

Western Power —

Mrs L.A. Munday, Chair.

Mr W.J. Johnston, Minister for Energy.

Mr S. Barbaro, Acting Chief Executive Officer.

Ms J. Hall, Chief Financial Officer.

Mr G. Landsborough, Executive Manager, Asset Management.

Mr J. Thomas, Acting Coordinator of Energy, Energy Policy WA.

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

Mrs A. Keogh, Principal Policy Adviser.

Ms Y. Lucas, 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 close of business Friday, 3 June 2022. If a minister suggests that a matter be put on notice, members should use the online questions on notice system.

Go ahead, member for Cottesloe.

Dr D.J. HONEY: Thanks very much, chair. The minister would know that the issue of power reliability into Kalgoorlie in particular is pretty topical given the last few days. We saw the power outages over Christmas and the minister organised an independent review into that. One of the issues identified was the high loads because of the very high temperatures; in fact, I think 63 per cent of the total number of customers affected by outages related to load on the system. One of the confounding factors was the inability to re-initiate the system due to the bushfire management protocols effectively, or at least the fire ban protocols. For the outage we saw over the weekend, there did not appear to be an issue of extreme weather causing high demand. Neither can I say there was extreme weather with storms and the like for that particular outage. Is the minister able to tell us why we saw that particular outage over the weekend and obviously the more recent one yesterday?

Mr W.J. JOHNSTON: I am going to ask the chief executive to make some comments, but I just want to make the introductory remark that almost all the outages at Christmas time were in the distribution network, whereas the outage for Kalgoorlie is in the transmission network. The challenges that were identified in Michelle Shepherd's report are not related to the question that Mr Barbaro is going to talk about in a moment. I want to make it clear that one of the challenges is that electricity systems are very complicated. Not everyone who comes to it always understands the complexities that are involved. Of course, customers should not need to, but, for managing the system, a range of issues needs to be dealt with. For example, the Shepherd inquiry points out that Western Power does not have visibility over the distribution network. That, of course, is different with the transmission network. A table in Michelle's report sets out how much visibility Western Power has when the fault is at a different spot in the network. I want to highlight that the questions that occurred at Christmas time are not able to help us in understanding this problem because it is a completely and utterly unrelated challenge. Of course, customers do not care because they just want their power. For the member's benefit, if he wants to be the minister, he needs to be able to understand the challenges that are involved here, because there cannot be simple answers to complex problems. I am now going to ask Mr Barbaro to make some comments.

Mr S. Barbaro: Thank you, minister. The statement in the question was correct that the outages on the weekend and yesterday were not related to load issues or excess load. On Sunday morning at about 9.30, the transmission line into Kalgoorlie tripped off. That fault was due to a protection setting and a bit of protection equipment in our west Collgar substation. That was found relatively quickly and was resolved within 30 minutes. Unfortunately, once we sought to switch power back on, there was another fault in the West Kalgoorlie substation, which took some time to resolve. We needed technical technicians to travel there to resolve it and then we were able to get customers back on. The outage started at 9.30 am and all customers were back on by 2.10 pm and most customers were back on by 1.30 pm. After that outage, we did a significant inspection of that transmission line with both helicopters and foot patrols. We found two or three issues that we thought may be problems going forward and we had planned to fix them this weekend, on Saturday. Unfortunately, we did not get to the weekend before one of

those issues transpired into a fault. Again, on this occasion we relied on the generator quickly. We turned on a generator using a network control service contract we have in Kalgoorlie. Unfortunately, the signal that went to the NCS generator did not work. We do test that generator; we actually had it working for us with no issue between 10 and 13 May, but, for some reason, it did not switch on. We have technicians there at the moment working on that. We resolved the fault out of the West Kalgoorlie substation with a workaround and within two or three hours restored power to all people in Kalgoorlie. We now plan to have an outage maybe tomorrow or at the weekend to restore those other issues we found and also to put a permanent fix in relation to the issue that we found.

Mr W.J. JOHNSTON: I draw the member's attention to the *Final determination on network control service costs in the eastern goldfields*, dated 28 April 2021 by the Economic Regulation Authority. It deals with the question of the network control service contract that Western Power has. Of course, the counterparty is Synergy. This is for the power station that was closed by Dr Nahan. I am not criticising him for that. It was the correct decision because it was about getting Synergy underneath its generation cap. That power station does not receive capacity payments and does not participate in the market for electricity. It is just available for Western Power to support the network. Western Power asked for \$12.3 million for the period 1 October 2018 to 30 June 2022. When the ERA reviewed that application under section 6.76 of the Electricity Networks Access Code 2004, it determined that \$9.8 million was appropriate for the network control service in the eastern goldfields. That is the amount of money that Western Power is allowed to spend on that service—not the \$12.3 million that it requested but the \$9.8 million that was approved. Interestingly, nobody apart from Western Power made a submission on the draft report by the ERA. I want to highlight this because these matters are actually very transparent. One of the challenges we have is that we no longer have any journalists who write about energy policy in Western Australia. The things that used to be reported in the media are no longer reported, so there is no longer an understanding of some of these questions that arise. In the past, whether that decision of the ERA was the correct one would have been discussed more broadly in the community. I am not criticising the ERA for doing that.

I must say that I think the new chair of the Economic Regulation Authority is doing an outstanding job. He is to be applauded for going around talking to individual communities in regional Western Australia because that will allow him to make better decisions on our fifth access arrangement. I make the point that all this information is transparent and available to people but I understand that customers do not know that and they cannot find it. We try to keep all these things as transparent as possible.

[1.40 pm]

Dr D.J. HONEY: I have further questions on two separate issues. Perhaps the minister could expand on that answer a little bit more. I understand that there are two diesel-fuelled gas turbines potentially available to come back online in Kalgoorlie, but during outages those turbines did not come back on. I am happy for the minister to correct me on that. My question really goes to the capacity in Kalgoorlie. The minister has commented on a number of occasions that this is a very complex network with a number of parts, if you like, between the power generation and the customer in Kalgoorlie. Of course, the corollary to that is: is there a requirement for more backup in Kalgoorlie? Perhaps to save asking several questions, I know there are proposals around to develop, for example, renewable capacity and storage in that area, but what backup capacity is available in Kalgoorlie? Is it correct that during the outages we have discussed at Christmas and the last two those turbines were not used as backup to help resolve the problem?

Mr W.J. JOHNSTON: That is a very interesting question and I will get Mr Barbaro to talk about it, but first I will make a point. People think about generators but they do not matter; it is the electricity. At the moment, we provide network support through a generator but there could be other technology that can provide the same outcome. At the end of the current network control service contract, in accordance with the rules, Western Power will be obliged to take the requirement to support the network back to market. It will be interesting to see what comes of that because technologies other than the old gas-fired power stations could be offered up. Remember, those gas-fired power stations are not used by the system in the way that every other generator is, like the Parkeston power station, and that is a better outcome because the larger the load on the network, the lower the average cost.

Some people say we should island Kalgoorlie, but that would increase the risk of outages and the costs. It is much more expensive for Horizon Power to supply electricity than it is for Synergy, because Horizon provides islanded electricity. The challenge is for me as a minister, because every time the lights go out, it is the minister's fault, and I have never stepped away from that responsibility. The people of Kalgoorlie's electricity comes down a very, very long line. The outages they have had in the last four or five years were when a farmer ran a tip truck into the line one day, and another when a farmer ran a machine into the line and knocked over a pole. We have had fires and we have had lightning strikes. The longer the line, the higher the risk. What is the benefit of the long line? The benefit is, even though it sounds odd, that it is actually more reliable than having a standalone system and much more importantly for industry in Kalgoorlie, it keeps the costs down because the cost of electricity for industry in Kalgoorlie is the same as in Kwinana. If Kalgoorlie had a separate system, the cost of electricity would go up and no industry would settle in Kalgoorlie. Having Kalgoorlie connected to the network is absolutely essential, but of course it means that this complexity comes into the case.

I invite Mr Barbaro to comment on the performance of the network control service generator.

Mr S. Barbaro: The first comment I will make is that the generators in Kalgoorlie have two main functions. Firstly, they supply electricity to the town when we are performing planned works on the network. That allows us to turn on those generators and effectively island Kalgoorlie and then do the works we need to do in the transmission system without causing any interruption or significant interruption to customers. For that purpose, the generator is very effective and has increased the standard of supply to Kalgoorlie significantly. In the past, customers would suffer an outage whenever we were doing planned works and they are now able to go through those planned works with a supply.

Secondly, the generators function when we have unplanned outages. In that sense, although the generators are still very useful, there are challenges that come with that. With a planned outage, we know when we are going to turn off the network so we are able to dispatch the generators in advance and the generators are up and running at full capacity before we turn off the network, and that way everyone is connected. When we lose power without warning, so an unplanned outage, we send dispatch to those generators and it takes them time to ramp up; they are effectively very, very large motors. It takes the generators two to three hours to ramp up and we have put on load in stages. They are not quite instantaneous in the way most people think they are; the power is not there immediately at the flick of a switch. The generators ramp up and as they ramp up we put on some load, and then they ramp up a bit more and we put on some load. That can take two to three hours so it is actually always quicker for us to repair the network. Often, as with the Sunday outage, if we had not had that extra fault in the substation, we would have restored power within 30 minutes. That is much quicker than turning on those generators and waiting for three hours. When we see and we forecast that an outage is going to be for less than three hours, we will default to repairing the network, because it will be quicker and better for the customers. When we see outages, for example, we forecast will be a five or 10-hour outage, we will turn to those turbines. The turbines have been quite reliable and worked well.

We have unfortunately had a couple of unplanned outages when some of the communication, the remote communication, has not worked and we have had to send people out to dispatch and do manual works on the turbines. That has been unfortunate. As the minister said, we are relying on old units and we are looking at new alternatives going forward. Kalgoorlie is much more complex than somewhere like Kalbarri or Perenjori where we have done work with batteries and microgrids. They are very small areas that we can deal with very quickly with a small battery. Somewhere the size of Kalgoorlie—the load and the industry—is a much more complex scenario to resolve. We are looking at what are the best options going forward. We are also looking at how we can do that in a way that will meet community expectations on climate change and renewable energy, and we are really committed to that. We will be looking at the options for Kalgoorlie but in the interim we go to the generators, and those are some of the limitations that we have.

Mr W.J. JOHNSTON: To conclude that comment, one of the recommendations of the Shepherd inquiry was improved communication from Western Power. I have spoken to Mr Barbaro a couple of times this week about making sure Western Power is on the front foot on communications. As minister, if there is a criticism from me to Western Power, it is that the communications did not work on Sunday. But I am very pleased that Mr Barbaro has been on the front foot making himself available and answering questions. In fact, he will be in Kalgoorlie on Friday to talk to important community leaders. Unfortunately, the member for Kalgoorlie will not be there on Friday, but we will arrange a catch-up with her for Mr Barbaro at another date. Western Power's board and management are committed to implementing all the outcomes of the Shepherd inquiry. As minister, I am determined to see Western Power do that. We appreciate the challenges that these problems cause people. It is a modern society and it is very difficult to be without power.

[1.50 pm]

Ms J.J. SHAW: I refer to page 802 of budget paper No 2, volume 2, and “Objectives, Outcomes and Key Performance Information”, specifically the provision of safe and reliable power supply. Firstly, I would like to take the opportunity to thank Mr Barbaro and Western Power for their management of the Wooroloo bushfire. I very much appreciated Mr Barbaro's attendance in my electorate, the multiple briefings he gave me and my constituents, and the extraordinary efforts that Western Power went to to rebuild the network in our part of the world. It was a significant effort and quite a thing to see the establishment of, basically, a mini-Western Power city. The speed with which the network was replaced was incredible. Rather than rebuilding the network in certain parts of Wooroloo, decisions were made to roll out standalone power systems. I would like to understand how those standalone power systems are going, particularly because we are still part of the south west interconnected system. What learnings have been taken from the rollout of standalone power systems more broadly into peri-urban areas, like the electorate of Swan Hills?

Mr W.J. JOHNSTON: That is an excellent question. I note the report of the Economics and Industry Standing Committee of the last Parliament into microgrids and the strong leadership that the member for Swan Hills provided for that report. I invite Mr Barbaro to comment on the rollout of standalone power systems.

Mr S. Barbaro: I thank the member for her kind words in relation to the effort that went in from my crews and the other staff in terms of responding to the Wooroloo bushfire, which was a large logistical effort for my business. We actually put in two standalone power systems in response to the Wooroloo bushfire. I should also mention that during cyclone Seroja we took the opportunity to put in 36 standalone power systems instead of replacing the network, and in response to the Shackleton bushfire, again, there were nine standalone power systems, rather than replacing like-for-like. That is something that we are doing more and more, looking at better solutions for our customers. In the Wooroloo bushfire, customers were chosen mainly around the difficulty in accessing their locations to maintain the network. It is a very hilly location, and therefore it is very difficult to get heavy machinery in there. The information we get after looking at all the data is that the supply for them is equal to or greater than what they are getting off the grid, so that is very good from a reliability perspective. From a safety perspective, we struggled to access and maintain some of those areas in the hills, and they are now gone. We had difficult-to-maintain assets that have been removed, and we are learning all the time with standalone power systems.

We have actually changed the scope of our standalone power systems this year. I will try not to get too technical, but we had an AC coupling and we changed to a DC coupling, which allows the solar panels to continue to provide power to homes even when the battery is exhausted. With our early ones, when the battery was exhausted, we would have to rely on the generator to give it some charge before the solar panels would start to charge again. We have changed our solution, which allows more renewables to provide supply. We are constantly learning from standalone power systems. That is one of our innovations, and we are working very closely with our local suppliers to continue supply and to ramp up to meet our targets.

Mr R.S. LOVE: Further to the Western Power standalone power systems, I attended a briefing organised by the minister's office, and it was explained that there is a large number of units going in around the areas affected by cyclone Seroja, including Latham, Perenjori and Carnamah. When it occurs, it will leave the town of Latham in a position of isolation from pretty much the rest of the infrastructure. There was a negative reaction in the briefing to the idea of any sort of community process whereby there might be private investment into those types of arrangements to create a solution for such communities. I ask the minister for his views on that.

Mr W.J. JOHNSTON: We often have people come to us to talk about community solutions. In the end it is about who pays. We do not stop people from doing whatever they want; there is no law that says they have to buy their power from Synergy, but if the government is paying for the kit, then we retail the energy. People do not have to buy from us, and I am not saying that this is the price we pay, but let us say it costs \$200 000 for a standalone power system. We then sell the electricity for the A1 tariff of 30¢, or L1 or whatever; it is relatively low-cost, whereas if people go to private providers, they have to get a commercial return, so the cost of their electricity is probably going to be about \$1.50. That is the gap that people get because the government is doing it, but they do not have to buy from us. If people want to do their own thing, they are absolutely welcome to do so. There is no requirement to connect to Western Power and there is no requirement for people to buy from us. But if we are providing the kit, we recover some of the costs.

Mr R.S. LOVE: I refer to page 804 of budget paper No 2 and the heading "Growth". Paragraphs 6, 7, 8 and 9 talk about the growth in demand and the system distribution network. With regard to the midwest, is there any indication as to whether the existing transmission lines from Three Springs to Geraldton will be updated or upgraded, given the damage that was sustained by the network following cyclone Seroja and the vulnerability it exposed?

Mr W.J. JOHNSTON: We are not going to duplicate the transmission line; cyclone Seroja showed that the system works. Of course there was disruption, but the disruption was relatively minor. This significant outage was not because of the transmission system but the distribution system. The distribution system was shredded. Yes, we had 132 transmission poles taken out, which is extraordinary. It is very, very rare to have that many transmission poles taken out, but that was put back together quite quickly. It was the distribution system that took a long time to fix, because that is thousands of poles outside individual houses. There is reference on page 804 to \$178.5 million for customer-driven works and \$37.8 million for augmentation. Customer-driven works are works for which someone else is paying, and the \$37.8 million is where that comes out of regulated income. If, for example, there was large demand in Oakajee, the customers would pay for that. That is a problem, because they do not want to borrow the money, so the government is in conversation with people about how we can do this, but it is a problem all around Australia. We had a briefing the other day from some members of government who have actually done an analysis across the country, and every single state has exactly the same problems around who pays. I have said this in public previously: the current transmission system to Geraldton is fit for purpose. There are no outages in that system, and the councils that I have spoken to up there understand that. It is not the transmission system that is causing the trouble for Geraldton and surrounds; it is the distribution system. The distribution system is a problem, and we are investing in a whole range of solutions to try to improve that. I am happy to provide a briefing for the member on all those things, but the transmission system is not the challenge.

[Ms A.E. Kent took the chair.]

Mr R.S. LOVE: Further to the point of meeting the challenges in those areas, is part of the challenge that there are not enough staff located in the midwest region and that people are travelling distances to get there and fix things?

Mr W.J. JOHNSTON: There has been no reduction in the staffing levels of Western Power in regional Western Australia since I became minister, and the number of day labour employees has increased since I became minister. The number of employees —

[2.00 pm]

Mr R.S. LOVE: But has there been a reduction specifically in the midwest region?

Mr W.J. JOHNSTON: There is no reduction anywhere. That is absolutely not happening. No; it is a complex system. There are very thin lines and there is very little duplication. It is very hard. In the metro area, everything is a circuit. Out there, it is a single line. It is much harder to manage.

Mr R.S. LOVE: There was one key employee up in the midwest who was lost —

The CHAIR: Member, through the chair, please.

Mr R.S. LOVE: One second. There was one key employee in public relations.

The CHAIR: Excuse me, member for Moore!

Mr R.S. LOVE: That is all I want to say.

The CHAIR: Member for Moore, you know the process.

Mr R.S. LOVE: There is no public face up there anymore.

Mr W.J. JOHNSTON: Yes. Western Power has to do better on public relations —

The CHAIR: Minister, we will finish. That completes the examination of Western Power.