be at the end of this calendar year - to be able to bring back a bit of a targeted response that will resonate with the people who have contributed to that risk identification process.

**CHAIR** - I will go to your performance statement report on page 21 of the annual report. In terms of CAPEX, the target was 100 per cent on time, 100 per cent on budget but there was only 75 per cent on time. Can you indicate the 25 per cent that weren't achieved on time?

Mr BROOKSBANK - Thank you, I might pass to Mr Peters if I may.

Mr PETERS - I am happy to take that on notice. I will come back to you shortly if that is okay.

**CHAIR** - That is fine. Under the regulatory compliance obligations zero breach is obviously what we would all hope. There was one breach resolved by an agreement with the regulator, Essential Services Commission Victoria, in the form of an enforceable undertaking. Can you tell us what that was and what the outcome of that was as far as you are able to?

**Mr BROOKSBANK** - Yes. The ESCV is the regulator in Victoria. Whilst Tim is getting some of the details, Momentum has entered into a two-year enforceable undertaking with the ESCV, following a wrongful disconnection of a customer who was facing some financial difficulty. As part of the commitments agreed in the enforceable undertaking, Momentum has committed to reviewing and updating its disconnection training manual and manually reviewing all disconnections for non-payment orders that have been raised by staff.

CHAIR - I was wondering how it can be in Victoria, but it's Momentum.

Mr BROOKSBANK - That's right. It's Momentum.

CHAIR - That makes sense then.

Mr BROOKSBANK - Sorry, I should have been clearer.

**CHAIR** - That's okay. I will go through some of the financial information. You made these points yourself, minister and the chair. From the outset from a training point of view you seem to have done a pretty good job, we give ticks where they are warranted around here. I would also like to say your net equity positions seemed to improve enormously over the last three years. Not least because your net financial and liabilities are less. The annual report doesn't explain why you've achieved such a good result to the level I thought might be useful. On page 12 of the annual report you told us market prices were high at the start of the year before stabilising, in-flows were low but improved in the last four months. Coincidently, this

was after the new Basslink Networks Service Agreement with APA from Basslink. I have a few questions on that knowing those comments you made in the annual report.

I understand that rain gives you more options, but how have more stable prices assisted in your performance?

**Mr BROOKSBANK** - Thank you I will take the first piece and then pass to Tim. The point about stable prices is, apart from the predictability that comes from those stable prices, for part of our organisation it's the difference between the Victorian price and the Tasmanian price that will make a difference. If that is stable around a reasonable difference, then that is positive for our organisation. For a bit more detail, if Tim is ready, I'll pass to you.

Mr PETERS - I can do this in two bits, if that's okay, on the pricing and then the movement in the net assets.

In 2022, the national electric market prices reached record highs resulting in the National Electricity Market spending the entire spot market on 15 June for the first time in their ministry. The suspension was lifted on the 24 June 2022. NEM generators such as Hydro are only partially exposed to spot prices, with most of the volumes sold at pre-arranged contract prices including regulated pries in Tasmania. The financial impact of the market suspension in the first quarter of financial year 2023, while difficult to quantify does have an impact on those evaluations. The assets of 30 June 2023 were \$2.17 billion compared to \$1.85 billion at 30 June 2022. The change predominantly represents strong financial performance and movements in that fair value of our current portfolio, driven by higher prices in the wholesale energy market. Those prices that came through from the energy market have flown through into our re-evaluations as we move forward. That in turn has affected the evaluations in the accounts. Also, during that period Basslink, the old contract, fell off. That had a net improvement of \$174 million favourable to Hydro.

**CHAIR** - A nice little kicker. I do note sales have decreased, page 103, was this drop-off in sales expected? This is the five-year summary. It is a very useful document, thank you.

**Mr BOLT -** As a general comment while Ian and Tim are getting ready, sales are a combination of many factors, including rainfall yield and market conditions. There is not a lot of point, in fact there is great incentive not to generate at certain times, when prices go negative in the Victorian region in particular, because it means we effectively get paid to import.

CHAIR - You have to pay to import?

Mr BOLT - No, we get paid to import power.

CHAIR - Oh, paid to import, sorry.

**Mr BOLT -** That is largely a product of the increasing entry of solar and wind into the system. There are a number of local climatic factors, the market condition and the desire of the organisation to optimise our ability to store water for when we really can actually make some decent revenue from it and provide value. At the same time, making sure we do not

lose opportunities to generate. It is always going to be somewhat more volatile. Our output is going to be more volatile than it would be typically if we were a coal-fired power station on the mainland. That is simply because we are dealing with a variable commodity much more than they are. That has been reflected in a figure of 8303 gigawatt hours for 2022-23.

**Mr BROOKSBANK** - As the chair has suggested, our generation sales are a product of both volume and price. When we have a lower generation year, regardless of the price that will always have a negative impact on the volume of our revenue. I will ask Mr Peters to talk through the rest of the detail.

**Mr PETERS** - A lot of the downturn in revenue sales for the year was driven by our retailer in Victoria. While Momentum seeks to price its electricity and gas offers effectively, it is a highly competitive market. In the first quarter of the financial year, Momentum temporarily paused its proactive sales campaign for residential SMEs and CNI retail customers, withdrawing these market offers from the market for both electricity and gas. This was due to record high wholesale costs and the resulting inability to offer value for money for new Momentum customers. Momentum prudently proceeded with a staged return to the market in August 2022 for C&I customers and in October 2022 for residential and SME customers, ensuring the return aligned to long-term positive financial outcomes. I note all retailers were impacted by these difficult energy market conditions through this period. Seven retailers did not recover, exiting the market altogether.

**Mr BROOKSBANK** - Whilst Momentum withdrew from the market, that did not mean it stopped selling to existing customers, it just did not sell to new customers.

**CHAIR** - That is what I understood from what was said. Yes. It would have been a bit untidy.

**Mr BROOKSBANK** - It would have been untidy. Of course, that means that is a volume of load that you didn't win during that period that we would then be consuming in future periods within the financial year 2023 period.

CHAIR - So, this shows up in this because this is the whole parent company reporting.

Mr BROOKSBANK - Yes. That is correct.

**CHAIR** - In situations such as this - you might have touched on it a little bit - but I note the net assets were up as revenues came down a bit. How do you value assets in that sort of scenario where you have those things going on?

**Mr BROOKSBANK** - Thank you for the question. I won't take much time answering this because this is very much a CFO question and it's almost a question of how long have you got, but we will have the abridged version.

**CHAIR** - We will have the abridged version for dummies, asset evaluation for dummies. Okay?

Mr PETERS - Thank you. I guess our valuation - we have a couple of different models, one for our assets, we have a what is called a long-term price. That looks out for a

number of years where we try to model what is happening in the market, what we think is going to happen, and that includes coal retirements or wind coming in. We try to allow for that and allow for what that will do to prices.

That then feeds into what we think our generation is going to be over a longer period of time. Between those two, that feeds into getting us a net present value for what we think our assets are going to be worth into the future. If you've seen the Hydro assets over a number of years, you will see them go up and down. A lot of that is based on what we think the future generation and future prices are going to be coming out of those very complicated models.

**CHAIR** - The abridged version. Thank you. Receivables and payables were also quite high in 2021-22, the prior financial year. This is on the same page. In the last year's report, this current year, you attributed the high level to market conditions and price volatility. So, can you explain what happened in 2021-22 that led to the change in 2022-23?

**Mr BROOKSBANK** - In part, like a lot of organisations - in fact, probably all organisations - the cost of equipment, the materials they buy, is increasing. This means that the amount of debt or the amount of accounts payable, the amount of debt we owe to suppliers at the end of the current financial year would be higher, like for like, than we would have had to carry in the prior financial year.

There has also been the impact of the nature of the purchases we're buying where we're starting to buy more as well as see that cost increase. There is also that level of demand, if you like, within our organisation as well as the price we're paying for the services and equipment that we're buying. I'm sure if I pass to Mr Peters, he will have a touch more detail.

**Mr PETERS** - Thank you. A lot of our receivables and creditors are made up of what we pay to the market operator and in each of those buckets, we have about a four or a five-week period where we are owed or paying money and during the period between 2022 the prices were probably around \$300 or \$400 for electricity. In June 2023 they were down to about \$60.

CHAIR - It's a timing thing, in some respects, that it happens.

**Mr PETERS** - It's a pricing thing in the market. The quantity is probably the same, but the price has been the real driver going year on year.

**CHAIR** - I'll just go into another area, if I might, then come to you, Luke. With regard to the available energy, noting recent public comments and a mild degree of hysteria, 'not an electron to spare' and the like, who made a decision to declare that there was no more capacity available? This is perhaps to you, minister, in the first instance. When exactly was that decision made? It's probably before your time as minister.

Mr DUIGAN - I will make some commentary -

**CHAIR** - It is about who made the decision that there wasn't an electron to spare, that was probably not the decision that was it was made but that is how it was reported by some, that we haven't got enough capacity to hook up another load to provide to another entity in the state who's already here.

**Mr DUIGAN** - We are aware of the commentary, and more broadly aware of the situation as our organic on-island energy demands increase. The amount of rain that falls on the island doesn't necessarily increase commensurately with that so the amount of energy that Hydro has in its storages is, by and large, the same year on year. As we grow, sadly we aren't maximising more rainfall, and there are other generation needs to come in. As the system comes in to balance, the supply and demand equation comes into balance. It is something we will need to be more mindful of. Hydro is working with the state government to develop a framework for how Hydro Tasmania will manage requests for contracts, including firm sustainability and the best interests of the state. This is an energy contracting framework and to provide some detail around that, which is probably where the question is going, I'll hand over to the Chair and CEO.

Mr BOLT - Thank you, minister. I will make some general comments and Ian and Tim can elaborate.

**CHAIR** - The question, who made the decision in the first instance, and when? That we just don't have enough energy in the state to do what we want to do.

**Mr DUIGAN** - I would say to that, I don't think a decision like that has been made. I'm not aware of a decision that says we don't have any more energy in the state.

CHAIR - Maybe it was other people who said that.

Mr DUIGAN - I will not put words in other's mouths, but I will let the Chair make some comments.

**Mr BOLT** - I am aware of no such decision either, Chair. As in any system, you will find at any point in time, supply generally is being grown to meet the load that depends on it and most systems don't tend to grow very large surpluses but they grow with demand.

As I said earlier, the opportunity for Tasmania to grow to meet an electrifying economy and so forth is something that Hydro is supporting. In the meantime, we have to prioritise and allocate the energy that is available and the firming services that are available according to what we've got to a reasonable and appropriate way to the demand that is there. We have published an energy prioritisation statement and are seeking to get authorisation for a framework which will ensure that while future growth is being developed, that we can make appropriate decisions about how what we now have can be allocated to new demands that come upon us.

CHAIR - So, is there spare capacity in the system at the moment?

**Mr BOLT** - There is limited spare capacity, but I make the point again, there is a lot more capacity that could become available as current development plans are developed and we would aim to support that. But right at the moment, as I said earlier, there is always going to be a ratcheting of supply with demand and so we're in the world of ensuring that we both use our resources appropriately and contribute to growth. Perhaps Ian can elaborate.

**Mr BROOKSBANK** - Thank you. With respect to the question about who made the decision, I'm just looking at some statistics over time. Demand in Tasmania has always been quite flat, but in the last few years, the last 10 or 15 years, it has started to grow a little, such that total demand in Tasmania in the last financial year was actually just over 11 000 gigawatt hours of demand. As mentioned, Hydro Tasmania receives about 9000 gigawatt hours of energy a year in the form of rain. That's a pretty static number. We receive 75 per cent of that rain between May and October each year, the balance of the year is the balance of that 25 per cent. Pardon the answer, but this is to the context of the capacity that's available - what we've seen with the effect of carbon on climate change, or the climate change we're seeing, is that whilst there's been a slight fall in the total volume of rainfall and therefore energy we receive year on year, and it is very marginal, but over a long period of time it's there - what we're seeing is high fluctuation in which months we're receiving rain. For example, last year, July - which should be one of our wetter months - was one of the driest Julys on record. August, however, was one of the wettest on record. As we know, by October/November, we were having floods and the like.

When we say there is a level of capacity available, I would describe it as seasonal, more so than 24/7, 365 days a year. Imagine a period where it's extremely windy and Tasmanian demand is low - because whilst it might be windy it might not be particularly cold, and we're essentially a winter heating demand-driven economy rather than an air conditioning economy. In a period where you've got lots of wind generation and low demand in the state, and our water reserves are high, then there is excess capacity in the system. But if you imagine a period where there's no wind, high demand, and you're in a situation where you might be managing water or you're maxed out on your generation, there will be less capacity and maybe no capacity.

Traditionally, the system is about balanced with small, net import or export over Basslink, depending on the nature of each year. Yes, there is capacity; but it's not something that you would rely on, in the sense that you would sell all of it for 100 per cent per year.

CHAIR - I'm not suggesting that.

Mr BROOKSBANK - No, I understand that.

**CHAIR** - But there is the AETV [Aurora Energy (Tamar Valley) 4:27:23] that we own, still in the mix, hardly used at all, when you look at the generation from gas. I acknowledge that it's not 100 per cent renewable energy, but if we're buying it across Basslink, that's not either; in fact it's probably less renewable than the gas. Why aren't we utilising that to assist these customers in the shorter term until more renewables are in the system? Is that a decision that's been made?

**Mr BROOKSBANK** - The Tamar Valley Power Station is a combination of two types of gas stations. There's a combined cycle stream, which is more suited to base load generation; and there's open cycle, which would be much more suited to filling in a gap when there's low wind, for example. Yes, the asset exists, and in total its capacity is roughly 300-and-a-bit megawatts. But, it is gas generating, it is a gas-fired power station, so it clearly has a cost of production that's considerably above the cost of production of either our hydro fleet, the wind that's in the system, and would, in most cases, be well and truly above the cost of imports.

If you think about a gigajoule of gas as a conversion ratio - 1 gigajoule of gas, if it costs you \$10 a gigajoule, is going to equate to north of \$100 a megawatt hour of generation. Yes - the gas-fired power station is a source of energy, but in reality, unless you're the Torrens Island Power Station in South Australia -[CHECKED] which was the dominant generator in the state and there for base load - gas is really for that firming role because the expense is so much that it's not economical to run unless the market price is covering the cost of gas. If you're a consumer on the other side of that transaction, then you're going to be paying a lot of money for the energy produced through a gas-fired power station.

CHAIR - Do we still have a take-or-pay contract there?

**Mr BROOKSBANK** - No. We have a contract for the haulage - the access to the pipeline - but in terms of the gas, no, we don't have a contract over the molecules. We've found that the cost of forward-buying gas, particularly with some of the changes that the federal government has made around gas caps et cetera, it's extremely hard to source a gas contract that comes in at a price that would make economic sense at the moment, for a generation facility like Tamar Valley.

**CHAIR** - It must have been before Hydro took over AETV; perhaps when Aurora had the 'take or pay' contract that also had gas going to Bairnsdale Hospital. Maybe that disappeared at the time, did it?

**Mr BROOKSBANK** - I don't know so much about that. I think we had a gas 'take or pay' contract five, seven years ago?

Mr PETERS - Four or five years ago.

Mr BROOKSBANK - Four or five years ago would have been when we ended that.

**Mr PETERS** - You had a question about the SOCI [?TBC 4:41:05] - we have an answer to that. The 75 per cent was due to three projects: Lake Echo, Categonia [?TBC 4:41:15]and Trevallyn. These are major refurbishments and sometimes when you open these things up. it's the first time they've been opened up in 50 years and you find things that you are not expecting.

CHAIR - Like renovating an old house.

**Mr PETERS** - A little bit, yes. There was a little bit of delay also caused from suppliers due to latent COVID-19 issues as well that caused them to be delayed in being finished.

**CHAIR** - On the basis of the discussion we have just had, what is Hydro Tasmania doing to make more energy available, noting we have had 3-500 megawatts of electricity available over the past recent years, even in times of variable rainfall. Every year we are constrained, how often has the AETV been used to fill the gap and what else is being done to try and increase the availability, or capacity?

**Mr BOLT -** I re-emphasise, chair, that our core role is to use the assets that only we can develop to enable the growth of the wider supply system in Tasmania, which can come from wind and solar, actual energy production and also from interconnection. Yes, there is the ability for us to increase the capacity of our existing power stations through some refurbishment; but the amount of energy available to generate from those is still limited by the fact that we have only so many dams and storages and no plans or real licence to increase that. What we can do - firstly, through Tarraleah and Cethana; all subject to further development, all subject to various preconditions and approvals, they would provide the opportunity for us to greatly support the growth of supply in Tasmania over the medium term by firming up wind and solar in conjunction with the availability of supplies through interconnection. That is really our core contribution.

**Mr DUIGAN** - From a Government perspective, having a renewable energy target that sets out a 150 per cent as at 2030 and 200 per cent at 2040, and getting on with progressing things like Marinus Link which will have a profound impact on bringing on new sources of generation which will allow us to maximise the benefits we are able to get from our deep storage capability through Hydro Tasmania.

**Mr BROOKSBANK** - I draw the committee's attention to page 104 of our annual report, which describes - about half-way down - the energy generation by asset. You will see leading up until 2019 the volume of gas generated from the thermal was a lot more. Around March 2019 is the last time the combined cycle unit ran. It's the last time that station ran for the purposes of megawatt hours - that is, supplying energy. Since then, the combined cycle has been in a state of dry storage, if you like; able to be recalled with some time and that's registered through AEMA's service for that or their system for that. We would run the open cycle gas turbines when there was a commercial opportunity to do so, i.e. the cost of gas was cheaper than the value for energy we could generate. We would run it as a means of ensuring that we can still run it, so for maintenance reasons and the like, and then very occasionally it does allow us to provide some systems stability into the Tasmanian network but it's very much being run for purposes other than the supply of energy into Tasmania.

**CHAIR** - The gas that was utilised last financial year, that's 71 gigawatt hours, was that all used as firming or was some of that used for generation as such.

**Mr BROOKSBANK** - It would be a combination of that because in reality the cheapest source of firming in Tasmania is the Hydro system, not the Tamar Valley Power Station.

CHAIR - Why would you use Tamar Valley for firming when you've got Hydro?

**Mr BROOKSBANK** - I was referring to traditionally, in the Australian energy market, that's what the gas stations have been used for and that's why I referenced Torrens Island station. In Tasmania, that's not what Tamar Valley would be used for.

CHAIR - We don't use Tamar Valley for that, is that what you are saying?

**Mr BROOKSBANK** - No, it wouldn't be used for firming, no, but it would be used for system stability and for the ability to just manage a price differential or take advantage of a price differential between gas and the energy you could generate from that gas.

**Mr EDMUNDS** - You talked about - when it came to generation - you had no plans or license to increase that, what do you mean by license?

**Mr BOLT** - Simply to build additional dams and create additional storages. It's not something that I can put it on the radar or within our policy bring it to do.

**Mr EDMUNDS** - On that front, are there any plans for the upgrade or renewal of the turbines at Woolnorth?

**Mr BOLT** - A good question that I should refer to Ian, who is on the board of Woolnorth JV.

**Mr BROOKSBANK** - As you know, the Woolnorth JV is just that, it's a joint venture. I am on the board, I'm the chair of the joint venture actually. What we have charged the local management team with is what are the options for repowering or refurbishing the three windfarms that we have. Their age is relatively old, in fact, I think they're some of the oldest still operating wind turbines in Australia. We need to understand what it would take to upgrade those, to repower them, i.e. to get more megawatt hours of energy out of the existing footprint, because obviously the turbines themselves would need to be replaced. Like all windfarm projects in the country, that entails not just a design study and EPBC and the like, but in our case, it also entails a different positioning of where those turbines would be if we were to go to bigger turbines because then the wind map would help tell us where we'd need to do.

The long and the short of it is that the local Woolnorth team have a task from the board to identify what the redevelopment, repurposing pathway is for the Woolnorth assets. Bring that back to us at a point sometime early to mid-next year and then we are able to determine what the correct pathway is. I would flag that we are not the only organisation in the world faced with this challenge and the suppliers of the turbines have got a full order book.

CHAIR - At a tidy price, I reckon?

**Mr BROOKSBANK** - Yes, absolutely. Also, though, because we have relatively small turbines in that fleet, the newer turbines - whilst they're larger - they obviously have a greater capacity. What we're looking at is not just what it takes to like-for-like, which does not contribute to the growing need for generation in Tasmania, but it at least protects what we've got, versus what would the greater output would be. With that would come the need for some network strengthening for our wind farms. It triggers a social and community engagement obligation because there is essentially a new wind farm being built even if it's on the same footprint. We are not at that stage yet. The very first stage is that the board needs to be comfortable that there is something there that is valuable.

**Mr EDMUNDS** - What you say about basically building a new wind farm, will that require a new development application?

**Mr BROOKSBANK** - We have a number of opportunities, there are a number of different alternatives. We have the three wind farms. The answer is that yes, depending on

the size of the change there would be a need for new approvals. If we were to expand the footprint from the existing land coverage that we have, then absolutely.

**Mr EDMUNDS** - Would you think that that might be something that could go through Major Projects rather than the local clearing authority? How would you approach that?

**Mr BROOKSBANK** - We haven't got to that stage yet in the process. It's a relatively recent request of the board to the local management team. Also remembering that this is a joint venture, so we have a joint venture partner that we're engaging in the process as well.

**Mr EDMUNDS** - In terms of risk, has there been highlighted risks to the program in light of what has happened with Robbins Island and the conditions given to that 'approval'?

**Mr BROOKSBANK** - Yes, like all wind farm proponents in the country, let alone Tasmania, we are very aware of the Robbins Island development and the court case processes that it is going through at the moment. The wind farms that are relatively close to Robbins Island, you would imagine, will be impacted by the same sorts of conditions. To be truthful, we haven't got to that stage yet to understand whether the parrot flies through our area as well. That is all part of the program ahead.

**CHAIR** - Are they all working at the moment? The turbines down at [4.53.02] Bay and Woolnorth Wind Farm?

**Mr BROOKSBANK** - No, not all of them are working. We've had a recent fire in one of them, so it's a little out of action at the moment. As I say, these are some of the older wind turbines in the country, so they're starting to see the reliability issues starting to come through.

**Mr EDMUNDS** - There are a few people at this table and I'm sure in other trips got to visit Tarraleah and Lake Cethana recently. Has there been any impact on those projects from the decision to stage the Marinus Project? It was a nice visit.

Mr BOLT - We are glad you enjoyed it.

**Mr EDMUNDS** - Your workforce were very good in the way that they took us around. Is there any impact on those projects from the decision to stage the Marinus Project?

**Mr BOLT -** In the case of Tarraleah, no. Tarraleah is a nexus with Marinus Link 1, and Marinus Link 1 was given impetus by the recent agreement. Marinus Link 2 and Cethana have a nexus, and they would be co-developed, but there will come a decision time for whether to proceed with Marinus Link 2, and we will continue to prudently develop Cethana. That is viable to be considered as a potential adjunct to Marinus Link 2.

Mr EDMUNDS - It does require stage two?

**Mr BOLT -** That's our thinking at the moment, however we also will be looking at the benefits of some version of Cethana in the hypothetical situation that Marinus 2 doesn't occur, because the state will still need firming for its growing demand and the growing supply of wind and solar on-island. We haven't really addressed that issue to the point where we can

give you a definitive answer, but that is what we're looking at. I don't know if the CEO wishes to add anything to that.

**Mr BROOKSBANK** - The Chair is right. Tarraleah isn't impacted by the decision. Cethana is, as we mentioned earlier, with the state energy system in balance and the likely new generation to be coming from a variable source, such as wind, then the firming capacity in the state will need to be lifted to help support that variable renewable generation. If you have only one of the two Marinus interconnectors built, then you've got less reliance on the mainland for some of that firming. The Woolnorth board is asking the Woolnorth team to understand what refurbishing and repowering the Woolnorth assets would look like, we internally are looking at what alternative plant makeup, sizes et cetera for Cethana might look like to support new variable wind on-island.

I might also add that as you would have realised and no doubt we would have banged on about when you were in at Tarraleah, that is a station that was commissioned in 1938 and whilst it's not the oldest station in our fleet, it is certainly not the youngest. In fact, the youngest of our stations is still 1990s vintage. So, we're going through a refurbishment along the west coast of Tasmania, along a number of those assets, so they're up for what you might term a mid-life refit so because they are of a vintage there are modern turbines, runners, et cetera that are available. We can squeeze a little bit more capacity and efficiency out of the same amount of water when we go through those upgrades.

Whilst Cethana is part of the solution for more firming in Tasmania, so is the refurbishment of some of our existing assets. As we mentioned earlier, Tarraleah would increase our megawatt hours output - the energy output - but it also adds 100 megawatts of capacity. We turn Tarraleah from a very base load station where we've got a 20-plus kilometre open canal and it takes four hours to change the amount of generation coming out of the asset because of the time it takes for the water to travel, by redeveloping the Tarraleah station as the way we want to, subject to a positive investment case.

With the board, and ultimately the government and parliament approving, we will turn that asset into something that is much more flexible, much more dispatchable and therefore much more able to support variable renewable with firming. That's an asset that already exists within our fleet although when you look at it in 10 years' time it will look nothing like what you saw today because it will be a brand new asset. They are all of the solutions that Hydro Tasmania is looking at to ensure that there is that ability to firm variable renewables when the time comes.

**Mr EDMUNDS** - Those projects are more looking at topping up Tasmanian supply that we currently have rather than opening up new development opportunities? Is that a fair way to put it?

Mr BOLT - It goes back to the earlier point -

Mr EDMUNDS - I'm just reading a fact sheet about it as well.

**Mr BOLT** - Because it can complement other developments, not so much ours, the wind and solar developments, then it enables the growth of an energy source as well. That is the point about the firming. It enables growth of supply under other developments.

Mr EDMUNDS - So it can plug the gaps when, say, we get more wind or -

Mr BOLT - Yes.

**Mr DUIGAN** - And an important part of all this, the cheapest form of renewable electricity is wind and solar. As much as we love our hydro assets, they are of an age and they do require substantial investment to keep them up and going and we will see that in coming years. The ability to firm those new renewables is the absolute value of Hydro Tasmania.

**CHAIR** - Can I just take that comment minister, in terms of the costs, you said renewables are cheapest. I've listened to some podcast and read some stuff and commentary in this pace, particularly in regard to costs related to this, Battery of the Nation and projects. This can work either way with your portfolio, we could have asked you in TasNetworks, but I'm asking here. Projects like that may stack up, you seem to treat Marinus Link in that case and North West Transmission Developments, which is the network that connects our generators, as a sunk cost. In other words, you don't consider the cost of Marinus Link and the North West Transmission costs when deciding if the Battery of the Nation is a goer, because Marinus Link is taken as a given in assessing the costs.

On the other hand, when you're discussing whether or not to go ahead with Marinus Link you treat Battery of the Nation as a sunk cost, it's like a chicken and egg type of thing. On that in your response to both the generation and the transmission assets as the minister, how do you resolve the conundrum of sunk costs when you look at generation pros or you assume that transmission required as a sunk cost, when you look at the transmission proposal you assume the generation is a sunk cost.

**Mr DUIGAN** - To that I would say don't assume anything, do the numbers because ultimately, they will bear themselves out in people's electricity bills. That's what we need to be very alive to. I think the point you make on assumptions on Marinus Link and the North West Transmission Developments, what we need to do is a whole of state business case where we look at this in some granular detail and all of the costs that are involved. Get a good a grasp on those costs as we're able to do and as we approach that milestone of FYD, understand what we are presenting to the people.

**CHAIR** - When we're looking at the cost of renewables, you made the comment renewables like wind and solar, the cheapest forms of electricity. That is after they're built, because you don't have import costs like gas or coal, other things to actually generate. Once the wind blows the wind blows, the sun shines, we don't pay for those as such. The sunk cost is the bit you assume is there to make the generation of that electricity cheap because you don't count the cost of the network. This has to come from faraway places, there's a lot of cost in getting the wind turbine to where it needs to be.

Mr DUIGAN - Yes, absolutely and there is the cost of transmission in any form of generation.

**CHAIR** - But that's not counted when you talk about the cheapness. If you counted all that it wouldn't be that cheap.

**Mr DUIGAN** - To flesh out whether it is the cheapest or not, the cheapest, we have Hydro at the table who are I suspect have looked at these numbers and would have something to say in this area. I'll throw to the CEO.

**CHAIR** - Is wind the cheapest if you count the Marinus Link costs and the North West Transmission Developments costs?

**Mr BOLT** - Just as a general comment and I'm accepting this is a broader matter than Hydro.

CHAIR - That's why I asked the minister who is responsible for everything.

**Mr BOLT** - Of course, you have to look at total system costs, but then what is an alternative that would be cheaper in a state with a growing electricity demand. Most new sources will require a large capital spend, many of them will require a network build and I'm not sure what alternatives there would be.

**CHAIR** - I'm asking where you count the cost, every side wants to treat the middle bit as the sunk cost.

**Mr BOLT** - From our point of view, clearly, we would look at our costs and would look to make those as efficient as possible and contribute to the lowest possible system costs. But you are right to say the total of cost equation, the total business case the minister refers to is bigger issue than Hydro Tasmania. I do not know if the CEO wants to add to that.

**Mr BROOKSBANK** - Only to say that in pecking order, solar is the cheapest form of new build energy, then wind. The transmission that's needed, is needed whether you build wind, solar or hydro and that's the same across the country. The advantage I would say Tasmania has over many of the other places, is that in a state like New South Wales the majority of the development is individual organisations, the AGL's, Origins, Transgrids of the world. They each do their analysis based on what that means, what that project means for their organisation in a financial sense. In Tasmania - the minister has eluded to it - the whole of state model allows the very question you are asking Chair to be answered, because it will include what is the cost of building and generating new Hydro. It will include the cost of what it is for a transmission system upgrade.

CHAIR - To get the generation to the people.

**Mr BROOKSBANK** - To get the generation to the people, exactly. There is this ability to model at a state level. It is true when we are looking at what we are doing, we are looking at the cost of delivery of energy to the network from whether its Tarraleah, Cethana or our existing fleet. But there is this opportunity to see the whole picture.

**CHAIR** - We need to, as consumers and the Tasmanians who will end up paying really expect to see the whole picture.

Mr DUIGAN - What the Government is doing in terms of renewable energies zones will be important in that regard, in how we coordinate all this new build to be in the right

place to deliver the community benefits it needs to do and to be stood up at the least cost possible to the end user.

**CHAIR** - To Basslink if anyone else wants to go there. We now have a new NSA agreement - the community will get grumpy with me for using all the acronyms. The network services agreement. Can you explain how it worked for you in 2022-23 and as far as its impact on Hydro Tasmania's financial position?

**Mr BROOKSBANK** - Yes, we do have a networks services agreement in place with Australian Pipeline Association. They are an Australian organisation listed on the Australian stock exchange. The network services agreement is a different agreement to the Basslink Services Agreement that was with the BSA, not to be confused with a motorbike. It does retain a number of the same features. There is a facility fee, there is the same -

#### CHAIR - BFF.

**Mr BROOKSBANK** - That's right. That hearing really has helped. The network services agreement retains a number of the features that existed within the BSA. It has obviously struck in a different negotiation process. I know that it is annoying to hear some of those commercial in confidence discussions. But there are parts of the original BSA that are not on the network services agreement so we've been able to arrive at an agreement different in a number of respects, that is both suitable for the Australian Pipeline Association and ourselves. In summary, the NSA provides a complete reset as a commercial arrangement between ourselves. Basslink Pty Ltd still exists, it is actually with BPL. Some of the features of the terminated BSA have survived or were carried forward. It did, through negotiation of the NSA, we have been able to with APA - this is really getting quite silly - have been able to arrive at an agreement both organisations are very comfortable with.

The other thing through the NSA we have with the new counter-party is they are an organisation with the ability to invest in the asset. They have been able to do some of the engineering fixes, some of the fault ride throughs, et cetera. We've ended up with an asset we have seen improvement in its operating capability and we know APA are keen on continuing that. Yes, NSA exists, retains some of the features, lost some of the features, end result, I think, is an absolute win for Hydro.

CHAIR - In terms of the financial impact or benefit to Hydro, in dollar terms?

**Mr BROOKSBANK** - Remembering that the NSA gives us access to the link itself, so the value to Hydro, in a negative sense, is that we pay the fee. In the positive sense, we get the inter-regional revenues and those are certainly part of the value that goes into our organisation. I'm not at liberty to describe the exact split-up of those values, suffice to say that, in the context of relative performance, year on year, we are certainly better off now than we were a couple of years ago.

**CHAIR** - We know that APA is on the pathway to creating a regulated link. When that happens, assuming it does - and I know there's a process they're in at the moment - what will that mean for Hydro Tasmania then? You'll lose the inter-regional revenues, so how will that impact Hydro Tasmania?

**Mr BROOKSBANK** - You are correct, APA has applied to the Australian Energy Regulator, the AER, in 23 May, to regulate Basslink. It would be known as a prescribed transmission service. In September this year, they submitted their proposal, including the regulatory asset base and cost allocation, which goes to the answer to your question in part. It is not a process that we are involved in. Hydro Tasmania is a bystander, but quite interested in it.

For context and timing, we believe the AER is expected to deliver a draft decision in March next year, March 2024, with a final decision due in December 2025. I can't provide a position on what the likely outcomes are for that regulatory process. For example, the submission and the allocation mix that APA put forward, the likelihood of what APA have submitted is something I can't opine on. Just to correct the record, I might have said December 2025 for the final decision. It is actually December 2024 for the final decision.

What will happen for Hydro? We're party to the NSA. It would terminate upon regulation, so we would then not have access to the inter-regional revenues by a stint of the agreement, but we also wouldn't have a facility fee to pay. The Basslink is the only market link in the NEM and probably one of the only ones in the world, so with all the other interconnectors in Australia, there is an auction process that AEMO runs. That enables organisations to bid for those revenues. If you win the bid, you win a certain amount of capacity, and then effectively, if you were able to bid and win the lot, and you got them at roughly the same amount of money that we were paying for the facility fee, then you'd be roughly the same as you would've been.

In reality, it's an open auction process, so the chances of any one counterparty winning all of those auctions is pretty limited. What it means internally, for us, is that whilst a regulated interconnector is a thing that exists throughout the country, our organisation hasn't participated in that market in that same way, but thankfully, it's not complex in the sense that our trading team are extremely clever at what they do and complexity is their bread and butter. We've already figured out how we participate in that new market.

In terms of the proposal itself, from APA, as I say, we're not in a position to opine on how successful that will be or otherwise, but are certainly looking forward to seeing the outcome.

**Mr DUIGAN** - Certainly, from a government perspective, we would absolutely like to have on the record that we welcome APA's investment in Basslink. I think the benefits to Tasmania of having a company of APA's stature running Basslink is already evident. As the CEO was saying, within a handful of months of owning the link, APA has resolved the long-standing technical issue that will see the link withstand short-term faults on the Tasmanian network, which is a benefit to our major customers and Tasmanian generators. The decision to seek regulation is a matter for APA. This is the only unregulated interconnector on the network.

I would like to have on the record is the foundation principle of the government that it has set out for, Basslink's conversion is that it is delivered. If that is a successful conversion having regard for the best interests of Tasmanian consumers, including by achieving a transmission cost allocation outcome to Tasmania that is minimised and no more than the

benefits that the Tasmanian customers receive. At this point Hydro Tasmania and Tasmania more generally have borne the cost of the asset.

**Mr BROOKSBANK** - It is not my night or evening for dates, I'm afraid. The draft decision by the AER is actually June 2024, not March 2024, as I have previously stated.

**CHAIR** - At least you are correcting them as you go. I hear the commercial sensitivity but in terms of the inter-regional revenues, if you go to page 59, note 18, where it refers down the bottom to Basslink financial assets and liabilities. If we look at the current liability, it is \$63 million roughly, and the current asset is \$56 million. Does that mean you expect to make enough inter-regional revenues to pay the Basslink fee, with a bit left over potentially, or not?

Mr BROOKSBANK - I will pass that across to Mr Peters.

**Mr PETERS** - The thing to take into account with those numbers is the network service fee, we are able to work out what a present value that is but in regard to the inter-regional revenues, they are at a point in time. So, like any other valuations in the Hydro accounts, as of that point in time on that day, it is right. If I did that valuation on 1 July, that number would move, if that makes sense. We are taking numbers and forecasting them into the future, based on a price curve. That price curve will change within five minutes, let alone the next day. If you looked at those two numbers, what you have said is actually correct. Is that what is going to eventuate over the course of 12 months? No.

**CHAIR** - Is there an expectation that the inter-regional revenues will effectively cover the cost of the NSA? Or the fee that you pay to access the link?

Mr PETERS - Ideally, the inter-regional revenues will more than offset what we pay for that facility fee, yes.

**CHAIR** - That was the question, in broad terms. Looking at the old BFFS, which is the facility fee swap, which did not die with the new agreement with APA. Is that now called Treasury derivatives? Is that how it is recorded in the financials, because it is not clear to me?

**Mr PETERS -** We have reclassified it now to just an interest rate swap, as opposed to relating to Basslink. I need to find the exact wording but we have moved it out of what was the BFFS in the previous year. It is a reclassification because that old agreement does not exist.

CHAIR - But it's still a cost to Hydro for the length of the original contract, isn't it?

**Mr PETERS** - We have an agreement where we'll continue to pay out the option into the future. As far as the cost, we're still wearing the cost, we're not necessarily representing it through a trading margin as there's nothing for it to physically relate to. There is a cost for us there that we offset if we can. When the agreement was terminated we entered into an equal and opposite agreement with TasCorp to try and offset any movements in that.

**CHAIR** - When we go to page 40, the treasury derivatives there, do they pick up the movements in this, the offsetting arrangements?

**Mr PETERS** - The original facility fee was there to offset any movements in the Bass Link agreement. When that was terminated we entered into another agreement to try and neutralize the impacts of that. When we do have those movements in prices, ideally, they offset each other, and a lot of the valuations in Hydro are fair value are at the end of the year at any point in time. I'm not sure if I have actually answered your question though.

**CHAIR** - If we go to page 71 then, we're looking at the interest rates swaps. In the next 12 months, over \$43 million will be interest on swap payments are expected to be paid. How much of this relates to the former Bass Link, the FFS?

Mr PETERS - We will take it on notice, if that's okay.

CHAIR - That still has eight years to run, as I understand it?

Mr PETERS - I think so.

CHAIR - Do your math.

Mr BROOKSBANK - There are dates involved.

**CHAIR** - I was just going to go to onerous contracts. Page 101, there's a reference to the Granville Harbour Wind Farm there, and it was stated there was no cost to Hydro Tasmania. I assume this relates to the power purchase agreement? I am just interested whether that is still considered an onerous contract, the one with Granville Harbour?

**Mr BROOKSBANK** - I will briefly touch on that and then let Mr Peters talk to it further. As we have outlined, the way we value things is very dependent upon the forward price of the commodity, in our case of electricity, in the case of a windfarm it's electricity and the large-scale generation certificates that are attributable to that generation. It is possible for a contract to be onerous and not onerous and onerous again during the life of that contract based on what the forward price curves are doing each time you value it. As we have to value it at a point in time, being the 30<sup>th</sup> of June each year, it is possible for it to wax and wane between 'onerous-ity' and not.

CHAIR - 'Onerous-ity'? Put that one down in your new book of words.

Mr PETERS - As of 30 June 2023, the Granville Harbour PPA was not onerous.

**CHAIR** - It's reflected in table on page 40, I assume, there's zero onerous contracts there. Is this entirely Granville Wind Farm? The \$27 million in 2022. Page 40. The onerous contracts line there under fair value losses in 2022 there was \$27.5 million in onerous contracts, this year there's none, and when I read that Granville Harbour was zero, does that mean that the only onerous contract that you might have now is Granville Harbour Wind Farm when it's having a bad year?

**Mr PETERS** - The onerous contracts we have are for some of our LGC contracts and also for some of our AV Gas contracts. Granville Harbour is not the only onerous contract that we have in that particular year. We've had positive movements, part of those positive movements have made Granville Harbour not onerous during that year.

**CHAIR** - In that case, the other onerous contracts that have existed in the past, like in 2022, the \$27.5 million worth of onerous contracts, this year is zero, that's in the consolidated accounts. The parent company is zero-zero. Does that mean that all those others?

**Mr PETERS -** I think you'll find if you look up the page a bit there's a fair value gains called onerous contracts. In 2022, there was an onerous contract loss and in 2023 there was a gain on those contracts.

**CHAIR** - Going back to the LGC situation, I did hear Minister Bowen on the radio this morning, I didn't hear all of his comments sadly though because I didn't turn it on at the right time, but I also just read, I think this is out of Renewable Economy yesterday about 'Bowen dumps RET 32 gigawatt of options in massive policy shift to supercharge renewables.' You referred to this a bit earlier minister in the other hearing with Tas Networks. In terms of the market for LGCs, it's been quite a profitable arrangement. Eventually, they'll end up with zero value or it will all disappear.

What's the view of yourself minister, but particularly of Hydro, the impact of this new approach? Do we actually understand what it's going to look like, because I don't really understand because it's a bit outside my ball park as well? Maybe yours, so early in the day too minister. What will it mean, are we looking at a whole new scheme? I thought we were moving away from the renewable energy target approach but it seems maybe not. What does this mean for Hydro?

**Mr DUIGAN** - Thank you Chair. I will just quickly go through as you rightly point out, seven weeks in and LGC's and REGOs - there are some complexities in the space.

CHAIR - And rapidly changing at the moment.

**Mr DUIGAN** - Yes. There are some movements as we potentially move out of LGC's and into REGOs, which are renewable energy guarantees of origin, as I understand it.

CHAIR - Is that the same as Australian carbon credit units?

Mr DUIGAN - Not as I understand it.

**Mr BOLT -** I think there is quite a few different questions going on at once. I'd like to clarify the particular answer to ACCU's and REGOs. It's a straight technical answer, but they are different but maybe we can explain how they would be different then we might come back to the capacity.

**Mr DUIGAN** - I am happy to in the first instance provide some detail there. The Australian Government is developing a Guarantee of Origin Certificate Scheme to track and verify omissions associated with hydrogen and renewable electricity. As currently proposed, the scheme has the potential to assist a wide range of Tasmanian producers to demonstrate their green credentials, which I think would be very welcome by many.

The Tasmanian Government is closely monitoring the scheme's development to ensure it meets Tasmania's needs in a robust and internationally accepted method of tracking and

verifying green hydrogen and renewable electricity is essential if Tasmania's competitive advantage in renewable energy is to be fully realised. As I'm sure you would be aware, there is some detail to be worked out about whether these are above the line or below the line.

**CHAIR** - Would it apply to new generators as opposed to new generation? Generation is new as soon as you generate; but would it apply to new entrants into the generation space or does it apply to existing generators as they generate?

**Mr DUIGAN** - As currently proposed, the guarantee of origin scheme is likely to meet Tasmania's need for a mechanism that allows tracing of pre-renewable energy target or below baseline renewable energy. Most of Tasmania's hydroelectricity generation capacity predates the introduction of the RET and is therefore treated as below baseline, meaning that it does not currently attract renewable energy certificates which can be traded as a form of renewable energy currency.

CHAIR - So, it won't help Hydro.

**Mr DUIGAN** - Well, the development of the new scheme will help Hydro - and I should say that it is currently a scheme that is being developed -

CHAIR - A work in progress. Yes.

Mr DUIGAN - It is not, by any means, a finished product.

**Mr BOLT** - Thank you, minister. It's probably because there are some technicalities and the scheme is not yet designed and there are counter-views, shall we say, about how much we would benefit from this, and that is still being debated and decided. The answer is we don't quite know what we should get from this. It might be helpful for Ian or Tim to elaborate on that.

**Mr DUIGAN** - It may also be somewhat speculative, so I don't know how interested you are to wade into that space.

**CHAIR** - I'm interested in, understanding more about it, as much as we can. From this side of the table, we don't really know anything about it.

**Mr BROOKSBANK** - Not many of us do know a lot about it. I sat in on a 9.00 a.m. conference call to hear from the Clean Energy Council their current views of the scheme. A bunch of questions from CEOs around the country were very similar to the ones you're asking. What I can say about what was announced today is that we think, from a Hydro Tasmania perspective and therefore for Tasmania, that it is a good thing. It's a capacity investment scheme. The majority of the Hydro Tasmania generation from the hydro system doesn't attract an LGC. It is below baseline, that is, it existed before the scheme was put in place.

The renewable energy target, or the RET as it currently stands, hasn't been scrapped, per se. It just won't be extended or expanded beyond the 2030 date that it was due to expire. It will still exist but, under what we understand Minister Bowen's announcement this morning was, it doesn't look like the RET will live beyond 2030. We do welcome the announcement.

It will enable longer-term transition to the cleaner energy sources. It's designed to under-write investment in capacity. That's exactly, from my perspective, what Cethana is, for example.

CHAIR - So Cethana would qualify even though it's an existing asset?

**Mr BROOKSBANK** - As I sit here today, I am no more educated than anybody else, so I would hope so, would be the way I would describe it. There's a lot of work to be done to understand what the mechanics of it are. The other parts to the question - a renewable energy guarantee of origin is an attribution to a product; by that, think a major industrial customer in Tasmania who is exporting their product. By attaching REGOs to their products, they will be able to attest that through the value chain of producing their product, their energy source, in this example, is coming from a green renewable source, that is, our wind farms in the state and Hydro Tasmania.

An ACCU, Australian carbon credit units, is more a unit you derive from abating a carbon emission that you have in your process, whatever your process happens to be. They are different things. At the very macro level, if REGOs pan out the way they seem, will be good for carbon-intensive export exposed organisations that have access to renewable energy sources, like Tasmania. The CIS announcement today is far too soon to really understand; but from my perspective we think it will be a good thing.

CHAIR - CIS being?

Mr BROOKSBANK - Capacity Investment Scheme.

**Mr DUIGAN** - From a State Government perspective we have provided a submission on the subject of REGOs. Our position is strenuously argued that we would like the best outcome for Tasmania, and that is including below baseline generation to recognise that products built and made in Tasmania from Hydro -

CHAIR - Otherwise you are ignoring those sunk costs from many years ago.

**Mr DUIGAN** - Indeed you are. That is our position, that we would like to see Hydro power, whenever it was built, recognised in that scheme.

**CHAIR** - It might be a little bit difficult to convince certain people. If the intention of it is to encourage new renewables to be built, it becomes the question of whether Cethana is new or old, or new-on-old. It would be interesting to watch that space.

**Mr BROOKSBANK** - What we do understand from the announcement is it is development from today onwards. Cethana has not reached financial investment decision. In reality there is no decision, in that context, to build Cethana. With all the caveats that come from a recent announcement on the morning of a very busy day, we would see this as an opportunity for Cethana, as we also would think Tarraleah, to be captured by the proposed CIS. But there is a lot of water under the bridge and detail to be sorted out.

**CHAIR** - Into the dam.

#### Mr BROOKSBANK - Yes, pardon my pun.

**Mr BOLT -** Because the capacity investment scheme is now being expanded, but it had already been announced, we have identified that we would strenuously explore the opportunity to gain some benefit from the CIS to those projects; without knowing what the answer would be. It is on our radar.

**Mr EDMUNDS** - What is Hydro doing to address concerns about the Maugean skate in Macquarie Harbour?

**Mr BOLT** - As a general comment, while Ian is calling up the detail, we are well-engaged in the processes to understand what the causes of the Maugean skate's population decline in Macquarie Harbour have been, and what role we might play in mitigating those impacts. That is another issue with a lot of water to flow under that particular bridge as well, and so Ian can perhaps indicate where we are up to and what we still need to know before we know what we can do.

**Mr BROOKSBANK** - We have been involved in the Maugean skate situation for some period of time. We are very much committed to environmental sustainability in managing endangered species. We have a number of those across our fleet that have been identified, in fact rediscovered in the last decade or so, and we manage our assets accordingly.

Specifically, with regard to the Maugean skate in Macquarie Harbour, as you know the state and federal governments are coordinating action in that space. We are working with those governments as part of the Maugean skate recovery team. We know that the dissolved oxygen dynamics in the harbour are extremely complex. River flows are one factor, but we also know that weather conditions, both on and offshore, are factors. Climate change is seen to be having an impact, as well as aquaculture biomass, legacy mining runoff, and of course wastewater input.

For us specifically, the Gordon and King rivers flow into Macquarie Harbour. That means that the operation of the Gordon and John Butters power stations are contributing to the flows in those rivers. At this stage, we don't understand what impact the harbour dynamics would have on our assets.

We are working very closely with the CSIRO hydro-dynamic model, which will give all of us a better understanding of those dynamics in Macquarie Harbour. The message has been that we need to let the science inform us as to what those dynamics are and therefore what is the most obvious solutions to the Maugean Skate and its habitat. In other words, we are working extremely hard with all those people who need to be involved in that exercise.

#### Mr EDMUNDS - Who's coordinating that?

**Mr BROOKSBANK** - My understanding is it's being coordinated by a recovery team that's been established, the Maugean Skate Recovery Team, that has been established between those stakeholders.

**Mr EDMUNDS** - On termination payments, so Caroline Wykamp was given a termination benefit last financial year of \$113 000 and then two months later was given a role at Marinus Link. What was the reason for Ms Wykamp's departure from the Hydro?

**Mr BOLT** - Not having been the chair at the time, I can't say too much about the reasons for departure but simply to say that Ms Wykamp received accrued entitlements and payment in lieu of notice. That was the extent to which she was rewarded for, or remunerated, on departure.

**Mr EDMUNDS** - So that's the breakdown of the number? My next question is, what's the breakdown of the \$113 000 into its components, so that's what that is?

**Mr BOLT** - I guess I can give those figures. Her accrued annual leave was \$19 000, her super on termination was \$11 000 and payment in lieu of notice was \$83 000. There was no ex gratia payment, there was no accrued long service leave and there was nothing for redundancy.

Mr EDMUNDS - Was the organisation aware that she was going to Marinus at that time?

**Mr BOLT** - To the best of my knowledge no, I don't think there is any more to be said than that.

**Mr GAFFNEY** - It says in the report that 2022-23 was the final year of the agreement to sponsor the Hurricanes cricket. It says: Hydro Tasmania was directed to enter into a sponsorship agreement with Cricket Tasmania. Who directed you? Was it the Government? Who directs Hydro Tasmania to enter into that agreement and what's the next quite significant sum and is that going to the cricket?

**CHAIR** - Is that cricket?

**Mr BOLT** - The direction would, can only come from the Government to us, that's the only body with the power to do so.

**Mr GAFFNEY** - I thought so.

**Mr BOLT** - The exact circumstances in that case pre-date me so you'll have to forgive that it's not on the top of my mind. Again, if there's any further detail we can offer I will ask Ian or Tim to do so.

**Mr BROOKSBANK** - Page 101 of our annual report talks to the community service obligations, if you like. That's where the sponsorship of the Cricket Tasmania, Hobart Hurricanes is included. I wasn't party to the conversations that occurred to sponsor the Hurricanes, but it was a direction from government, yes.

**Mr GAFFNEY** - My question would be, that was the final year of the three-year sponsorship. Has the Government directed Hydro to sponsor the cricket again for the next three years or is there a sporting group that they have been told to sponsor?

**Mr BROOKSBANK** - No, we have not been directed to sponsor any further sporting organisation. I would note that we have continued off our own bat a small sponsorship with the Hurricanes as part of the process of moving away from them but not nearly in the magnitude of the original sponsorship.

Mr GAFFNEY - Can you say what that sponsorship is for this year?

Mr BROOKSBANK - Yes, it's \$40 000.

Mr GAFFNEY - Over the next three years or just for the one year?

Mr BROOKSBANK - Just for the one year, I believe.

**Mr GAFFNEY** - My question to the minister, has there been a discussion regarding who will sponsor now that Hydro has stepped away from that sponsorship of the Tasmanian Hurricanes? Are you aware of who's picked up that shortfall of \$260 000?

**Mr DUIGAN** - It's not a conversation that I have had. I suspect that those conversations would be had by the Minister for Sport and Recreation in terms of sports teams' sponsorship. I do understand that the shareholder ministers may give a direction to a government business enterprise to provide, perform or allow the function's service, concession that they are satisfied will not be provided or allowed if the government business enterprise were in a business in the private sector, acting in accordance with sound commercial practice. That is what it says there. As to if I have had those conversations, the answer is no.

Mr GAFFNEY - Are you worried that they may change their name?

Mr DUIGAN - I won't be speculating on matters of that nature. Thank you for the question and your interest.

**Ms LOVELL** - Minister, I had some questions about the Great Lake Walking Track. I understand there's a proponent who's wanting to develop a walking track around Great Lake but there's some difficulty - pardon the pun - in finding a pathway forward, I suppose that's the best way to put it. Does Hydro Tasmania have a formal process or policy for considering tourism proposals or proposals for tourism developments on public land in and around Hydro assets?

**Mr DUIGAN** - I will confer with my team and see if I have some of that information. If not, I'll be happy to, if you're okay with passing that to the , who I know would have information on that answer.

**Mr BROOKSBANK** - Yes, there is a proponent who's been working with both ourselves and Parks and Wildlife Service since March 2020 to look at the proposed opportunity. Advice had been provided to that proponent and their representative on several conceptual trail alignments. They're working out what is the best route that the pathway would take. That is to identify for them constraints as to where the alignment of the trail might be, including limitations on developments within the Tasmanian Wilderness World Heritage Area and other land tenures.

Hydro Tasmania is the most affected landowner of the proposed trail and has agreed to undertake the assessment of the proposed trail on behalf of the Parks and Wildlife Service. We have chosen to follow the Parks and Wildlife Reserve Activity Assessment process for the assessment of the proponent's proposal.

We and the Parks Service have provided the proponent with a request for additional information that goes into satisfying progression through that Reserve Activity Assessment process. We've also provided the community with the opportunity to provide informal feedback on the proposed project through a project-specific website. Community engagement has been undertaken through attendance at public meetings and direct engagement with stakeholders should they have requested it.

Our focus in the engagement has been to describe the process for assessment and why this needs to occur. The proponent, themselves, is yet to provide Hydro Tasmania with the necessary information to progress through the Reserve Activity Assessment.

Ms LOVELL - Are you able to share with us what that necessary information is?

**Mr BROOKSBANK** - I can yes, thank you for the question. Our request for additional information to the proponent included further development of the feasibility assessment in the business case, detailed project description plans and scopes of work, Aboriginal heritage and engagement requirements, shareholder engagement and community requirements and asset ownership and operation of the trail, should it be built.

**Ms LOVELL** - In terms of the assessment that's going to be undertaken by Hydro in this instance, is that normal business for Hydro? Is that something you would normally do or have experience in?

**Mr BROOKSBANK** - Part of your first question is our process. We have a process called unsolicited proposals and that's how something like this would come through. They come through our website, they go into a particular employee of Hydro's task list, if you'd like, to assess the unsolicited proposal. You can imagine we get quite a few of them over a year.

Some of them are quite difficult to assess. This one in particular because of its nature and because it covers roughly 105 kilometres in length, a vast majority of which 80 per cent is actually in land owned by Hydro Tasmania. We have looked at what it would require to assess such a thing and that's why we've gone with the Parks and Wildlife Service Reserve Activity Assessment Process. We can assess many things but that Reserve Activity Assessment Process is clearly the right pathway for such a development to be assessed and then, if necessary, progressed.

**Ms LOVELL** - As part of that additional information that's been asked for, and particularly the further development of the business case and feasibility, is it correct that the proponent has been advised that the project must be fully funded before a decision will be made to grant landowner consent?

**Mr BROOKSBANK** - What we've asked the proponent under the assessment pathway is to prepare a detailed feasibility study and business case that includes details on the trail's feasibility capital and operational cost, sources of funding, cost-benefit analysis, and alternatives, and market segment analysis so the demand for the trail et cetera. As I say, that is because we're using the wildlife reserve assessment activity process, they're required to do that.

The other thing that we've asked relates to the asset ownership and operation. They are required to provide us with details of the proposed ownership as well as the maintenance and operation responsibilities for the asset. Once it's built, who is going to maintain it, who is going to take whatever revenue, fees, charges, all that sort of thing.

**Mr DUIGAN** - I will add to the record, that information lines up essentially with what I have, that there is some information outstanding.

**CHAIR** - That matter was raised some time ago with me when this was first proposed. There was concern from members of the community who have shacks and live up there, mostly shacks, but about ensuring public access to the lake would not be disrupted by any private development around the perimeter of the lake. Can you provide any assurances on that?

**Mr DUIGAN** - As Mr Brooksbank was alluding to, the Great Lake Adventure Trail would be assessed as a level 3 Reserve Activity Assessment, a level 3 RAR. This level of assessment will require concept endorsement, preparation of an environmental impact statement with formal public consultation -

CHAIR - I'm talking about public access to the lake because if it goes around the lake -

**Mr DUIGAN** - I guess through all of those processes, the opportunity for people who are concerned about their access to the lake and people potentially walking or riding their bikes would have a great deal of opportunity to be involved in the process.

**Mr BROOKSBANK** - As part of what the proponent has been asked to do. They have been asked as I said to provide project description plans and scope of works. That provides the detailed plans as to the proposal trail pathway and that will help us understand where those access points to the lake would be if they were going to be there. We haven't received that. That would also detail likely ancillary and supporting infrastructures such as toilets, access tracks, campsites et cetera.

We have also asked them to undertake an assessment of potential impacts of the project on Aboriginal heritage values in accordance with processes endorsed by Aboriginal Heritage Tasmania. That will also help inform their impact on the areas around the lake and access to the lake.

With regard to stakeholder engagement in community, the proponent has been asked to undertake a comprehensive stakeholder consultation and social impact assessment to better understand the communities concerns and issues associated with the project.

CHAIR - Local community are you talking about there?

**Mr BROOKSBANK** - Yes, the local community. What potential impact of the proposal on any of those things we don't currently have sufficient information to understand the potential impacts on either current recreational activities or potential impact on public access to the Great Lake.

**CHAIR** - I notice the energy control system cost \$80 million to replace. I'm wondering what happened there and was this a cyber issue? And if it wasn't, we'll come to the cyber issues in a moment.

**Mr BROOKSBANK** - The energy control system is pretty much exactly what it says it is. It's the integration of a bunch of systems that allow us to control and dispatch the assets. Hydro Tasmania has 54 major lakes and dams and 30 power stations, so, we have a very complex system to manage. The energy control system that we have implemented is a state-of-the-art system. We've gone from a system that we've had in place for a number of years to something that is more suited to the modern-day equivalent. These are not cheap projects. In a past life, I've been involved in one that in today's dollars would be well in excess of the \$80 million that Hydro has spent on theirs.

In the redevelopment of our energy control system we've gone to a supplier of such systems - world renowned - and I have seen their processes in past lives. That came with all that you would expect from a cyber security perspective. One of the key features that we've asked of our supplier is that the system that we're putting in place, both the software as well as the hardware et cetera, is guaranteed to be cyber security safe as much as you can guarantee in a world where every week somebody has invented a new hack and gotten somewhere. Yes, it is very much part of that program of work.

I also add that the energy control system is part of our operational technology, so it's separate to what would be your normal business or commercial system, for instance, SAP, the accounting system, payroll and the like. There is a level of natural containment within our systems as well, from a security perspective. The control system itself will enable us to embed within an individual asset control, it will help us with dispatching new plant when we build it and connect to it and it will be future proof, as much as you can future proof such a system.

**Mr PETERS** - If I could clarify further, the existing ECS system is still there, it will still be there until June 2024. At the moment it was still building the new replacement, that's in the phase of testing. That should go live and run parallel by 30 June 2024, as the CEO said, the previous one is aging, the new one will make sure our OT environment is secure in regards to cyber crisis management and cyber risk management as well.

**CHAIR** - A new system, you'd hope it would have a bit more cybersecurity features inherent in it. Right across the business, how many cyber attempted attacks - I assume we would have heard about an actual successful attack - but how many attempts have been made that you're aware of? It's something you're not aware of because the only people who don't think they have been hacked are the ones who don't know they've been hacked.

Mr PETERS - Hydro Tasmania has observed several domestic energy sector cyber security incidents over the past 12 months. These attacks included ransomware, supply chain

and business email compromise attacks. Hydro Tasmania has not been directly impacted by a cyber security threat or incident in that time. As part of Hydro Tasmania growing out its cyber crisis management, we've developed a cyber security incident response plan that's been reviewed by a third-party security specialist. This has also been tested in a cyber incident exercise. It functions in conjunction with other entities' cyber sector and cyber emergency management plans.

In relation to the cyber risk management, we have established an enterprise risk management framework that guides our cyber risk management. We have an established cyber risk framework. We've adopted the Australian Energy Sector Cyber Security Framework, which meets the obligations of the Security of Critical Infrastructure Act. We recognize risk posed in malicious acts of targeting our employees via emails and establish a comprehensive cyber security awareness program that includes simulated phishing.

CHAIR - The system that's being tested, is that the whole system being tested?

**Mr PETERS** - We have two systems, one is our IT system which is your Word, Excel, Office et cetera, we also have our OT system which is our control system for our operating the power stations et cetera.

CHAIR - They are completely separate?

Mr PETERS - They are separate, yes, absolutely. Each of those systems have been tested in their own right.

**CHAIR** - In terms of a disaster recovery plan, is that in terms of if there was a successful hack on the operating system particularly - it's bad enough from the other side, but I think it would be worse, who knows, it's all bad, and it depends what they pinch, isn't it, or what damage they do - a hack that effectively shut down all your generation, and even though that would be quite a disaster. Have you got a crisis management plan to deal with that? I am just thinking about how Optus perhaps didn't do so well in their last little incident.

**Mr PETERS** - We have a variety of business continuity disaster recovery plans. I think what you've highlighted is probably the worst-case scenario of somebody being able to -

CHAIR - Got to be ready for that.

**Mr PETERS** - In that instance we have operators ready to go onto the field to either turn things on, turn things off, so those fields start becoming pretty critical in that type of event.

**Mr BROOKSBANK** - I want to clarify, the ECS replacement cost is approximate \$18 million over the three years.

**CHAIR** - Eighteen?

**Mr BROOKSBANK** - Yes. I might also add that despite that 80 versus 18, the system that I was involved in was still multiples of 80.

CHAIR - Eighty?

Mr BROOKSBANK - Yes, in today's dollars it would be.

CHAIR - Probably overdate now.

Mr BROOKSBANK - One half of it is because it was at Liddell.

**CHAIR** - In terms of the work that not on foot yet but planning for, in terms of Battery of the Nation projects, how are you building your workforce to deal with the challenge, knowing it's a very tight workforce at the moment and a lot of this is a highly skilled workforce. What are you doing to try and deal with those risks?

**Mr BOLT** - A good question best answered by Ian; but it's a staged approach. As we reach certain obligations there will be certain tasks to be done. We're scaling up staff; and when you get to the point of building something - which we are not yet approved to do - we'd go up again; but Ian can give you the statistics for that.

**Mr BROOKSBANK** - It's a multi-pronged and multi-faceted approach. We do have the luxury of staged developments at the moment - Tarraleah coming on earlier than Cethana. It is true, though, that we are facing the same resource challenges that every organisation in the country, and the world, are facing. We have a certain number of internal advantages that some organisations may not have. For example, we have Entura, which is a consultant engineering business and very able to work more for Hydro than it does for external organisations where the skills and experience of the Entura folk makes sense to work on that.

We are also, as much as we can, reliant on our own workforce for the operations and maintenance of our existing plant. We have, for example, a very large workshop at Cambridge where we can refurbish and build equipment that might otherwise need to go off-island; so we have the ability to do a number of the items of work within the state and within our existing business.

We also target the development of people within Tasmania. We have a graduate program and we have an apprenticeship program. We are hiring graduates under that graduate program that, should they stay with us, will have four, five, six years of experience by the time their skills are critical to the builds.

If I just focus on Tarraleah, at this point in the financial investment decision process, we are working through exactly what the schedule of delivery for Tarraleah is. That will help inform when we need to start seeing ramping up in the various skill sets across the necessary skill sets. It's everything from the people who are installing the kit through to tunnelling, through to procurement and the like. We are building a very comprehensive internal resource management plan for that.

We recognise that the resources that we hire-in to build Tarraleah and then Cethana, a lot of the specialist expertise may have to come from off-island, but wherever we possibly can, we're looking at local workforces, hiring local contractors. There are a few other things that people might be a little less familiar with. We have bought the Tarraleah village and that's very much so that -

CHAIR - Bought it back.

Mr BROOKSBANK - Bought it back, yes, we repurchased the Tarraleah village.

CHAIR - I was booked in to go up there, you know.

**Mr BROOKSBANK** - It's the energy transition, I'm afraid. The purpose of doing that is we will have people who will work at the asset for long periods of time - up to five years. If they have a family, then we want to provide them with the best opportunity to be able to work in an environment where they are not worried about the roof over their head or the schooling, et cetera. It's an opportunity to attract and retain staff into our build. It will also enable us, at that peak time when resourcing needs peak, we will have the ground to create more shorter-term accommodation that will house the workforce.

CHAIR - And a school?

**Mr BROOKSBANK** - Not a school, but there is access to the local community. I'm not that familiar with that area.

CHAIR - It's a bit of a distance to a school from there, on a not very straight road.

**Mr BROOKSBANK -** But it is better than driving in and out every day. That presents a safety issue.

The other thing we have that goes very much unnoticed is that Hydro Tasmania has a worldwide reputation. We have been doing hydro for over 100 years. The organisations that we partner with, the equipment manufacturers, they want to work with us. We are government owned, so the credit risk is not so high. We are seen as being extremely good at what we do, which is own, operate, and manage hydro plant.

The other thing internally is that we have a workforce that are very passionate about hydro assets and the things that we do. We are working extremely hard on our employee value proposition that will allow us to provide people with flexible working arrangements which we put in place - the ability to swap a public holiday for a day that suits you more. All of those things go towards people wanting to work with us and stay with us. The sheer nature of the work we do is, for many people, why they are there. If we can make everything else of the experience positive, then we will get that employee value proposition up. But it is a big challenge.

We have some advantages the other organisations might not, but being Australia, we want to do things by 2030 and 2050 in terms of 82 per cent decarbonisation in a generation fleet in Australia. They are the same dates, by and large, that the rest of the world wants to do the very same things.

**CHAIR** - A bit of competition.

**Mr BROOKSBANK** - There is an extreme amount of competition for people. But, if we can leverage, as we are, the sheer beauty of Tasmania, the employee value proposition, the

heritage and pride that you have with Tasmania, then we are at least half a step or a step ahead of some.

CHAIR - Let's go to the other most beautiful island, King Island. It is!

Mr BROOKSBANK - I will let it slide because it is late in the day.

**CHAIR** - It is. I know that Hydro has been investing over there in terms of wind and solar. Can you update the committee on what is happening on King Island? Is there a plan to see the end of diesel use, or will there always be a requirement for diesel?

**Mr DUIGAN** - The Tasmanian Government is committed to ensuring all Tasmanians have access to reliable, affordable power. Comparing Bass Strait island energy prices to mainland Tasmania energy prices is difficult due to the relative remoteness of King and Flinders Islands. Hydro Tasmania provides very substantial subsidies for Tasmanians who live on King and Flinders islands through community service obligation. The intent of the CSO is for people in remote areas to be provided with similar access to the essential services that we enjoy here.

That means that customers on King and Flinders do not pay anywhere close to what the full cost of their energy would be. I am very pleased to see, having some experience on Flinders Island and to a lesser degree on King, the really innovative solution that Hydro Tasmania has brought to providing solar and wind into the mix.

CHAIR - Batteries, right, a bit old now?

**Mr DUIGAN** - They were reasonable sized consumers of diesel and have been in the past and that has been changed very substantially by large investment through that CSO by Hydro Tasmania. I congratulate Hydro for stepping into that space and providing that service, and I invite the CEO or the chair to make some further comments.

**Mr BOLT** - Having been to both King and Flinders as part of my induction, and endorsing your remarks, it is a really innovative approach that is being taken - to taken what was a fully diesel-powered energy system and inject wind and solar batteries, but also flywheel technology which is quite crucial for allowing to ride through a false. It is the kind of microcosm of the mainlands energy challenge to go from where we are now, which roughly speaking depending on the year and depending on the circumstances for your safe ascend of 50 per cent renewables to a much more fully renewable system is a big leap that would require considerable planning and investment. At that point I will hand over to the CEO.

**Mr BROOKS** - King and Flinders' Island is the only place where Hydro Tasmania operates the system with a retailor, the generator and the distributor. What we are doing on both islands we have a remote path system and a [inaudible] system as you have alluded to. We are attempting to reduce the community's reliance on the diesel and replace that with clean energy sources like wind and solar. Because it is a contained network, network stability is a really key element of what we do on the islands. It is not just about the wind farms we have or the solar we have installed, but it is batteries and a flywheel for that inertia that gives the system its stability.

We have successfully designed and delivered those solutions on the Bass Strait Islands and been supported by Australian Renewable Energy Agency who have helped partly funded that. We have also been able to deliver that same service to Cooper Pedy and Rottnest Island for example. Specifically, on King Island the three existing Nordex wind turbines and the battery are approaching the end of their nominal life.

We are investigating further options on what we do, do we renew those assets? Do we refurbish them? Do we replace them? As well as obviously installing a new battery, what we are looking to do is to at least maintain the current levels of diesel. Hopefully reduce them, but at the end of the day the rest of the country is seeing fuels like gas as that last resort fill in the gaps.

For King and Flinders island that is diesel. It is hard in the short-term to imagine a system on either island where there isn't some diesel, whether it is even there just in case it is not windy. Having been to both islands, that is going to be fairly limited periods time.

CHAIR - I don't know of any day I've been on King and it has not been windy.

Mr BROOKS - That is true, the day we were there was beautiful.

CHAIR - For 6 days it was windy, the rest it was nice.

**Mr BROOKS** - We are investing a touch over \$5 million on the 1.5 megawatts solar farm at the existing Huxley Hill wind farm. We should see that fully operational by the end of this calendar year. That should reduce our fuel consumption and therefore, the fuel cost on the island.

**CHAIR** - You are involved in obviously hooking up the rooftop solar, is that increasing over there?

**Mr BROOKS** - I don't have the actual numbers, but in conversation with the teams we have on both islands there is an interest in rooftop solar. But again, it impacts on the stability of the network and how you would balance that intermittent generation in with the rest of the generation.

**CHAIR** - The network probably needs some work if you are going to increase solar too much, is what you are telling me?

Mr BROOKS - Yes, it will need some level of network strengthening not necessarily and I am an accountant, not an electrical engineer-

CHAIR - I was a midwife not a-

**Mr BROOKS** - Not necessarily the poles and wires part of the network. As I mentioned earlier, there is a flywheel that provides a level of network stability. Yes, it is like everything in the energy industry, it is a system and every bit have to work together.

**Mr BOLT** - I don't want to get into too much of the technology of it all, but I can't help but observe the great benefit of Tasmania as an island is what we mentioned earlier, the great deep storage. That is the big challenge for the mainland and for the Bass Strait Islands is you can keep generating lots of solar, you have to store it somewhere to be able to make use for it really to displace the diesel. That's the big challenge I think of the transition in general except in places like Tassie itself.

**CHAIR** - We have seen a lot more work and RND being done on battery storage. Batteries on King Island are massive, old and getting tired, like us right now. In all three probably. As that work evolves and you get denser batteries that can actually store and provide some of that firming backup, do you think we are likely to see that support the islands to a greater degree?

**Mr BOLT** - It would be sensible to defer that question to some more expert advice, but in general terms, batteries are generally a pretty short-term gap filler. They are improving.

CHAIR - They're getting up to eight or more hours storage.

**Mr BOLT** - Yes, in terms of a single rot line of batteries, currently eight hours is quite a stretch. You can of course take two four-hour battery systems and put them one after the other, but then you double the cost to keep the output. Storage undoubtably will benefit from the improvements of battery technology. Many of those are more perspective than commercial now. I'm not trying to talk down the opportunities, but we are still a long way from understanding how you would take a system that doesn't have the deep storage that Tassie enjoys and turn it into a large renewable system. That last 40 to 50 per cent at this stage is a pretty expensive proposition, but we will keep exploring.

**Mr BROOKSBANK** -If I could just add to that and then I'll pass to Tim because we've got an update on one of the previous questions. I did mention on King Island we are looking at re-furbishing the wind farms and the battery. The purpose of the battery, whilst it may only discharge for a short period of time, it will replace those times when the diesel might be needed to run for a short period of time. It will help displace some of that diesel generation. It is a short duration battery, because we know the technology is not quite there yet, but it will help. I will pass to Tim.

**Mr PETERS** - I believe there was a question on Page 64 in regards to the interest rates and how much of the 273 related to the BFFS and the answer is 207.

CHAIR - That was the component of the BFFS. Yes.

**Mr DUIGAN** - I have some documents from the TasNetworks hearing this morning I would like to provide to the committee, services, Marinus Link organisational chart, some documents requested.

**CHAIR** - Alright, thanks. You can cross those off the list. We're very efficient around here. I just want to go to one other thing if I might, on Tarraleah. What are the benefits on doubling the output capacity of Tarraleah from 100 Megawatts to 200? How much electricity has it been currently producing on average? How much of that is from natural inflows and

how much if you double it? How much would it be in the future from natural inflow and how much would be from pumping? Is it one for one?

**Mr BROOKSBANK** - The Tarraleah redevelopment is taking the station from 90 Megawatts capacity to 190, so roughly 100 megawatts. It's not a pumped storage facility, it will still be a conventional hydro power facility. We estimate it will increase its average end annual energy generation from the same amount of water from about 630 gigawatt hours a year to around up to around 830 gigawatt hours a year; roughly, a 200 gigawatt hour improvement. What you get, though, with the redevelopment isn't just that increase in generation output; you get the flexibility that comes from turning the conveyancer into a pressurised conveyance which means that essentially the water goes from Lake King William straight through into the power station - in very simple terms - rather than going through a bunch of intermediate ponds.

That means that 190 megawatts of new capacity is extremely flexible and dispatchable. Tarraleah will support baseload generation, like it does today, if we wanted it to - that will be driven by market and demand and what level of wind penetration there is in Tasmania. But, it will turn it into a very much more flexible asset that can fill in the gaps when wind isn't blowing. It becomes an asset that cannot really firm at the moment, to an asset that can firm at the moment in the future.

Also, at the moment we have Great Lake and the Gordon/Pedder, that are multi, hundreds of years of storage and Lake King William will become an interseasonal storage body as well by doing that. We'll not only get the flexibility of a dispatchable asset and the ability to generate more energy, but we'll also get better energy security on the island because we'll have a third storage that can last for a great period of time.

**CHAIR** - I plan to get there at some stage I just couldn't make all those other days. PAC was always sitting.

Mr BROOKSBANK - The invitation is standing, for sure.

CHAIR - Your staff have been back on my case; I was trying to find a date.

Mr DUIGAN - It's aabsolutely wonderful.

**Mr BROOKSBANK** - I'm not 100 per cent sure if this ended up being a question on notice or not, but I do have a gender split across the categories of our -

**CHAIR** - Can you produce it in a table and provide it to the committee? that would be helpful. You can read it into -

**Mr BROOKSBANK** - I think we can produce it in a table. Just at the headline, though, at the group total, we're 66 per cent male and the balance female.

**CHAIR** - Thank you. If you can get that breakdown across that would be great, but we've got that on the list already to be provided on notice.

Mr DUIGAN - I've got someone running to the printer.

**CHAIR** - We'll talk slowly then. I know it's been a long day, particularly for you, minister, so we thank you for your input today, and thanks to the team. We will write to you with those few things that are outstanding. I'll just point that if we inadvertently ask for one that you've already provided, please forgive us. We do our best on this side as well. Is there any closing comment you wanted to make, minister?

**Mr DUIGAN** - Thank you, Chair, and I thank the committee for the scrutiny of Hydro Tasmania today. It has been enlightening for me, as I hope it has been for you. I also take this opportunity to provide a little shout out to the 1200 Hydro Tasmania employees who may or may not be watching the broadcast as we go to air.

CHAIR - I'm sure they're all watching.

Mr BROOKSBANK - We lost them hours ago.

**Mr DUIGAN** - Just to thank them for the work that they do in providing a resource that all Tasmanians are justifiably very proud of.

CHAIR - Thanks, minister.

**Mr BROOKSBANK** - The headline numbers I gave were rounded; there are three categories of gender in our organisation and that's the table.

CHAIR - Thanks very much. We appreciate your time, and we'll end it there.

The witnesses withdrew.

The committee adjourned at 6.29 pm.