

Horizon Power —

Mr S.J. Price, Chair.

Mr W.J. Johnston, Minister for Energy.

Ms S. Unwin, Chief Executive Officer.

Mr M. Houlahan, Chief Financial Officer.

Mr N. Roberts, Chief of Staff.

Miss K. McKenzie, Principal Policy Adviser.

Miss Y. Lucas, Senior Policy Adviser.

Mr J. Welch, Senior Policy Adviser.

Mr P. Meyerkort, Senior Policy Adviser.

[Witnesses introduced.]

The CHAIR: This estimates committee will be reported by Hansard. The daily proof *Hansard* will be available tomorrow. 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. The Chair will ensure that as many questions as possible are asked and that both questions and answers are short and to the point. If an adviser needs to answer from the lectern, will they please state their name prior to their answer.

The minister may agree to provide supplementary information to the committee, and I ask the minister to clearly indicate what supplementary information will be provided. I will then allocate a reference number. Supplementary information should be provided to the principal clerk by Friday, 30 October 2020. I caution members that if a minister asks that a matter be put on notice, it is up to the member to lodge that through the online questions system.

I give the call to the member for Warren–Blackwood.

Mr D.T. REDMAN: Thank you. I refer the minister to page 243 of budget paper No 3 and expenses from the general government sector. One of those relates to remote communities and essential services. I wonder whether the minister could update me on how many remote communities Horizon provides services to.

Mr W.J. JOHNSTON: Yes. This is an exciting project to continue the regularisation of more of these remote communities, and we are also pleased that the commonwealth government is going to make a contribution to other ones on top of these ones here. I will ask Ms Unwin to comment.

Ms S. Unwin: We have just over 50 communities that we already service as remote communities.

Mr D.T. REDMAN: How many?

Ms S. Unwin: It is around 50 that we already service within our remit. This body of work relates to another 13. Essentially, their electrical infrastructure will be upgraded to provide that safe and reliable service that I guess we call town-based services.

Mr D.T. REDMAN: Was that part of the \$40 million that I think was announced, which was a fairly significant chunk?

Mr W.J. JOHNSTON: It was \$65 million, yes.

Mr D.T. REDMAN: That was the total.

Mr W.J. JOHNSTON: Yes.

Mr D.T. REDMAN: I think \$40 million was for the remotes.

Mr W.J. JOHNSTON: I cannot remember what the figure is for the remotes, but it also includes the standalone power systems, Denham and a few other things.

Mr D.T. REDMAN: Was that going to be borrowings for Horizon?

Mr W.J. JOHNSTON: No. That was money from the consolidated revenue fund for Horizon. It was not borrowings. The recovery money is from the CRF, so it is a subsidy to —

Mr D.T. REDMAN: The government made a \$65 million announcement —

Mr W.J. JOHNSTON: Yes.

Mr D.T. REDMAN: — of which I think the lion's share was going to remote community investment.

Mr W.J. JOHNSTON: No, this is —

Mr D.T. REDMAN: When I asked a question on notice, that source of funds was borrowings.

Mr W.J. JOHNSTON: It was not Horizon borrowings.

Mr D.T. REDMAN: I thought it was Horizon borrowings.

Mr W.J. JOHNSTON: No, because it is this year. It is the \$40.4 million and it is a capital contribution. The total on page 243 is the expenses from the general government sector of the public corporations. Horizon Power got \$40.4 million of payments from the general government sector. It includes the \$23.7 million for the electricity credit, and then the three COVID amounts are underneath that, which is for the recovery plans and solar and energy storage for Derby Hospital at \$3.7 million. Those ones are CRF funded and the other ones are then debt funded. That is why the member is getting me confused because he is referring to the page about the Treasury payments to Horizon, but then asking me about things that are not related. I apologise that I was confused, but I agree that I was confused.

Mr D.T. REDMAN: That is all right.

Dr D.J. HONEY: Minister, I am interested in the simplification of the network. I wondered whether it would be possible to give an estimate of the average net cost to connect customers to the Synergy network.

Mr W.J. JOHNSTON: Is that Horizon Power?

Dr D.J. HONEY: Horizon Power's network, I should say. What is the average cost to government?

Mr W.J. JOHNSTON: Of a new connection?

Dr D.J. HONEY: Yes, of customers. There are so many customers to network and there is a cost.

Mr W.J. JOHNSTON: As it happens, the annual report shows the number of people who are served by Horizon. If the member divides the total cost of service by the number of customers, that will give him the average cost.

Dr D.J. HONEY: Does the minister have that number? I am not trying to be smart. I am interested in the number.

Mr W.J. JOHNSTON: Well, it is here. Yes, I imagine it is pretty high. In some of the communities where people are burning diesel, the cost is extraordinarily high. There is not just a climate change advantage by reducing the amount of diesel that we burn; there is also a very significant cost saving. The decision by Horizon to enter its new agreement with Contract Power for the supply of electricity in Esperance is an example of that; there is a \$10 million a year saving in costs for Horizon. That goes back to the tariff equalisation contribution and therefore takes the cost pressures off Synergy, which we were talking about before. It is working very, very hard to both reduce carbon pollution and, at the same time, costs.

Dr D.J. HONEY: There is a buyback line item in the report or the summary here. What is the investment in terms of taking customers off the extended grid?

Mr W.J. JOHNSTON: What is the member discussing? I am sorry, I do not —

Dr D.J. HONEY: Do not worry. I will go onto another question and then come back to it. There is a particular line item, but I will find it and refer to it.

Mr W.J. JOHNSTON: That is okay.

Mr D.T. REDMAN: There was some legislation that supported the opening up of some of Horizon's network. Can the minister give me an update of the status of that now and the predicted impact that it is going to have on Horizon's business?

Mr W.J. JOHNSTON: Yes. I will invite Stephanie Unwin to make a comment, but I will just say first that, yes, the legislation is through. We have delayed the expected implementation date by another six months, out to 1 July next year, because of the COVID pandemic. The other partners in that reform process support that. Energy Policy WA is currently in consultation about the nature of the system operator, because it is not clear that we need a complete system operator for such a small network. The Australian Energy Market Operator is one choice, but the participants in the market up there might choose a different option and that is currently being consulted on. Obviously, there are cost impacts on Horizon for the preparation of moving to the new market, and then there will be challenges post the new market when customers start to be pinched by other people. I will invite Stephanie to make a comment.

Ms S. Unwin: There is a likely impact on Horizon Power's revenue as a result of the number of contestable customers that are then made available for competition. About 47 customers would fall into the threshold that is available, and over the forward period we are expecting about a \$25 million revenue impact if those customers were to change their arrangements and move into a competitive supply that is not with Horizon Power.

Mr W.J. JOHNSTON: Could I make a point about that? Because of the nature of the South Hedland power station arrangement, that is a direct loss to Horizon that it cannot recover because it has still got to pay for the high-cost contract with the South Hedland power station. Think about this: Horizon is marketing the unsold energy out of

that power station, yet Alinta is building a new power station in Newman that is providing energy at a cheaper cost than the existing Horizon arrangement. That just shows the member exactly how out of the money that arrangement by the former government was.

[12.40 pm]

Mr D.T. REDMAN: I think that there is still a tariff adjustment payment there for Horizon, which has flatlined. I am not sure that it necessarily relates to this, but I know that the TEC offsets the uniform tariff.

Mr W.J. JOHNSTON: Yes. The TAP is the protection against the TEC.

Mr D.T. REDMAN: Yes. So what will be the impact on that of the 45 potential new customers, or whatever, coming in on the contestable space?

Mr W.J. JOHNSTON: The TAP is the charge that we are making to contestable customers.

Mr D.T. REDMAN: That is right; that is being referred to them.

Mr W.J. JOHNSTON: It is a charge collected by Treasury and then allocated back to —

Mr D.T. REDMAN: Yes, I forgot that piece.

Mr W.J. JOHNSTON: Yes. That is so that we do not have to increase the TEC. It is effectively funding the losses from inside that market. Understand this, member—this shows how bad it is—even if we add 10¢ a kilowatt hour to the competitors to Horizon, they will still be able to undercut Horizon.

Mr D.T. REDMAN: Is the TAP that we are seeing in the budget is paid by those that come into the network?

Mr W.J. JOHNSTON: That is correct. It is collected by Treasury and paid to Horizon to offset some of its losses.

Dr M.D. NAHAN: I will not go into that issue, but I am sure that Alinta's power station is having an impact on the competition.

I refer to page 767 and energy storage in regional towns, which is a substantial investment. Can the minister describe that program?

Mr W.J. JOHNSTON: I will invite Ms Unwin to make a comment. That program is rolling out these batteries across these towns because these are high-costs towns. The batteries basically pay for themselves in short order, because the cost of the diesel supply is so high. I will invite Ms Unwin to explain.

Ms S. Unwin: Nine battery energy storage systems will be rolled out under this program, the biggest of which is in Broome, but a range of towns across our regions will benefit from this. It does two things. The battery releases hosting capacity. As we know, it is really important in the regional towns that more rooftop solar can come on for our customers so that they can effectively self-generate and reduce their consumption. One of the added benefits will be about 12.5 megawatts of additional hosting capacity across those towns with the nine batteries that will go in.

Dr M.D. NAHAN: On this issue, I can remember, minister, that Horizon had huge renewable energy buyback prices.

Mr W.J. JOHNSTON: Yes.

Dr M.D. NAHAN: I assume with this that the minister has lowered those, or how does that work?

Mr W.J. JOHNSTON: Earlier this year, the government moved from the old renewable energy buyback scheme to the new distributed energy buyback scheme, and Horizon is included in the DEBS. I think it was either the member or it might have been Hon Peter Collier who, under the old REB scheme, paid Horizon a higher rate for those high-cost-to-serve communities. Horizon continues to have that option. For those communities where it is of value for Horizon, it can make that offer. I will invite Ms Unwin to speak further.

Ms S. Unwin: For each of the towns, the DEBS rate has been set based on the benefit to us of procuring that energy. That amount varies town by town, based on the cost to serve that particular town.

Dr M.D. NAHAN: One of the problems in many of these towns is the lack of ownership of the building. There is a large number of rentals and intermittence mining, if you wish, and, therefore, the landlord or the people in those buildings did not have a desire to put on capital in the form of solar cells. Does the minister have a program to facilitate that?

Mr W.J. JOHNSTON: I will invite Ms Unwin to respond, but we are not in that business at this stage.

Ms S. Unwin: Yes, it is a very evident problem in our regions. It is kind of the reverse situation to the south west interconnected system, in which about 70 per cent of rooftops are not owned by our customers. One thing that is quite possible, and we are looking at this from a product base, is whether a community battery, for example, or a community solar farm can effectively give our customers the opportunity to participate in an equitable way, as

if they had their own rooftop. We do not have a product rolled out yet, but it is something that we have asked our team to look so that we can provide the equity of renewables in the regions.

Mr W.J. JOHNSTON: Could I just add that because of the high cost to serve these towns and the fact that they are using diesel, renewable solutions are usually the best outcome. Horizon has an ambition to be diesel free by —

Ms S. Unwin: By 2025—no new diesel by 2025.

Mr W.J. JOHNSTON: Yes, so no new diesel by 2025.

Dr M.D. NAHAN: Yes. In fact, the differential is huge.

Ms J.J. SHAW: Minister, I refer to page 768 of budget paper 2, volume 2. What challenges has Horizon Power faced in supplying electricity to customers during COVID-19 and how has the government responded?

Mr W.J. JOHNSTON: That is a good question. COVID has had a big impact on all of us, and that includes Horizon. I will invite Ms Unwin to speak further, but one of the interesting things was its effect on even the control centre and the fact that Horizon was able to work out a method to keep the control centre running if its staff needed to work from home. I invite Ms Unwin to explain some of the challenges, particularly because of the internal borders that were going on for a while.

Ms S. Unwin: It was a very challenging time for our own business as well as our customer base. I guess the first thing we did was try to make safe our own people, particularly around working from home arrangements, the control centre that we talked about just then. We managed to stand up two separate control centres so that we could have rotating crews. They did not interact, so if one crew effectively went down, the other crew could then keep all our systems going. We also had communication so that we could do that work effectively at home. Other changes we had to make were sort of quite unusual things, like not enabling two workers to be in one elevated bucket in order to do live work—so low voltage or high voltage work—and then trying to think about the safety protocols that that change introduced. We quite quickly restricted access to our customers from interfacing with us in our depots, and then we installed as quickly as we could perspex screens and the like—things that we now see as pretty standard. They were some of the small things we saw.

Through the work that the government did with the energy assistance payment and the offset payment, we were also able to outbound many calls and touch base with our customers one on one and we heard some fairly dramatic stories of hardship across the regions, which were in some areas quite exacerbated, particularly in the Kununurra area. A lot of that feedback we were able to put back into the coordinating group in Perth so that it could get a sense of some of the different issues that were facing those customers. We also implemented the disconnection moratorium and a number of web chat and other technical ways to contact our customers so that they could give us feedback. When people are in financial distress, often web chat is actually a better facility and people are more open to talk about that and prepayment arrangements. They were some of the things that we had to implement.

With the intrastate borders, it was quite difficult to get out and about, but thankfully they came down reasonably quickly so that we were able to interact with our crews again during that period.

Mr D.T. REDMAN: A fairly strong rollout action was mentioned before in the remote communities and others in terms of battery solar solutions set to replace the diesel. I think that when I asked a question on notice when the announcement was made about the procurement process for the provision of those systems, part of it was in the future purchases—so it was work being done—but part of it was off a bunch of preferred suppliers. Can the minister just talk me through the procurement process for those services? Is it simply a list of specs and asking them to provide that, neutral to what the TEC might be, and/or how often does the government renew its preferred supplier arrangement?

Mr W.J. JOHNSTON: This is a really interesting topic. I want to congratulate Horizon Power on its ambitions for supporting Western Australia manufacturing. Like Western Power, which buys all its standalone power systems from manufacturers in Perth, Horizon has an ambition to ensure that that continues. We are the global-leading jurisdiction for the implementation of standalone power systems and we want to continue to make the most of that. I will invite Ms Unwin to say whatever she thinks is appropriate.

[12.50 pm]

Ms S. Unwin: There are two categories of batteries, I guess, in this discussion. The standalone power system arrangement is a compilation of the solar, the battery, the inverter and, at the moment, the backup diesel. We are certainly working with a Western Australian company for the compilation of those units and then the deployment of those into the field.

We have five batteries in situ across our regions, which I think were in the question on notice that the member referred to, and various technology. I think LG and Samsung are the predominant ones that are both lithium ion technology. We do not currently have vanadium flow, although it is something that I would actually really like us to investigate.

There is quite a limited offering for vanadium flow at the moment, but something that would be quite useful to understand how it works because it is very good in hot climates and it will provide that medium to longer term storage, which is pretty important in our regional areas.

But with regard to the current procurement process that the member referred to, we leveraged really strongly the work that Western Power had done. It ran a very extensive procurement process in which it shortlisted three preferred suppliers of batteries. We have worked with that list to see whether we could speed up the procurement so we could achieve the stimulus outcomes in the 18-month period to get it on the ground. Our team then looked at those specifications and the work that came out of that and determined that we could source from the same battery suppliers.

Mr W.J. JOHNSTON: I want to make a comment here, too, that one of the innovations or changes that I made when I became minister—obviously, ministers always have a monthly catch-up with their government trading enterprises—is that we now have a catch-up once a quarter with all three GTEs plus EPWA and Treasury. This is to make sure that we have as much alignment as we can on these types of issues, and there is much hope and discussion. People say that Western Power and Synergy have not got on this well since they were separated at birth. I will let Horizon speak, but I think it will say that it is getting on pretty well with Western Power as well. We have gone out of our way to try to coordinate across the GTEs as much as possible.

Mr D.T. REDMAN: In terms of utilising Western Power's preferred procurement schedule, does the minister know when that was established? The number of people in this market is moving very quickly. If it is an old bit of work, then it is going to be out of date. A number of people have reflected to me that they have not be able to play in the game because of it. I understand the time frame for that, and the minister has just articulated the reasons why, but that equity in the marketplace is significant.

Mr W.J. JOHNSTON: Look, there is a range of companies that have a range of complaints. They come and see me, too. Western Power has a set of rules that it applies, and some people say that the rules are unfair. They may or may not be unfair, but they are the rules that Western Power is applying. Western Power is constantly going back to market to examine what the options are. Ms Unwin mentioned vanadium flow batteries. I am the minister for the future battery industry strategy. I can tell the member that if we could get somebody to provide a cost-effective vanadium option, I would love to stand in front of that one because that would be very, very good for Western Australia. But, at the moment, there is only a limited number of technologies. One of the amusing things is that Tesla, the world's most famous battery company, does not make any batteries. There is a limited numbers of suppliers actually in these spaces, but we are trying to support the Western Australian industry to the extent that we can.

Dr D.J. HONEY: I refer to page 766 and paragraph 16, which is about the Denham hydrogen project. Can the minister outline a little detail on what is intended with that project?

Mr W.J. JOHNSTON: Yes. This is an exciting opportunity to demonstrate the practicality of using hydrogen and renewables to provide dispatchable power. It is a demonstration project; this is the state government investment in it. We are looking for other money. I will invite Ms Unwin to explain further.

Ms S. Unwin: The Denham project is a hydrogen microgrid in a regional setting. It will take about \$9.3 million all told to put the full solution on the ground. That solution is a combination of a direct current solar farm, a battery, an electrolyser, the compression and storage and a fuel cell. That fuel cell will support about 260 kilograms of storage of the hydrogen. It is a very exciting project for us. It is the first in Australia to see a hydrogen microgrid in a regional setting. It is a learning project for us that we hope will give us enough learnings and intelligence to start to deploy hydrogen more readily across our systems.

As I mentioned in the battery discussion earlier, one of our key issues is that for renewables to work in a 24/7 baseload capacity, we need to have some storage. The batteries that we talk about provide between two and four hours of deployable time. That long-term storage—it is called deep or medium storage—is the thing that has to be solved and hydrogen looks like the very best solution for that. The technology is actually mature, but the combination of it all is the learning that has to be gathered, and then the cost savings have to come in because we are talking about \$2 a kilogram to make it competitive. Ours can be higher because we are competing against diesel as opposed to, say, a metropolitan grid-based price, but it is still quite a significant number. We have to drop the cost of the electrolyser, the fuel cell componentry, in order to get to something that is competitive in the microgrids. But we are very excited to have the support of the state for this project because we think that it heralds in a technology that will be a game changer for not just our regional communities, but also—I think out of the Pilbara, for example—Australia's competitiveness in this space.

Dr D.J. HONEY: Is there any sort of dimension that I could understand in terms of capacity per day, kilograms of hydrogen or the capacity of the unit itself?

Ms S. Unwin: The storage capacity is 260 kilograms. That will then enable us to deploy that in service of the grid. When the sun is down and we want to utilise renewables rather than any backup gas, we can deploy that 260 kilograms. We think that will service around 100 houses. So, we are not talking about an enormous scale, but

we are talking about a demonstrable microgrid that will tell us whether this can work, how quickly we can deploy into the grid and bring it out of the fuel cell effectively to utilise.

Dr D.J. HONEY: Is there any thought that that might be also linked to the potential supply of hydrogen for vehicles or is it going to stick very much to the grid stability?

Mr W.J. JOHNSTON: No. This is just to demonstrate the capacity to do it in this circumstance. But we all know that hydrogen is an exciting opportunity to replace carbon-intensive fuels in other applications. I am sure that the member is aware of the number of mining companies that are not far away from Denham that want to examine the deployment of hydrogen to replace diesel in their trucks.

Dr M.D. NAHAN: Under my watch, but I think following on from that, Horizon Power introduced an experimental pricing arrangement in Broome. What is the progress of that?

Mr W.J. JOHNSTON: We are very excited about it. I will ask Ms Unwin to talk further.

Ms S. Unwin: MyPower has been really strongly supported. As the member will be well aware, given his time in government, the Broome project has been greatly taken up by the community in Broome. About 1 200 of our customers are on it at the moment. Last year, they saved about \$1.8 million based on, effectively, the time of use or an opportunity to utilise the peak load at a lower rate by the number of units that they have been allocated. That has been quite strongly supported with those great customer outcomes. In order to roll it out further, we have a fair amount of work to do on the back office. It is often the case that the integration of our back office systems in order to do a large-scale deployment requires quite a bit of investment. The system that we had at the time was for a trial rather than a large-scale deployment. But we are now working on a range of products to suit our customers and we are getting their input into what might work for them. Interestingly, in places like Esperance, our customers are keener on a yearly payment, for example, to work in with the seasonal harvest. So one of the things that is very important for us to do is listen to our customers in each of the areas to construct the right product for them.

Mr W.J. JOHNSTON: Can I just say that the distributed energy resources road map recommended tariff trials. They were endorsed by cabinet. They were delayed in the Synergy footprint during COVID because we could not recruit. But we are actively recruiting customers for two trials. One of them is a MyPower-style capacity charge, and the other one is a load-following charge that rewards a customer for using electricity during the day.

The CHAIR: Thank you, minister. The time has expired, so that completes the examination of Horizon Power. I will now vacate the chair until 2.00 pm.

Meeting suspended from 1.00 to 2.00 pm