# [ASSEMBLY ESTIMATES COMMITTEE A — Thursday, 25 May 2023] p41b-45a

Chair; Dr David Honey; Mr Bill Johnston; Ms Jessica Shaw; Mr Shane Love

#### Western Power —

Ms M.M. Quirk, Chair.

Mr W.J. Johnston, Minister for Energy.

Mr S. Barbaro, Chief Executive Officer.

Ms J. Hall, Chief Financial Officer.

Mr G. Landsborough, Executive Manager.

Mr J. Thomas, Deputy Director General; Coordinator of Energy, Department of Mines, Industry Regulation and Safety.

Mr R. Sao, Chief of Staff, Minister for Energy.

Ms A. Keogh, Principal Policy Adviser.

Mr J. Stephens, Senior Policy Adviser.

[Witnesses introduced.]

**The CHAIR**: This estimates committee will be reported by Hansard. The daily proof *Hansard* will be available online as soon as possible within two business days. Questions must relate to the operations and budget of the off-budget authority. The chair will allow as many questions as possible. Questions and answers should be short and to the point.

A minister may agree to provide supplementary information to the committee. I will ask the minister to clearly indicate what information they agree to provide and will then allocate a reference number. Supplementary information should be provided to the principal clerk by noon on Friday, 2 June 2023. If a minister suggests that a matter be put on notice, members should use the online questions on notice system to submit their questions.

I give the call to the member for Cottesloe.

**Dr D.J. HONEY**: I refer to page 786, budget paper No 2, volume 2, and paragraph 4, transmission growth. Given that the minister has been through some planning, or at least his officers have, what is the estimated cost of the new high-voltage transmission lines that will be required to connect Perth to renewable energy hubs in other parts of the state? Given that we are going to bring in renewable energy from all parts of the state, what are the anticipated costs associated with that program of work?

Mr W.J. JOHNSTON: Sorry, that is confusing because that is not proposed. In respect of existing customers, the whole system plan showed that, with very little additional investment, the existing infrastructure supplies existing customers. The SWIS demand assessment looks at large industrial customers and what the impact on the network would be. It says that we need to grow the network, over 20 years, by perhaps 4 000 kilometres. Therefore, it is not true that it is going to connect to everywhere in the state. It will connect only to places that are reasonably close to the existing SWIS. It will go perhaps down through the wheatbelt, up north to Oakajee and then perhaps take advantage of the goldfields area. There is already transmission infrastructure in many of those locations, so it is not about going to Shark Bay like the member proposed because that would not be a sensible outcome. We also recognise that sometimes if we go a long distance, we will need more than one transmission line because of the risk of the infrastructure failing.

We do not have a breakdown of costs in the way that the member has described. We are not at that stage yet. We have allocated \$126 million to Western Power for two purposes. The first is for the purchase of some long-lead items, because as we talked about previously these projects happen all around the world and there is only a limited number of suppliers. There is some kit that we know we will need on specific projects and at the same time we have to do the engineering and have a detailed understanding of those priority projects, which are to supply the north, the centre, and south and east. Having a line beyond Eneabba is something that has been hanging around for 20 years. The member knows as much about it as I do, so it will not be too hard to work out exactly what it will look like and what its costs might be. We do not know a route yet for the line from Neerabup to Kwinana. We have no detail like that, so we cannot cost it because we have not done the principle design analysis but, once we do, we will have to come back. At the same time, of course, we have to talk to those large industrial consumers about how they will contribute to that.

Let us take the example of the Pilbara. The government of Western Australia has not paid for any of the electrical infrastructure being used by the three big mining companies; they paid for it themselves. That is the way it happens. The idea that the taxpayer should pay for infrastructure for multibillion-dollar multinational corporations does not make any sense, so we also have to have negotiations with the users of the infrastructure to make sure that they contribute either up-front or over time. It is simply too early to put specific costs on any of the individual projects.

**Dr D.J. HONEY**: I have a question on that latter point. The minister has indicated in media statements that industry would pick up much of this tab, but what are the preferred mechanisms? It is very obvious that when a line goes

## [ASSEMBLY ESTIMATES COMMITTEE A — Thursday, 25 May 2023] p41b-45a

Chair; Dr David Honey; Mr Bill Johnston; Ms Jessica Shaw; Mr Shane Love

out to one big mine site, that site will get hit for the whole tab, which will be part of its project, but the minister is talking about dispersed projects coming into a system. Is it the government's preference to try to negotiate with the multiple users of the lines to pay for the lines, or is the government's preference more likely to be to go for a tariff of some sort that defrays that cost over time?

Mr W.J. JOHNSTON: I just make it clear that under the existing rules for Western Power, customers have to pay for their connections. It is not a new process. All we are saying is that we will use the existing rules, and so existing customers have to pay for connections. One of the challenges is that at the moment a customer has to pay 100 per cent of the costs but they might only use 40 per cent of the infrastructure. We are trying to package up these large-scale projects so that we can smear the costs over more people. There is going to be a range of alternative costing outcomes. These are sophisticated businesses, and they understand the need to pay for their own infrastructure. Do not forget that a residential customer pays 100 per cent of the cost of the infrastructure, but they just do not realise that because it is embedded in the land price. Therefore, it is not fair or reasonable for large industrial users to get a free pass. The question is not whether they pay; it is how they pay. Some might have deeper pockets and may want to pay up-front. Others may have a different profile for their project and want to pay over time. In the end, this is a question of risk. What does the government of Western Australia see as an appropriate risk profile for the construction of these projects?

**Dr D.J. HONEY**: One of my favourite potential projects is the upgrade of the power line from Three Springs to Geraldton and then through to Oakajee. Is that in the planning phase for government; and, if so, what would be the anticipated time line—I will not hold the minister to a date—for that project?

Mr W.J. JOHNSTON: It is not Eneabba to Geraldton; it is Eneabba to Oakajee. Geraldton does not have a capacity constraint. This is very important. I know that the Geraldton chamber of commerce does not get this one. It thinks that expanding the transmission line improves the reliability of electricity in Geraldton. It does not; it is not about that. The transmission line that already serves Geraldton, which is obviously at a lower voltage, is not unreliable. It had a couple of challenges recently when it had a planned outage, but that was not the transmission line; the generators up there caused the problem. Geraldton's reliability issue is about the distribution system, which is a completely different conversation. The line to Oakajee is for those large industrial customers. Now, there may be some industrial customers at Dongara as well that, obviously, would use the same line. As I said on the day I announced it, the four projects are north of Eneabba, additional supply for Kwinana, some strengthening in the east and some work in the south. They are the four projects—\$126 million. Some of that is for long lead items but mostly it is for design and engineering works.

[3.10 pm]

Ms J.J. SHAW: I was at the 9 May lunch at which the minister announced the \$126 million package and I felt the love in the room for the announcement. In the media release that the minister issued in conjunction with that announcement, he mentioned the benefits of public ownership of Western Power as an incredible enabler to give effect to energy transition. Can the minister go into that in more detail and make observations about the jurisdictions in which the privatisation of networks has been a hindrance to being able to effect energy transition?

Mr W.J. JOHNSTON: That is a very good question.

Ms J.J. SHAW: Thank you, minister!

Mr R.S. LOVE: It is not relevant to the budget, but it is a very good question.

**Mr W.J. JOHNSTON**: This is not a budget item. If the member knew the standing orders, he would know that the question is entirely relevant. Given that the member does not know the standing orders, that is probably a moot point.

The CHAIR: Minister, let us move on.

Mr W.J. JOHNSTON: Everything was running so smoothly before the member for Moore arrived—it is so amusing.

The advantage of public ownership is that we can make decisions faster; we do not have to wait for the sort of problems that we see on the east coast. As an example, New South Wales is having to build billions of dollars' worth of transmission infrastructure to supply existing customers, whereas we are able to move faster and get these things done more rapidly. We are also able to aggregate demand so that we have better outcomes for the system. For example, Energy Policy WA had a look at the potential costs of putting in 10-gigawatt demand at Oakajee. Using an integrated grid will save more than \$15 billion over the life of the project. These are the advantages of centralised government control; we can get things done in a coordinated fashion rather than relying on everybody to make up their own mind.

Just look at the north west interconnected system; we all know about the three train lines next to each other, but people do not realise that transmission lines crisscross the Pilbara because they were built independently by people without regard for everybody's needs. By bringing things together through government leadership, we can move faster, get a better outcome and have a smaller footprint. We could have ended up with eight separate sets of transmission

## [ASSEMBLY ESTIMATES COMMITTEE A — Thursday, 25 May 2023] p41b-45a

Chair; Dr David Honey; Mr Bill Johnston; Ms Jessica Shaw; Mr Shane Love

lines crossing into Oakajee if people had done it themselves. Having government leadership and government ownership, we can get these things done in a coordinated fashion. Either the member for Central Wheatbelt or the member for Vasse—I cannot remember—asked a question about land access. Imagine if we had to run eight separate transmission lines across farmland into Oakajee. The farmers would have been very upset. Once we know the best pathway for the line, we can engage with affected landholders in an integrated way and we can make the decision to size it larger so that we get a longer lived asset. These are all advantages of having government ownership and leadership on these projects.

**Mr R.S. LOVE**: I refer to page 786 of budget paper No 2, where it refers to the distribution network facing reliability and safety challenges in the regions. Five of the worst areas for power reliability in the state are Perenjori, Northampton, Irwin, Coorow and Chapman Valley and they all happen to be in my electorate. What is being done to turn that around so that that is not the statistic next year?

Mr W.J. JOHNSTON: That is a very important question. I understand the challenges of living in those areas, although there are many advantages. People in the member's electorate have told me that they would not live anywhere else. Of course, that means that it is more complicated to provide electrical power. It is simply a fact of physics that a lightly populated community cannot have—it is not a choice; it is just a fact—the same level of reliability. That is why when the former Liberal—National government was in power, the system average interruption duration index and the system average interruption frequency index rates there were lower than the SAIDI and SAIFI rates for metropolitan Perth. Following the Shepherd inquiry, we have provided more transparency on the performance of individual feeders. That means that the member's constituents can now see the outcomes for them. I am pleased by the outcome of the AA5. Previously, we were just rewarded for averages. The problem with that was that that would drive—this is what happened when the Liberal—National government was in power—investment to townships because that would get the biggest average benefit for the larger population centres. Now we are being transparent and driving new outcomes—we do not go to the averages, but to the worst performing. The 10 worst-performing lines have been the worst performing since the day they were built; this is not new. I know from talking to the member's constituents that they have had bad reliability. Now we are exposing the problems and addressing them. I invite Mr Barbaro to make further comments. He might ask others to comment as well.

Mr S. Barbaro: Thank you, minister. I am happy to address that. To follow on from the minister, we were happy to lead with the A8 submission, the change in direction in terms of reliability outcomes, and certainly to start looking at the felt experience of customers and the worst-performing feeders and asking for that to be addressed in the access arrangement, as opposed to just looking at averages, which, as the minister said, does not necessarily provide good outcomes for small communities. In relation to the communities that the member mentioned, the first thing we have done is to reinstate siliconing and line washing. We have had challenges with that, given an incident we had a couple of years ago and the safety needs of our staff. We have done a successful trial of helicopter washing of the distribution network. It is the first time that has been done in Australia. We have done 400 insulators in the areas of Milo, Dongara, Springfield and Port Denison. That has been successful and we will continue to roll that out over time, which will have a big impact on reliability. We have put a high-voltage generator in Dongara and Port Denison, which will provide backup when there are outages. Significant work is being done in other towns in the area. We have completed upgrade works on the powerline running into Mullewa, which has improved power reliability. A generator is maintained in Mullewa full-time. In Kalbarri, the microgrid was commissioned in 2021. That is providing good reliability for that area and is not experiencing the same sort of outages that the others are. In late 2022, we carried out \$4.6 million worth of upgrades to the infrastructure in Perenjori. In Cunderdin, a \$5 million package of works was completed in April 2023, which included 293 poles and 47 kilometres of conductor. In Merredin, we will start work shortly in relation to 159 poles and 12 kilometres of conductor. We are confident that these works will have an impact. The year before we did similar works in Northampton, which had a poor-performing distribution network. We replaced around 200 poles, 50 high-voltage and low-voltage crossarms and 48 insulators. Northampton is now seeing significantly improved reliability in that area. We are confident that the things we are doing are helping, but it is a challenging part of the network given the long, thin feeders out there and also the environmental factors.

**Mr W.J. JOHNSTON**: I understand that the Springfield distribution line has a challenge because it has a large load at the end of the line. Perhaps Mr Barbaro would like to explain this challenge.

Mr S. Barbaro: There has been lot of discussion about whether we can put a separate generator in the Springfield area. We know that constituents in Springfield have particular challenges when there are power outages. The area does not have mains water so it relies on electricity for its water supply, which provides particular challenges. In terms of putting in a backup battery, as we did in Kalbarri, or a generator, the challenge is that there is a big concrete batching plant at the end of that line. That is a large load and it is too large to have a backup battery or a backup generator of the size that we carry. We are looking at solutions, such as whether the load can be disconnected so residents can have a backup, but that is a technical solution that will take time to deal with. It is an area that we are focused on. We had a community event there earlier this year that was well-attended by residents. They were very

### [ASSEMBLY ESTIMATES COMMITTEE A — Thursday, 25 May 2023] p41b-45a

Chair; Dr David Honey; Mr Bill Johnston; Ms Jessica Shaw; Mr Shane Love

clear about their expectations and we were happy to share our knowledge about the challenges we have and what we will continue to do for them.

[3.20 pm]

Mr W.J. JOHNSTON: I conclude by saying that the other thing Western Power has done is some reconfiguration to provide alternative pathways for the electricity to flow. That is the challenge in a more settled community. Because there is always an alternative supply choice, if there is an outage on one side, it can be supplied from the other. It might not be possible to supply 100 per cent of the people on that network but a significant proportion of them can be. However, because these lines run in only one direction, any break before the customer leads to an outage, whereas that is not true for the more settled communities. Western Power has also put the reclosers in different locations. They are automatic devices that are like a circuit breaker but for the network. Those reclosers operate when there is a transient outage. If a branch hits the line, they open up the line and disconnect the electricity, causing people to have an outage, but then it comes back on almost straightaway—within a minute or two. Therefore, what would previously have been a long-lived outage until a line inspection was done, is now able to be cleared automatically. We appreciate the challenges that people in this area experience. Because of the change resulting from the Shepherd inquiry and the change that this government has asked for in the AA5 process, we are bringing more investment to those communities. Do not forget that those investments are being paid for by metropolitan residents, who pay more for their electricity than the actual cost so we can make sure that people in the member's community do not do what the Liberal Party wanted, which was to pay for 100 per cent of the cost of their electricity.

**The CHAIR**: Leader of the Opposition, is this a further question?

**Mr R.S. LOVE**: Yes. The issue I would like to raise is the one the minister mentioned, and that is the pressure that Western Power has been under for connection times for businesses.

Mr W.J. JOHNSTON: Is this a new question?

The CHAIR: No, it is a further question.

Mr R.S. LOVE: Sorry. I thought you were offering me a new question.

The CHAIR: No. I said, "Is that a further question?" To which you replied yes, but if it is a new question, go ahead.

Mr R.S. LOVE: Sorry. This has been raised in the house. In my experience, when a single business is looking to connect a new shed or upgrade their business, the connection time often goes for well over 15 months. The minister acknowledged in the budget paper that there is an issue. I would like to know what can be done to shorten that time.

The CHAIR: Like your question, member.

Mr R.S. LOVE: The government aims to diversify the economy, and this is a very necessary part of that.

Mr W.J. JOHNSTON: This is the same question I was asked by the member for Vasse in the chamber on 10 May and 18 May. Funnily enough, the answer is the same as the last two times I was asked it. This is a serious problem, and that is why we are addressing it in a serious way. The challenge is that the number of applications has gone from 3 000 to 7 000. That is an unprecedented increase in demand at a time when it is hard to find new engineers. We are changing our internal practices and doing what we can to find additional staff. I am happy to ask Mr Barbaro to elaborate on Western Power's response to this unprecedented surge in demand.

Mr S. Barbaro: We have three levels of categories of applications. Level 1 to 3 is single domestic street light applications, level 4 is medium commercial and high voltage, and level 5 is large scale and large commercial. We are not seeing significant challenges in the residential area. There has not been a material impact in that area because we do not have the same supply challenges. The connection times are still travelling at similar time frames. We have actually improved the turnaround time frames for our solar applications. Absolutely, the land development packages have been significantly impacted. The connection time used to be 26 weeks, or six months, but it has now blown out to 10 months. We have looked at our applications processes and recruited more staff in that area and we have allocated more resources. We have also outsourced more work in that area. In addition, we have been working very closely with the Urban Development Institute of Australia. We held a workshop with the UDIA at our offices the week before last. We are co-designing new processes and are looking at areas in which the UDIA members can take on more work or we can do things slightly differently to better align with the way they manage their projects. That has been very productive and we are looking at those ideas and progressing them through to action.

Mr R.S. LOVE: Just quickly, I want to ask about the standalone power units that Western Power has been installing, a number of which are in my electorate, as the minister knows. It has come to my attention that the maintenance and repair of those is an issue. I have a constituent who has lost the use of that system due to a lightning strike and has been told that it will be months before it can be addressed. Will the minister have to look at the timely repair of those standalone power units?

### [ASSEMBLY ESTIMATES COMMITTEE A — Thursday, 25 May 2023] p41b-45a

Chair; Dr David Honey; Mr Bill Johnston; Ms Jessica Shaw; Mr Shane Love

Mr W.J. JOHNSTON: I am not aware of a specific example. I am happy to have Western Power go away and talk to the member separately. Obviously, if equipment gets hit by a bolt of lightning, it will get fried. The power of lightning is about 10 000 volts for each centimetre, and the lightning is probably 20 kilometres long. Members can imagine the power of that. It is just unbelievable. If someone is unlucky enough to have any of their electrical equipment hit by lightning, it will be completely destroyed. That is not a question of repair. That is just one of those things. Western Power is trying to have enough stock of standalone systems so that it has spare parts for them, just like it has for everything else. If a bolt of lightning hits a transmission pole, it will take a couple of days to replace it, because that is how long it takes, but Western Power has the kit ready to do it. The same is true of 240-volt transformers. Western Power has spares sitting around. Because standalone powers systems are new, Western Power does not have the same stock of spares and therefore it is a more complicated process to respond. However, the intention is to build up the stock. As an example, Western Power was starting to build up its stock of standalone systems, but then we had the bushfires at Wooroloo and so a number of standalone units that would otherwise have been installed in the wheatbelt were provided to the customers at Wooroloo. Western Power also provided 36 standalone units after cyclone Seroja. That was a better outcome for those customers but it meant that our plan for rolling them out was completely blown out of the water because all the units that we had were allocated to the response to cyclone Seroja. Given the time, it is probably better for the member to have a separate briefing.

**Dr D.J. HONEY**: I refer to the line item "Decarbonisation" at the top of page 791 of budget paper No 2. What is the principal source of Western Power's carbon emissions? To save time, does Western Power think that it will be able to achieve its 80 per cent target by 2030?

**Mr W.J. JOHNSTON**: That line is the \$126 million that has been allocated for the south west interconnected system demand assessment. It is the decarbonisation of others, not Western Power.

**Dr D.J. HONEY**: Page 776 of budget paper No 2 talks about the decarbonisation of the economy and that would include Western Power —

The CHAIR: Do not try to justify it; just get the minister to answer the question.

**Dr D.J. HONEY**: I will ask the same question: what is the principal source of Western Power's emissions, and is it confident that it will achieve an 80 per cent reduction?

**Mr W.J. JOHNSTON**: The point I am making is that decarbonisation line item is not about decarbonising Western Power; it is about other people decarbonising, like the member's former employer Alcoa. Western Power has a range of sources of emissions and is trying to deal with all of them.

**Dr D.J. HONEY**: Are those carbon emissions associated mostly with vehicles or with Western Power's own generation?

Mr W.J. JOHNSTON: Western Power generates very few carbon emissions.

The CHAIR: That completes the examination of Western Power.

[3.30 pm]