

**ELECTRICITY — OUTAGES — DAWESVILLE**

*Grievance*

**MRS L.A. MUNDAY (Dawesville)** [9.28 am]: My grievance is to the Minister for Energy and I thank Minister Johnston for taking my grievance. First of all, I would like to express my gratitude for the minister's support and the hard work undertaken by his advisers during the unprecedented power outages that occurred during the Christmas period last year. I would like to make particular mention of Yhana Lucas for the assistance she provided to both me and my team as we endeavoured to respond to constituents during the extended power outages throughout the week of that Christmas period. In addition, I would like to thank Ben and Briony from Western Power's stakeholders and community engagement team, who made themselves available and regularly emailed me updates and suggestions. They also organised for two generators to be deployed to maintain continuity of power following the outage. I also know that some people came in during their allocated Christmas leave to assist us and for that I am truly grateful.

I appreciate that the Christmas period was a tough time for many residents in the Peel and Perth metropolitan area because of a continuous heatwave with temperatures above 40 degrees over a four-day period and the added stress of a bushfire in the Perth hills. I am also conscious of the pressure that was on Western Power to rectify numerous faults and restore power to homes and businesses in very challenging conditions.

During the Christmas power outages, I received over 150 emails from people in my electorate describing their power outages that began late afternoon on Christmas Eve, with a growing number of outages occurring on Christmas Day before peaking in the evening of Boxing Day, with the largest number of customers affected on Boxing Day and into 27 December. However, a sizable number of affected customers remained without power until 28 December. I have three examples of emails I received during the Christmas 2021 period. Liz writes —

I am a resident of Dawesville.

We have experienced power outages on Christmas Day, Boxing Day and today.

My family has personally lost over \$500 worth of food.

We had our Christmas Day and Boxing Day completely ruined.

Power outages are commonplace in Dawesville and nothing seems to be done to fix this issue.

I would like this to be an official ministerial complaint and would appreciate knowing the correct way to lodge a ministerial complaint.

...

Your prompt response would be appreciated.

Then Cindy and Paul write —

The Dawesville power blackouts. We have had no power for the following times....

Xmas Day: 6pm–1.30am ...

Boxing Day: 5pm–10.30am the following day ...

27th: 4pm–11pm ...

28th: Streets behind us have lost power, we cringe we are next.

Aside from this happening on days over 40C & the heat being unbearable, we've also put up with:

1. Throwing out Xmas & New Years food
2. Cancel family gatherings
3. Reticulation times are in the evening, so instead of using our bore water over ... we had to pay for town water & hand water

but more inconvenient....

We run a business that deals with clients internationally in different time zones. We don't get time off over Xmas because it is a busy time of year. Client sites are dealing with Boxing Day sales, etc, and we have to be available if their website strikes difficulties.

When we lost power, we also lost mobile & data coverage. Which meant that we had no form of communication during the outages. We had to keep driving north & south finding a tower that had coverage, and sitting in the car just waiting in case our clients needed us. Not a flash way to spend Xmas ...

Then Madeline writes —

Hi Lisa, I am a pensioner and live alone, 3 days of black outs 25.12.21 6pm/12.30 am. 26.12.21. 5.30 pm./1.00 am. 27.12.21. 5.30pm.../9 pm, also when the power is off I have no internet and mobile phone not working, what do I do if I need to call someone, my family are concerned if they can't reach me.

This is not a recent problem, I have lived in Dawesville since 1974 and ... has always had a power problem with not enough power being supplied ...

Why doesn't the power that goes back to the grid from solar panels during the day get saved so we don't have an overload from the inadequacies of the grid.

This is not a 3rd world country.

...

Yours sincerely Madeline

I rang every constituent who emailed me and consented to a phone call, and during these conversations that I had over the Christmas period, it came to light that many of these residents revealed that power outages in pockets of Dawesville south of the Dawesville Cut bridge are frequent—on average every four to six weeks—with a duration of anything from seconds to several hours. In response to these extreme outages, the minister commissioned an independent review of the power outage, led by Michelle Shepherd, a commissioner at the Australian Energy Market Commission. The review examined and reported on the reasons for the outages and made recommendations on reducing future impacts. Ms Shepherd's *Independent review of Christmas 2021 power outages* made several findings. It states —

During the Christmas period a TFB was called by DFES across large areas of the SWIS.

This triggered Western Power to apply its total fire ban procedures, which included making its network protection equipment more sensitive and disabling its auto-reclose settings. Ms Shepherd reported that making network protection equipment more sensitive and disabling auto-reclose settings reduced the risk of the network starting a fire. She said —

Multiple outages disproportionately impacted customers in rural areas, with 65.8% of customers experiencing multiple outages located in rural areas, including semi-rural areas, for example, Dawesville.

Since Christmas 2021, Western Power has been working to upgrade networks in many areas, and I know some works have been done in the electorate of Dawesville. Could the minister please outline to me the work that has been done and what prospective works will be done to further improve the system to provide reliable power now and for the future growth of the area? I understand that these works are not a silver bullet and that power outages will occur in the future and there is no such thing as a 100 per cent guarantee.

Can I also respectfully request that while the Dawesville electorate is still waiting for upgrades, generators be made available to us over the summer period? It has been explained to me that each year, Western Power reviews the load on its feeders and zone substations to ensure adequate capacity, based on historical performance and anticipated natural load growth, and any prospective shortfalls are addressed to ensure that prospective demands at this high-voltage level can be met. Additional planning investigations continue to be conducted for a number of areas, including Dawesville.

Also during the Christmas power outages last year, as outlined in the email from Madeline, my electorate's phone services in the area were interrupted for an extended period. Some residents advise that when their power goes out, so does their phone service—each time in sync with the power. There were many emails like Liz's asking about the history of power surges occurring in the suburb of Dawesville. Is the minister aware of any reason this could be happening? Is there anything Western Power could do to ensure the reduction of power surges and the continuity of power to telecommunications facilities in the area, as residents were unable to contact emergency services?

Thank you, Minister Johnston, for your continued support and for taking my grievance today.

**MR W.J. JOHNSTON (Cannington — Minister for Energy)** [9.35 am]: I thank the member for Dawesville for her grievance and her continued advocacy on these matters. I know we spoke at the time and subsequently on a number of occasions about the challenges that her constituents faced.

First of all, it is obviously important to understand that climate change is making the management of the electricity system much more difficult. The equipment that is used in the distribution of electricity is air-cooled; therefore, the fact that there will be higher temperatures will lead to more challenges for the equipment. That relates to the way the equipment works; in just the same way as a car's radiator relies on the vehicle moving to have air going through the radiator, the equipment is cooled with normal air. Therefore, on a series of high-temperature days and particularly high-temperature nights, there will be challenges with the electricity system.

The Mandurah region presents a series of challenges. Western Power's zone substation in Mandurah is operated from 132 kilovolts to 22 kilovolts. It has nine 22-kilovolt distribution feeders that extend north to supply Mandurah, up to Greenfields and east to North and South Yunderup. Extending south, these feeders also supply the area between the Dawesville estuary and the Indian Ocean, right down to Herron. As members can imagine, supplying these distances with feeders is challenging, given the topography between the Indian Ocean and the Dawesville estuary. It also presents limited opportunities for interconnection because of the estuary.

During the unprecedented heatwave that occurred last summer between Christmas and 27 December, outages that affected 2 900 customers unfortunately occurred on the southern feeder between Dawesville and Herron. We all know that power outages are never convenient, but the member has outlined why the Christmas 2021 outages were particularly inconvenient. The experience of the member for Dawesville's constituents having to throw out food and cancel Christmas celebrations was not unique. Of course, 86 per cent of customers were not impacted by outages, but that is no comfort to the 14 per cent who were. The member also read out an email from constituents Cindy and Paul, who were unable to use their bore. This also was a common occurrence, particularly in regional communities that rely on bores.

I also note the query regarding power surges. When people refer to power surges, they are likely talking about momentary interruptions known internally to Western Power as "auto re-closers". These take place when a high-voltage protector device, either the feeder circuit breaker or an automatic re-closer, trip in response to a fault. The typical root cause is something in passing contact with the high-voltage power lines, resulting in a short circuit. When the incident is passing—also called a transient—the circuit breaker can restore supply automatically after a few seconds. As long as the fault is cleared—that is to say, it was only instantaneous—power is returned with the smallest possible interruption to the customer. Genuine supply-side voltage spikes are rare and limited to situations in which there has been lightning, a neutral fault or failures in substation voltage regulation equipment. They very, very rarely occur. When most people talk about a surge, they are talking about the transient's impact on the network.

Finally, the member raised the issue of telecommunications, and this is an ongoing challenge. I have written to both Telstra and the federal government to draw attention to the challenges here. As a state government, we have no control over telecommunications; it is regulated by the commonwealth. Of course, as we moved from landlines to mobile devices, the way that the mobile stations are built means that they are impacted by outages. The telephone companies could apply other technologies to solve that problem, and we urge them to do so.

I understand how disruptive the Christmas outages were in 2021, including to people in the community the member represents. I appreciated that at the time, which is why I apologised to everyone affected and took a number of further actions. One of those actions was that we doubled the extended outage payment to \$120. Of course, as the member outlined, we also commissioned Michelle Shepherd to examine the root causes of the troubles we had. I tabled that report on 23 March.

I want to acknowledge the considerable progress Western Power has made, beginning with works that will directly benefit the Dawesville community. Western Power has fast-tracked significant capacity and reliability investments on the Mandurah network, and we expect all of them to be completed by Christmas this year. The 12 packages of work would normally have taken two years to complete. These works will significantly improve network reliability and cater for increased customer demand. There will be more flexibility between feeders. The addition of new feeders and interconnections between existing feeders means that we will be able to redirect electricity around breakages in equipment. These works will also create additional capacity and redundancy in the region by utilising almost six kilometres of line from the new feeders to extend and enable the northern feeders to pick up additional load from the southern feeders, thereby allowing loads to be better shared across the Mandurah network. Networks cannot be 100 per cent reliable as faults do occur during normal operations. However, if faults occur, customers will experience a reduction in the time that it will take to respond, and will be reconnected more quickly. One way in which we are doing that is that Western Power has automated eight of the key switching points in the area to allow automatic action.

I also want to update the house more broadly and table Western Power's *Shepherd report implementation plan: Progress update*.

[See paper [1711](#).]

**Mr W.J. JOHNSTON:** The member can see that we are taking action in her community to make the system better and give us more flexibility and faster responses. We are doing that in a number of other locations across the state as well.