

**Western Power —**

Mr S.J. Price, Chair.

Mr W.J. Johnston, Minister for Energy.

Mr E. Kalajzic, Chief Executive Officer.

Ms J. Hall, Chief Financial Officer.

Mr S. Barbaro, Executive Manager, Asset Operations.

Ms K. Ryan, Coordinator of Energy, Energy Policy WA.

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

Mrs A. Keogh, Principal Policy Adviser.

Miss Y. Lucas, Senior Policy Adviser.

[Witnesses introduced.]

**The CHAIR:** This estimates committee will be reported by Hansard. The daily proof *Hansard* will be available the following day. Members may raise questions about matters relating to the operations and budget of the off-budget authority. Off-budget authority officers are recognised as ministerial advisers. It is the intention of the chair to ensure that as many questions as possible are asked and answered and that both questions and answers are short and to the point.

The minister may agree to provide supplementary information to the committee, rather than asking that the question be put on notice for the next sitting week. I ask the minister to clearly indicate what supplementary information he agrees to provide and I will then allocate a reference number. If supplementary information is to be provided, I seek the minister's cooperation in ensuring that it is delivered to the principal clerk by close of business Friday, 1 October 2021. I caution members that if a minister asks that a matter be put on notice, it is up to the member to lodge the question on notice through the online questions system.

**Dr D.J. HONEY:** I refer to page 803 of budget paper No 2 and the retention of the dividend. It is indicated that the dividend is going to be used for future infrastructure investments. Are any additional infrastructure investments being funded out of that fund this year?

**Mr W.J. JOHNSTON:** No.

**Dr D.J. HONEY:** None are going to be going through?

**Mr W.J. JOHNSTON:** No.

**Mr V.A. CATANIA:** My question relates to page 202 of budget paper No 3. Under "Utilities" and "Western Power", I refer to "Other Spending" and "Growth and Services—New Projects" at \$44.8 million. It seems like that is an extra \$44.8 million. What will that be spent on? Does it include upgrades to security fencing at various substation sites? Can the minister provide some more detail on that \$44.8 million?

**Mr W.J. JOHNSTON:** I will invite the CEO to make comment in a second, but the capital budget for Western Power is enormous. It is \$800 million-plus. A spending difference of \$44.8 million is not significant, given the size of the corporation. But I invite the chief executive officer to make any comments he wants, and if he wants to ask his other officials, I am happy for him to do that, as well.

**Mr E. Kalajzic:** Thank you, minister. To put the \$44.8 million into context to start with, we have a large capital program—anywhere from \$800 million to \$900 million depending on what is going on in the business. This additional \$44.8 million is part of what we call our growth and services area. It is to do with some of the stuff that we are doing in Kemerton, so the upgrade there; also we have a reasonable size program going on around upgrading some of our security fencing across the network to maintain the system security at various substation sites; and we are replacing some ICT hardware and software.

**Mr V.A. CATANIA:** Is the minister able to provide a list of the sites that will have their fencing upgraded?

**Mr W.J. JOHNSTON:** We do not have that information with us tonight. If the member wants to put it on notice, it is an easy question to answer.

**Mr V.A. CATANIA:** That is pretty much a standard answer by every minister at the moment: "Put it on notice"!

**Mr W.J. JOHNSTON:** The member is not disappointed, then!

**Mr V.A. CATANIA:** Not at this time in the estimates cycle! What is wrong with the fencing around some of these sites? Is it aged, weathered, rusted out or whatever?

**Mr W.J. JOHNSTON:** Again, I will invite the CEO to make comment, but there is a very large footprint for the assets of the company and it constantly examines what needs to be done to protect those assets. Sometimes we have had people entering the substations for the purpose of self-harming, and that is obviously very troubling to everybody involved. Sometimes people enter the facilities for other purposes, like to vandalise equipment, and that is obviously no good, either. But I will invite the CEO to make any comment he believes appropriate.

**Mr V.A. CATANIA:** Just before that, so that he can answer them all at once to save time: Are the fence upgrades or the new fencing or whatever it is being tendered out? Are Western Power contractors doing it, or has the company gone out to tender for local contractors in that region to do the work? Perhaps if the minister can do that all in one, to save time.

**The CHAIR:** Mr Kalajzic.

**Mr E. Kalajzic:** Thank you. To put it into context first, we have 150 substations spread all the way from Kalbarri in the north to Albany in the south and Kalgoorlie out in the east, so it is a large program. That gives the member the context about the volume of spending. We have security fencing, which ranges in condition depending on how old it is. As the minister explained, some of the fencing is upgraded for security reasons for where we are, but also we need to make sure that we have the right upgrades for the standards that we have going forward. It is a rather large program, given the volume of substations that we have. In terms of the market and who does the work, it just depends on the location and where the substation is, but it does go to market and tends to go to whoever is available in those areas to be able to do it.

**Dr D.J. HONEY:** The minister talked a little earlier today in another session about the importance of the reliability of the power supply connected to the grid. We know that cyclone Seroja knocked out something like 60 of the 132-kilovolt poles on the Three Springs to Geraldton line. Are any current assessments being made to upgrade that line, complete the Mid West Energy Project phase 2 and install the 330-kilovolt line between Three Springs and Geraldton to improve the reliability of that system?

**Mr W.J. JOHNSTON:** I think that the member is confused. Upgrading to 330-kilovolt lines does not assist with reliability.

**Dr D.J. HONEY:** I am talking about building a new line, obviously, to the same standard as the existing line. My understanding is that on the Three Springs line—the minister can tell me if I am incorrect—the connection from Three Springs through to the rest of the south west interconnected system withstood the weather conditions at that time, but the wooden power poles on the 132-kilovolt line going from Three Springs to Geraldton suffered enormous damage. My understanding is that if that line had been replaced with a 330-kilovolt line built to the same standards as the Mid West Energy Project phase 1, it is unlikely that the line would have suffered anywhere near the same extent of damage.

[7.10 pm]

**Mr W.J. JOHNSTON:** No, that is not an accurate representation. Whether it is 132 or 330 kilovolts does not change the reliability factor. That storm was enormous and it was unprecedented; we have never had a storm of that size hit that area. Obviously, the infrastructure did not cope with the storm. If there had been a 330-kilovolt line, it would not have changed the outcome. Also, it is highly unlikely that the Economic Regulation Authority would ever give approval for us to upgrade that line because that would mean using Western Power money to upgrade a line that is used for demand, not supply. As the member will know, because I am sure he is aware of this stuff, the ERA requires customers, not Western Power, to pay for line upgrades. If customers need an upgrade of that line, they will have to pay for it; in fact, I regularly talk to the potential customers at both Narngulu and elsewhere in the midwest and they all absolutely acknowledge their obligation to pay for an upgrade, if that is what they want. There is a whole range of scenarios that they might use to finance that, but, as the member knows, Western Power is not permitted to upgrade that line for customer demand. Customers have to pay; otherwise, we would be asking existing customers to pay the costs of future customers. That would push up the cost for the member's old employer, Alcoa, for example, which would be paying for a competitor to come into the market. That is not the way the regulatory framework works in Western Australia. If there was a reliability challenge, the ERA would permit Western Power to do it, but it is not a reliability challenge.

**Dr D.J. HONEY:** I understand the difference between 132 and 330 kilovolts in terms of some intrinsic capacity to withstand damage.

**Mr W.J. JOHNSTON:** It is not correct. It is just not correct. It is just wrong.

**Dr D.J. HONEY:** The minister is making an assertion that I am not making, and that is very clear. I am not saying that there is any relationship; I just said that then. There is no relationship between the volumes of the line; however, there is a difference in the construction of the line. We have an old line that is made with wooden power poles. If

that line was replaced—in this case, it would make sense to replace it with a 330-kilovolt line—that line could be expected to have substantially greater physical reliability —

**Mr W.J. JOHNSTON:** No.

**Dr D.J. HONEY:** — because of the construction techniques used for the line, not because of the voltage of the line.

**Mr W.J. JOHNSTON:** No. The ERA would not permit that. The ERA requires Western Power to use the lowest cost option. As the member knows, that is a regulatory requirement of Western Power. Western Power cannot upgrade from 132 to 330 kilovolts for that line using its regulated income. It is not permitted. To upgrade that line, the customers would have to pay for it. As I say, I talk to the potential customers both in Narngulu and elsewhere in the midwest and they understand the legal requirement for them to pay for the infrastructure. I will give the member an example. The government of Western Australia did not pay for the overhead infrastructure that Rio Tinto, BHP, Fortescue Metals Group et cetera use in the Pilbara. We did not pay for the infrastructure that connects Alcoa to the south west interconnected system. The infrastructure is paid for by the customers. If that line needs to be upgraded from 132 to 330 kilovolts because of load, the new load has to pay for it. Western Power cannot—is not permitted—to upgrade that line from 132 to 330 kilovolts as part of its regulated income.

**Dr D.J. HONEY:** Is it not the case that that line already has the capacity for 330 kilovolts in wires and insulators; it is only the connecting substations that are limited to 132 kilovolts?

**Mr W.J. JOHNSTON:** No, that is not correct, and the member was advised that it is not correct in February this year when he met with the company's representatives. They told the member.

**Dr D.J. HONEY:** Minister, that is not true.

**Mr W.J. JOHNSTON:** If the member wants, I can read out the briefing note.

**Dr D.J. HONEY:** I was there; the minister was not.

**The CHAIR:** Leader of the Liberal Party, you have asked the question; the minister is responding.

**Mr W.J. JOHNSTON:** The member was advised in February that that is not correct.

**Dr D.J. HONEY:** No.

**Mr W.J. JOHNSTON:** That is what the member was advised by Western Power in February.

**Dr D.J. HONEY:** That is not correct, minister. That is not correct.

**The CHAIR:** Leader of the Liberal Party!

**Dr D.J. HONEY:** I have a further question. Are there any designs and plans for a 330-kilovolt line between Three Springs and Geraldton, and has a nominal costing been done for such a line?

**Mr W.J. JOHNSTON:** Yes, of course there is a potential design, because customers are talking to Western Power about building the facility. They have a plus or minus 50 per cent costing, but they are in commercial negotiations so I am not going to tell the member what the plus or minus 50 per cent costing is. The member keeps talking about this stuff. I am sure that the customers are telling him exactly what they are telling me. They have two choices: they can commission Western Power to build the infrastructure and pay whatever Western Power charges them or they can build it to the standard required by Western Power and, if they think they can do that at a lower cost, that is the way they can do it. Once they build it, they gift the asset to Western Power. But Western Power cannot spend its money on that project because there are no regulatory permissions to do that and it is not required to maintain the integrity of the grid.

**Dr D.J. HONEY:** All the potential energy producers and connected downstream manufacturers I have spoken to have said to me that unless they also have the capacity to export power, their operations are unviable. In that case, there would be producers there. Would that provide the capacity for Western Power to install that line?

**Mr W.J. JOHNSTON:** No. I think the member is missing what they are saying. They are not telling him that. They are saying that they need to be grid connected. They are not saying that they want to sell into the market, although some of them might. Nonetheless, they know, because they have told me. Some of these companies are multinational mega-billion-dollar companies. They must be telling the member that they understand that they have to pay for their own infrastructure. What the serious players in the Narngulu estate know—because they tell the member and me—is that when the project proceeds, the infrastructure will be in place, by definition, because they cannot proceed without the infrastructure. The question is: who will pay for it and how will those costs be shared amongst the users of the infrastructure? It is a much better outcome for them to build common-user infrastructure than for each of them to build their own infrastructure, which is what happened in the Pilbara.

Now, as the member knows, we literally have transmission lines running parallel to each other, which is crazy. That was the outcome because those companies wanted that outcome. The hope here is that because they wanted the grid

connected, we can get a better outcome whereby they share infrastructure that pushes down the cost for each business because they do not have to separately build the infrastructure. Whether they pay for it and Western Power builds it—they pay for it and commission Western Power to build it—or they build it to the standards that Western Power requires and gift the asset back to Western Power makes no difference to Western Power.

[7.20 pm]

**Dr D.J. HONEY:** Who paid for the 330-kilovolt line from the south west interconnected system to Three Springs?

**Mr W.J. JOHNSTON:** As the member knows and was advised by Western Power earlier this year, the line up to Karara was built by Western Power and paid for by Karara. Nobody in the room here was in Western Power at the time we are talking about, so they cannot answer the question. If the member wants to put it on notice, we will dig out the history. Again, I make the point that it is two decades since Western Power has had the current regulatory framework and the current regulatory framework in Western Australia, while not identical, is similar to the east coast system. On the east coast, the network business cannot build speculative infrastructure. For gas, to which, of course, we apply the national law here in WA, we cannot build speculative infrastructure. The distribution system is different, so we can build speculative infrastructure in the distribution business but not in either gas or electricity in the transmission business.

**Dr D.J. HONEY:** Further question.

**The CHAIR:** There are other people.

**Dr D.J. HONEY:** Thank you very much, chair.

There is a chicken-and-egg situation in relation to this project insofar as the customers I have spoken to—I do not think we are too disparate on the point here—have said that they want the ability to put power into the network and the ability to draw power from the network, in which case, it would be a distribution network, if you like.

**Mr W.J. JOHNSTON:** No.

**Dr D.J. HONEY:** It is a separate discussion, which I will not hold up time on here. In fact, it is both ways. They need stability for their operations when they cannot generate their power and they need the ability to sell their own power into the network as well.

**Mr W.J. JOHNSTON:** I want to clear this up. Distribution means the low high-voltage network, not the high-voltage network. What we call transmission-connected customers, are the ones like the member's former employer that are connected directly to the high-voltage system. The distribution customers are the ones that are connected to the low-voltage system. As I understand, there are a couple of workarounds for some of the potential customers in that area that Western Power is talking to customers about. They might be able to provide an initial opportunity for those businesses to commence, but, clearly, if they need the high-voltage system available to them, they will have to pay for the connection. The good news is that it will be done at a lower cost if it is done as multi-user infrastructure than if it is done as individual infrastructure, as happened for people in the Pilbara.

Do not forget, member, Western Australia has received more direct foreign investment into our resource sector than almost any other country in the world, so big investors understand the need to provide their own infrastructure. These are multibillion-dollar companies. The idea that they do not know how to provide their own infrastructure is silly. I cannot believe that any serious player is telling the member that they expect the government to take money off mums and dads in Western Australia and give it to large foreign-owned multinationals. There is not a multinational in the world that would make that proposal and that is why none of them have.

**Mr V.A. CATANIA:** Minister, firstly, can you indulge me to say thank you to Western Power for the work that has been done due to the cyclone in Kalbarri and the midwest. Also, thank you for the tour of the Kalbarri microgrid, the other month I think it was, which was very informative.

**Mr W.J. JOHNSTON:** You are very generous, thank you.

**Mr V.A. CATANIA:** I do not know whether this relates to this division, but I refer to “Optimising the Modular Grid Transition” under “Significant Issues Impacting the Government Trading Enterprise” on page 804. I want to talk about the Kalbarri microgrid. We have brought up in this house many times the issues around Kalbarri's power supply outages and how they affect businesses and individuals alike and the damage they do to appliances and, obviously, income. Can the minister perhaps update where the Kalbarri microgrid is at and when it will take effect and be working? Hopefully, it will fix 80 per cent of those smaller outages, which, obviously, will be beneficial to the community.

**Mr W.J. JOHNSTON:** Thank you, member. You were very generous in your praise of Western Power. I agree; I think the workforce of Western Power is to be commended for the work it did in responding to cyclone Seroja.

We are very excited about the microgrid. I have my briefing note here, but I invite Sam Barbaro to speak, because he is the technical expert.

**Mr S. Barbaro:** The microgrid was delayed for a number of reasons. As the member will be aware, part of the delay was from damage from the cyclone, but also the original proponent went bankrupt, so we had to make different commercial arrangements to proceed with that. However, we are progressing with that and will start a 40-day trial with the microgrid relatively shortly—within the next month or so. Once we have done that, we are hopeful that it will be up and running by the end of this calendar year.

**Mr V.A. CATANIA:** As I said, can the minister perhaps elaborate on how it should improve those outages? This week the *Midwest Times* referred to how power outages continue to frustrate Perenjori residents. This has obviously been modelled off Perenjori. I know it is a smaller scale system, but very similar and a little bit different in the way it is constructed—or the parts are. Are they problems that perhaps Kalbarri could experience? Perhaps the minister can elaborate on those issue there compared with what is happening in Kalbarri.

**Mr W.J. JOHNSTON:** I will make some comments and then ask Mr Barbaro to speak. Firstly, Perenjori was very unfortunate because the battery has not performed to the manufacturer's specifications—put it that way—so the manufacturer is getting the battery to work the way it is supposed to. It is very unfortunate. This is why we try not to overpromise on these things because we cannot guarantee 100 per cent. There is a technical fault that is being resolved for the Perenjori battery. The Perenjori battery is just a battery; it is not a microgrid, so, obviously, it helps but it is not perfection. I invite Mr Barbaro to comment on the microgrid in Kalbarri and, if he wants to, on the Perenjori situation.

**Mr S. Barbaro:** The Perenjori battery was working relatively successfully until the cyclone, so when the cyclone hit, the battery went out and caused a fault. That is why we are working with the manufacturers to get that fault fixed. That is why people in the town of Perenjori, unfortunately, are seeing more outages at the moment—outages they were not seeing when the microgrid was working. It was quite a successful project.

Kalbarri will work in a similar fashion. It will still be grid fed. When there are outages, the microgrid will see that and trigger immediately. It is what we call a bumpless system. We will not see an outage; it will trigger it within a millisecond and then back feed into the town to keep the town running. The microgrid will pick up a lot of the small intermittent outages that are seen by the town at the moment—the short one or two-hour outages that frustrate the customers there a lot—and bumplessly start to back feed them, so they will start to get a much better service. Unfortunately, Kalbarri is still facing issues from the cyclone that we are trying to deal with. Hopefully, when the microgrid kicks in, we will pick up a lot of those faults.

[7.30 pm]

**Mr W.J. JOHNSTON:** Mr Kalajzic would also like to make a comment.

**Mr E. Kalajzic:** In addition to what Sam was saying, that feeder comes all the way from Geraldton, as the member knows, and is 140 kilometres long. Now that we have a microgrid 20 kilometres out of town, the impact will be less on that whole line. This is still new technology that we are dealing with and that bumpless transition around the high voltage unit—I am sure that the member saw it when he was up there. We are making sure that that stays up there. It will be relocated to a different place from where it is now, but the idea will be to have it there as we bring that microgrid fully online through summer.

**Mr W.J. JOHNSTON:** I will just finish by saying that Western Power has a vision for the future using a modular grid. Energy is in a rapid period of transition, and regardless of whether it is Western Power or Synergy, or later on Horizon Power, they will face all these challenges with the change. If we go back to when the State Energy Commission of Western Australia was formed, for people in the wheatbelt the arrival of grid connection was seen as a major step forward. But now that we have these new technologies, we are going back to the future a bit. In the future, we will have a tight underground network in the densely populated areas, an overhead grid in the fringe of the lightly populated areas and separate microgrids for the more isolated areas. Technology is changing, so that firstly allows us to make it less carbon intensive, but it also improves the reliability of the network. Every time I say this at any public meeting, I then make the point that we are not talking about next year. We are talking about a transition over a period of time. I do not want people to think that tomorrow everything is going to be better.

**Mr V.A. CATANIA:** It has got to be the way of the future.

**The CHAIR:** That completes the examination of Western Power. Thank you, everyone.