

**ELECTRICITY INDUSTRY AMENDMENT (DISTRIBUTED ENERGY RESOURCES) BILL 2023**

*Second Reading*

Resumed from 11 October 2023.

**HON DR STEVE THOMAS (South West)** [1.36 pm]: Kia Orana, Madam President. I probably did not expect to be standing up and addressing a bill this quickly. At the outset, I thank members on both sides of the house for their well wishes and kind words. Thank you for your consideration, but it stops now, because I am not going away. I expect members to interject and give me a hard time in the same robust manner that they have done over the past three years. Please do not be gentle with me just because of a few tribulations. It is not the first tribulation I have been through and I suspect that it will not be the last.

Having said that, we are here to discuss the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023. I am quite looking forward to making a contribution on the government's performance on the provision of energy and its cost and reliability. I think this is a very good opportunity to do that, and it is quite timely. This is a reasonably long bill. I say at the outset that the bill does not deliver a specific set of outcomes. It is more of a bill that will simply put in place legislation that that will ultimately allow other regulations to try to fix the issues of electricity supply that the government faces. The bill is not a fix in and of itself. The opposition, unless it has changed its position in the last 24 hours, supports the bill because it will open up the capacity for the government to deliver better outcomes. Better outcomes need to be delivered because our energy supply, reliability and cost is one of the worst-performing sectors of this government. I have a few examples of that to go through.

Interestingly, one of the pertinent proposed sections of the bill is found at clause 5, which opens up a great opportunity for debate. I am sure members are looking forward to that. Clause 5 will insert proposed section 3A, which is the development of the state electricity objective. That is one of the key components of the bill. The new state electricity objective deserves to be read in full. It states —

- (1) The *State electricity objective* is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to —
  - (a) the quality, safety, security and reliability of supply of electricity; and
  - (b) the price of electricity; and
  - (c) the environment, including reducing greenhouse gas emissions.

Proposed paragraph (c) is the bit that is effectively being added by the bill before the house. We know that the new Minister for Energy has a very strong bent towards greenhouse gas emissions.

I think we need to have a bit of a discussion about how the state is performing, particular on the quality, safety, security and reliability of electricity supply. It would be interesting if we could bring forth the population of Kalgoorlie and ask them how they thought the government performed recently in terms of energy supply. I am not going to stand here and blame the government for a significant storm that did significant damage. As much as the former Premier liked to think that he managed everything in the state, perhaps including the weather, that was not the case. As much as it would be good to blame Hon Mark McGowan for that, or in this case the new Premier, Hon Roger Cook, I accept that these things will occur from time to time. In fact, interestingly, the new Minister for Environment, who is also the Minister for Energy, went on the radio and said that these things will happen more often because climate change is having a significant impact. I thought that was a very pertinent comment. The only problem was that a couple of years earlier, under the same government, a storm went through and there was a major power outage in Kalgoorlie. Kalgoorlie had a major power outage recently and also a major power outage two years earlier. Do members know what happened two years earlier? The backup generators did not kick in; they were not adequate for the job. Interestingly, two years after that—bear in mind that the government had a budget surplus of \$6 billion in each of those years—another storm ran through the supply lines that run out to Kalgoorlie, and guess what happened? The backup generators did not work! Two years later, with the government having received \$12 billion of free money—not because of the financial management of the government but because iron ore had propped it up—the generators still did not work. When we talk about the security and reliability of the electricity supply, that event indicates that maybe this legislation needed to come in a bit earlier.

I remind the government that part of its job is to provide a reliable supply of electricity. Kalgoorlie is not the only example of where the power has gone out; it has gone out in a lot of places. The power went out through the Perth hills and the western wheatbelt. The government could not do much about some of those things, because a lot of powerlines run through state forest, where trees blow down. That was not necessarily the government's fault either, but there is work to be done to make the system more secure. That is not a significant criticism; I am sure the parliamentary secretary representing the minister has had similar things occur in his home patch. However, when there was a major outage and the backup system that was designed to keep the lights on failed because it was inadequate—keeping the lights on is important; I will come back to that in some detail—and then, two years later,

the same problem occurred and the backup generator failed again, that is a failure of government. That is a failure of supply. That is a representation of the government.

Interestingly, I noticed that Western Power put out a press release towards the end of last year, telling us how much good work it was doing with the backup generators. It had put some money into maintenance and said that that was good. We will probably get some questions about this in the fullness of time, but I suspect the parliamentary secretary might be able to tell us either now or during question time at some point that the backup generator was not big enough. When the demand hit, Kalgoorlie could not get a reliable supply because the backup generator was underpowered. Okay, sure. I could accept that, except that it was underpowered two years ago. The Minister for Environment said that these storms will become more frequent because of climate change. We are going to get more storms and they are going to get worse. Two years ago, we discovered that the backup system in Kalgoorlie was underpowered. Two years later, after a bit of maintenance, it was still underpowered. I understand there were private providers that could have been used more rapidly. People in Kalgoorlie had their power off for days and days. Their fridges basically went into meltdown, their freezers defrosted and their food was thrown out. Businesses lost tens of thousands, if not hundreds of thousands of dollars. Originally, they were able to claim \$120 in compensation, but ultimately that was doubled to \$240. If someone has lost \$200 000, \$240 is not a big percentage, but I suppose it is a token effort. If there had not been a precedent under this government, I would say, “Okay, maybe that is a fair cop.” In some places, particularly in the Perth hills, where there is an issue with trees, powerlines and storms, maybe that is a fair cop. But there had been a problem with supply and the generators had proven to be insufficient. After two years of the greatest surpluses that have ever occurred in this state—the biggest combined surpluses of any state in the nation’s history—the government could not put generators in place that were able to do the job. Maybe we needed this a little bit earlier. This might have been a reminder to the Cook Labor government that, in effect, it should have invested in equipment and facilities that could actually do the job. I suspect that if the power went out for five days in central Perth, we would have mayhem on our hands. People would be rising up in the streets. Poor old Kalgoorlie had to suffer again.

Which issues of security and reliability of supply does the government need to look at? As demonstrated in Kalgoorlie, the first issue is generation. The transmission lines were down, but the power generation from the backup generators was inadequate. This will occur in the coming years under the government’s transition plan. The government’s target is to reduce greenhouse gas emissions and become net carbon neutral by 2050, which I agree with. That will probably get me into trouble. I am in trouble not infrequently, which might surprise some members. The 2050 carbon neutral target is not a bad idea, but the reality is that the government is stuck with a 2030 close-down target that it cannot meet. The government does not have enough generation capacity to maintain reliable supply even up to 2030. It might have had that capacity if it extended the life span of the Collie coal generators. The government might leap up and say, “No way would we ever do that. Our carbon credentials are too powerful for that.” As members would understand, a few months after the government put all this in place, one of the first things it did was extend the life span of one of the coal units in Collie. When did it extend it to? Funnily enough, it was to a month after the next state election. Wow! It will not run all the time. It is there basically to get this government through next summer, because it is worried that the lights will go off. How worried was this government that the lights would go off this summer? It was not worried much. When was it really worried? It was last summer. Do members know what this government did? It brought 100 000 tonnes of coal from Newcastle to Collie. We imported coal to Collie! Why did we import coal to Collie? I think it was because the former Premier said to the former Minister for Energy, “Actually, our energy system is in a bit of strife. I’ve been running around the country saying that our energy system is better than everybody else’s energy system and that we have the perfect energy system and the domgas policy.”

That is not in this bill, but I am sure we will come to that debate in the fullness of time. The former Premier said, “We have the domgas policy, which is perfect. Our energy system is perfect, and we have plenty of electricity and gas. We do not need to worry about any of these things.” What happened? It started to get a few reports that said it might be in trouble and that it was not managing its energy system particularly well. There were two major reports from the Australian Energy Market Operator from the end of 2022 to the end of 2023. The reports said, “Guess what, Western Australia? First off, you’re likely to run out of gas.” I think the government must have panicked a bit at some point and appointed a committee to look at the domestic gas policy. I think it is interesting that the committee looking into the domestic gas policy, the Economics and Industry Standing Committee of the house that shall not be named, was going to release an interim report in November or December but had to push it back until a week or two ago. Basically, it said in its report that this policy is not fit for purpose. This was the policy that the former Premier—state daddy—was trumpeting around the country as perfection. He had to realise that “perfection” was not necessarily the right description; “panic” might have been a better description, but certainly not perfection.

That was not the only one. In its next report the Australian Energy Market Operator said, “We think the state government’s going to run out of electricity as well. It is not just gas, some of which provides electricity; we are going to run out of electricity.” Members have seen that report, but it is not just the AEMO’s reports; there are also reports

from Synergy and Western Power. The government's own reports told it exactly the same thing. The government report came in and said, "We are potentially going to run out of electricity." The government, which thought it was perfect, truly believed that in its magnanimous perfection—that is hard to say!—the policy was absolutely perfect, and it had to realise that maybe it was not: "Maybe there's more that we need to do."

I know I have repeated myself many times in the house, much to the enjoyment of those on the other side, who I know like to hear me wax lyrical!

**Hon Dan Caddy:** It makes it easy!

**Hon Dr STEVE THOMAS:** You do not have to learn too much of anything new! We do not want to load you up too much with new material!

We had these reports coming in and the whole system plan was effectively out of date a few months after it dropped, because the government changed its agenda, particularly around removing coal. But to keep the lights on, we imported 100 000 tonnes of coal from Newcastle. Members have heard the expression "taking coals to Newcastle"; we took coal from Newcastle and elsewhere in New South Wales to Collie—the town in Western Australia where we mine coal. Why did we do that? I think it was because the previous Premier said to the Minister for Energy, "We're in a bit of strife. Our energy system's not performing like I said it was performing. You must keep the lights on over summer." As it happened, the south west did not experience any temperatures over 40 degrees that summer, but the government was desperate to keep the lights on, but at what cost? I have heard a range of figures on this and they all start at around \$900 a tonne. The price received by the producers of Collie coal—who, by the way, are effectively break-even or going bankrupt, depending on which one we look at—is in the order of \$55 a tonne. The price to bring it in was something like \$900 a tonne. That means that 100 000 tonnes would be \$90 million. This government spent \$90 million to \$100 million to bring coal to Collie. How do members think the people of Collie felt about that particular exercise? Just imagine if that money had gone through the coal companies that are struggling to pay their bills or to keep their workers on. I can tell members, that did not go down all that well in Collie.

The government had started to panic. It had already closed operations at Muja 5; Muja 6 was theoretically the next one to go, but it has now been extended to beyond the next state election. The government will apparently attempt to close down the Collie A power station first, and then it will close down Muja 7 and Muja 8. In theory, the government will be out of the coal industry by the end of 2029, but I do not think it has a snowflake's chance. I probably have to be careful with that word; it means other things, apparently, in the modern dictionary. The government has no chance of getting out of coal in that time frame. Why does it have no chance of getting out of coal in that time frame? It is because its transition plan around generation is not adequately funded and timed.

I do not want to single out the generation component of the transition plan because none of the components of the transition plan are appropriately time framed or adequately funded. The generation, the transition and the storage are inadequate. None of the three sections of the energy system is adequately planned or funded. I have said in this chamber before that my view is that the minimum price to do what the government is proposing to do, if it can get there by the end of 2029, is probably \$15 billion. Bear in mind it is now 2024, so the government has six years; that is \$2.5 billion a year that it has to pump out. Unless iron ore goes back up to \$US200 a tonne, I do not think it has any chance of delivering on that.

What will the government's transition plan deliver in increased generation? It will deliver 810 megawatts of wind generation. Split in half, 400 megawatts are effectively going to the new desalination plan. That is set aside for the Water Corp. The government has \$400 million to \$410 million set aside for wind-farm generation, so it will not get close.

I remember in budget estimates hearings last year Hon Dr Brad Pettitt commenting that for the government to deliver on the transition plan it is proposing, it will probably need about 10 times that amount of wind. Put this one down for the books, Acting President: I am going to agree with Hon Dr Brad Pettitt. I think if the current plan is anything like accurate and the government is saying that it will deliver enough generation to replace, effectively, 300 megawatts at Collie and 200 megawatts each at units 6, 7 and 8 at Muja—it will send out 1 000 megawatts of coal—it will need far more wind generation than 410 megawatts going into the system. Why is it 10 times? I think Hon Dr Brad Pettitt is possibly pretty accurate. Other energy aficionados have said similar numbers to me—around 400 megawatts. It is because, obviously, wind is not a stable generation tool. A particularly good area will get 50 per cent on average nameplate generation out of wind. Unless we have the capacity to generate significantly more and store it—two things: generation plus storage—it will not work.

We will need significant wind. That 800 megawatts of wind generation in the budget was, I think, about \$1.5 billion. Does Hon Dr Brad Pettitt remember the number?

**Hon Dr Brad Pettitt:** No, sorry.

**Hon Dr STEVE THOMAS:** It was a significant amount. The parliamentary secretary probably has it at his fingertips so he can tell us later, but it is about two to one. It is about \$2 million a megawatt. If that is the case, the 4 000 megawatts that we need if we go down the wind farm path means that it is an \$8 billion exercise. I think we can get increased generation, which will ultimately have to be gas and renewables, and probably a \$500 million budget will do. An amount that is bigger than the entire budget that the government has put aside for this transition will be needed just for generation. The government will probably say that the feds will come in and save the day; they owe \$1 trillion anyway so they should make it \$1.5 trillion and fund the extension of the energy system in this state. It might be right. I do not know. It depends how desperate “Albo” is to win the next election perhaps. Let us see. If we are relying on the state government, it is not funded. It has not been properly funded and it probably cannot be properly funded.

I have to say that probably the most controversial wind farms in Western Australia are the ones planned offshore. I know some people hate wind farms universally. I am not one of those. However, I think offshore wind farms are going to be problematic. Bear in mind that there is one off the coast between Mandurah and Cape Leeuwin. It sits between five miles and 100 kilometres offshore in international waters. Potentially hundreds of wind farms will be constructed out there, and I am pretty certain that people will go absolutely spare, particularly recreational fishers, who may well be banned from fishing in a fair bit of Geographe Bay. Good luck to “Albo” with that one. That is not the fault of the state government—as much as I would like to blame it for everything that is going on, and occasionally do—that is a federal government issue. There is not enough generation in the system. Clause 5 of the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023 refers to the safety, security and reliability of supply of electricity. The reality is that with insufficient generation, that is not being achieved now. A major generation injection will be needed to achieve that objective.

I have only limited time, and I am sure we could talk about this for a long time, but generation will be critical. As I have said before, I believe that this government will be forced to build between 200 and 300 megawatts of gas generation capacity to keep the lights on, even with the best intent. This government has traditionally said, “No more fossil fuels. There are too many greenhouse gases.” The reality is that its numbers do not add up. It was interesting during the estimates in that other place that shall not be named when the then Minister for Energy said, “We think we probably have to build some gas to add to the dispatchable demand.” He did not say it would be needed 24 hours a day, seven days a week, but we dragged out of this government, kicking and screaming that it is likely to need additional gas capacity just to keep the lights on. I think that is true. Welcome on board, parliamentary secretary Hon Darren West; you have joined the Thomas train! We are all now talking about more gas capacity to keep the lights on. I do not know what the current Minister for Energy’s position is; he might be a bit more tie-dyed and hemp and hessian. No insult to hemp, Acting President (Hon Dr Brian Walker)! The new minister might be a bit less gung-ho on meeting that extra dispatchable demand. We used to call it base load and it is now dispatchable demand. I think it is a bit intermittent, but we do not need to get into the technical arguments, otherwise we would be here all day and we do not necessarily want to do that.

The former minister said, “We think we’re going to need some additional gas”, which is exactly what I have been saying for nearly two years. Perhaps at that point the former Minister for Energy—I do not want to do him justice—had decided that he was going to retire and was waiting for the right time to make the announcement and therefore felt freer to tell the truth than he might have otherwise been as a minister who was continuing on. At that point he might have been more frank and fearless in saying that we will need more gas because we do not have enough. He is absolutely right. Today—write this one down, Hansard—I have agreed with both Hon Dr Brad Pettitt and the former Minister for Energy, Hon Bill Johnston, and on the same day! I will be drummed out soon. This is the case. Hon Bill Johnston said that we will need additional gas capacity to keep the lights on, and he is right.

If I were to put in 300 megawatts of gas, where would I build it? I would build it in the northern suburbs or just north of the suburbs on the Bunbury to Dampier gas pipeline. Would I need to expand the capacity of the pipeline with a few more looping sections? I may well need to do that. Would it roughly fit under the current gas contracts? That would depend on how much gas is used. If I decided to run that gas pipeline like a base load—24/7, 365 days a year, 300 megawatts of gas demand—what would I end up with? I would end up with 60 terajoules of consumption a day, which would take me out to 20 petajoules a year. That would not be a huge increase in what we currently use, but it would not run very often. It would run when the demand was not being met. When it is a hot, still night, renewables will not generate much, and because the government has not built adequate storage—we will come to storage in a minute because that is also part of the equation—to keep air conditioners on, not necessarily the lights, it will need more dispatchable energy. See—I can jump to the modern terminology. We will need that extra 300 megawatts.

Guess what? Hon Bill Johnston and I agree. We will need extra dispatchable energy, because the current system will not meet demand. We do not need a heck of a lot more. We have significant gas generation capacity now, but with only a limited amount of interruption—a couple of units under repair or in the event of a breakdown or, heaven forbid, a breakdown in the energy system—suddenly even the government’s extra 300 megawatts would struggle. That will need to be built.

It will be interesting to see whether the new minister has the mathematical skills of the previous minister, because at least the previous Minister for Energy could add up. I will be interested to see whether the new minister can do the same thing or maybe departmental people will add up for him. We will need additional generation capacity on top of the continuing increase in rooftop solar. Rooftop solar is a critical part of the energy solution; I understand that. The issue again is that it is not a 24-hour reliable supply. Not much rooftop solar energy will be generated before 10.00 am, even in summer, or after four in the afternoon. There is a limited supply time. In the middle of the day, more rooftop solar energy can be generated than could probably be used. The parliamentary secretary could answer that point, too, but I think more than half of rooftops in Western Australia have rooftop solar heading to 60 per cent. I forget the exact figure. It will get to 80 per cent, which is probably the maximum infusion, but it must be managed. There are some wind farms on top of that with an extra 400 megawatts going into the system. That is not nearly enough, but every bit helps.

The government is now on the Thomas train, so it will build an extra 300 megawatts of gas. If it adequately invests in transmission and storage at the same time, it might just keep the lights on and the air conditioners running. What has happened? This massive underinvestment in generation has been matched. This government is consistent. It is matched by its massive underinvestment in distribution, and its massive underinvestment in storage. At least the government has a consistent message here. When the power goes out, we can probably blame all parts of the power system equally—generation, distribution and storage.

A report released about 18 months ago said that Western Australia will need 4 000 kilometres of additional significant transmission lines. I am not convinced that that 4 000-kilometre figure is necessarily accurate, but it came from the state government. Maybe we can discount it a fair bit; state governments tend to overestimate or underestimate. In this case, I do not necessarily know whether it guessed it accurately, but if it has, and if we take this government at its word in terms of how much additional transmission line will be required to keep the lights on, it will be 4 000 kilometres of a 330-kilovolt ampere line, not the big 500-kilovolt ampere line. It is not the very expensive one, but it is bigger than standard. The old power poles people put on their property and ran to their house now cost well over \$1 million a kilometre. The government wants to put the big 330 lines on metal—the ones that buckle on the way to Kalgoorlie. That size is needed for the Three Springs to Geraldton line extension. I expect to see that funded in the budget. If it is not funded in the budget, we will go to war on that one.

**Hon Darren West** interjected.

**Hon Dr STEVE THOMAS:** You reckon? Come on!

**Hon Darren West:** Do you know why it's not there?

**Hon Dr STEVE THOMAS:** It is coming in the next budget?

**Hon Darren West:** It's been in the budget.

**Hon Dr STEVE THOMAS:** The next budget will be interesting. This is Hon Darren West's patch. Now that he is a parliamentary secretary with all the power—no pun intended—I expect to see him flex his parliamentary secretary muscles to see that project delivered within a time frame that is not five to 10 years down the track. I do not want to see it like the Geraldton Health Campus, whereby the start of construction has been delayed for five years to date. That is another project up in Hon Darren West's patch. I want to see a deliverable time line, and for it to be properly funded.

I will talk about the government's position on the 4 000 kilometres of additional transmission line because it is also important. If the line is 330 kilovolt amps, it would cost, say, \$2 million to \$4 million a kilometre. If it is \$2 million a kilometre, 4 000 kilometres would cost \$8 billion. If it is up to \$4 million a kilometre, it would be \$16 billion. I have seen projections that it will cost the government \$40 billion or \$50 billion to deliver this transition. I think those numbers are probably questionable. I am working from my \$15 billion back-of-the-envelope figure.

A report that came out recently—I will find it in a second. For the sake of the clerks, I am still unable to connect to any printer in the Parliament at the moment. Maybe I am blacklisted from the printers as well as everything else! I struggle to get any sort of coverage. I was going to print this off for the parliamentary secretary, but I have been unable to. I am happy to send the document to Hon Darren West. It is research from the Institute of Public Affairs on the delivery of the proposed transition. I will give the parliamentary secretary the name of the research paper because I think he will find it very interesting. It was published on 24 February and is entitled *Unachievable at any cost: Analysis of Western Australia's energy plan*. I highly recommend that document to the parliamentary secretary; it is an interesting read. I am not sure that "unachievable at any cost" is necessarily an accurate reflection. Obviously, a government as rich as this one is off iron ore royalties can afford a fair bit; it is just about how many years it puts into it. It can be built up. It is like Metronet. It was to be \$3 billion and now it is \$12 billion, and it is still growing—we are not sure! When the government's embarrassment of riches increases, it can do a fair bit.

This is an interesting document. It probably piggybacks off the work of some former employees of the power system in Western Australia. If the printer ever works, I will send a copy to the honourable member so that he can

have a look at it. It basically says that the government's entire project is completely undeliverable. It looks at different things. From my memory, the IPA's costing was \$50 billion, which I thought was perhaps gilding the lily a little bit, but the member is more than welcome to have a crack at that. It is not just the IPA; there are plenty of groups saying that this government is incapable of delivering.

We were talking previously about transmission. If the government is going to add 4 000 kilometres of transmission line upgrades for anywhere from \$8 billion to \$16 billion, it will be far more than the transition cost. What was the former Minister for Energy's position on this? Again, I will give some credit to the former energy minister. I think he could at least add up—to 20 at least if he took his shoes and socks off! He understood how many billions of dollars would probably be required for this. He said, "Well, most of this is going to be edge-of-grid new transmission line that will run to resources projects." First off, I do not think that is true. Secondly, if the government expects the private sector to build 4 000 kilometres of additional distribution network, I think the private sector will want to build, own and operate it. I think the communists opposite are looking at a build, own and nationalise proposal, expecting to take over the poles and wires once industry has built them. There might be a very good mine in Hon Darren West's electorate; he has a few good mines there. There will be a new mine and the private sector will have to build it, as it does now. It does not matter where someone buys a block of land, Western Power will not run power there free of charge. Those of us who are getting a bit long in the tooth can remember the contributory days when costs would be shared with others who might eventually be on the line. I wonder whether the government's plan might be to reinstitute a contributory charge on those 4 000 kilometres of new transmission line. I suspect not; I think the government will just take it over and nationalise it. I do not have a problem with the build, own and operate model in the private sector, but there would need to be third-party access, much in the way that there is third-party access to railway lines.

Sometimes how good that is depends on the legislation and who has the best lawyers. The government needs to make sure that it has the best lawyers in the room when it drafts a state agreement act. My good friend Hon Robin Chapple used to have a particular opinion on state agreement acts, and I presume Hon Dr Brad Pettitt probably has a similar one. The lawyers are generally better in the private sector than in government—it just happens to be. If these 4 000 kilometres of transmission lines are built, and let us be generous and say at a cost of \$8 billion—maybe the private sector will build a bit of that, but I suspect that the reality is it will not—the best the government can hope for for an adequate distribution network is that it has its numbers wrong and demand will not nearly be as high as we said a few years ago. It will be, "Well done", but the hope of the government will be that it got it wrong. Luckily, as we proved in Kalgoorlie not that long ago, this government gets it wrong not infrequently, so there is a reasonable chance that that will be the outcome. That covers transmission. There is an issue with transmission that the government has not fixed.

That brings me to storage. Bear in mind, I am still on clause 5 of the bill. We have not even got to the Committee of the Whole House stage yet and I am still on the one clause that needs to be addressed in significance. For the safety, security and reliability of electricity supply, we have to deal with storage. The Standing Committee on Estimates and Financial Operations over the last year managed to get some genuine answers. Hon Peter Collier and his committee members did some very good work. Hon Dr Brad Pettitt is on that committee as well. There was some excellent work done. What is the government's plan for storage? The government's plan is 4 400 megawatt hours of storage. It gets a little bit complicated because some people use megawatts and some use megawatt hours. I like to use megawatt hours because it is a discharge for a certain period of time at a certain volume. For 4 400 megawatt hours, if all that power is discharged in one hour, there will basically be 4 400 megawatts going out; it is a simple maths calculation. I find that better than just saying "megawatts" because in that case there is no time frame to deal with the battery. Let us say that the government is somehow magically successful in its transition plan; it casts a Harry Potter Accio spell over its transmission plan and suddenly these things are in place—it has magicked up the transmission plan, it has magicked up the \$15 billion required, probably through a high iron ore royalty and the GST underpinning it, and it has this in place. It is a hot, still night, the air conditioners are going flat chat and suddenly there is a disruption in the Dampier to Bunbury natural gas pipeline. What are we relying on at that point? There is obviously no solar power coming in and very limited wind—there might be a little bit coming in. Plenty of the wind farms out there at the moment produce nothing at certain times, but sometimes they go flat tack. I have this running joke. I know a few people who hate wind farms and I just think that if we put one wind farm outside their front door, every morning when they had their cup of tea and shouted about the wind farm it would probably generate enough energy to fix the system! That might be the government's new plan! I will not name any names, but I have used that on a few people.

I refer to storage. In that circumstance, we look at the storage and ask: will we have enough? If the gas supply was interrupted and the capacity of the generators that currently deliver a couple of thousand megawatts of gas was suddenly significantly reduced, what would 4 400 megawatt hours of storage do? If we turned off as much industry as we could, 4 400 megawatt hours would probably keep the south west interconnected system going for a couple

of hours at best. There will be a couple of hours of storage if we have a significant disruption to gas. What is our backup mechanism for that? There is simply not enough storage in the system.

Battery storage is currently very expensive, but it is about the only option we have. Again, I find myself agreeing with the former Minister for Energy, Hon Bill Johnston. We can look at pumped hydrogen, for example, which a lot of countries are using for energy storage. I am quoting the former minister; I do that quite frequently. He said that Western Australia has everything it requires to pump hydro except an excess of water and hills. We have flat, dry country. The proposals around Collie, which have kind of got me into trouble recently, were always a nonsense. In my view, these were nonsense proposals that were never deliverable, and I think that Hon Bill Johnston understood that they were never deliverable. Therefore, we are effectively dealing with batteries, and they are expensive. I think that in stationary energy, in many cases, lithium batteries will be supplanted by vanadium flow batteries. We had a very interesting debate on vanadium batteries at the end of last year; I thought that was very good. I think there will be a significant shift. But with the best will in the world, those batteries are not being built, constructed and delivered in time to meet any of the world's transition plan time frames. There is probably not enough lithium, and, if the price stays low, there will not be enough lithium, nickel or anything else. The price of all those critical minerals has always flexed up and down significantly; that is not new. I must admit, I had a look at some of the commentary on how we have to save the nickel industry. Some companies that make very big profits on iron ore said, "We can't keep the nickel industry going." I thought that was interesting. Companies expect taxpayers to prop up part of their business whilst the other part of their business is making a \$10 billion profit. I would be interested to see where the government lands on that; I think that will be a very interesting component. I have digressed again.

There is inadequate storage in the system. With inadequate generation, distribution and storage, this transition plan is in trouble. Clause 5 of the bill provides an upgrade to section 3 of the Electricity Industry Act with proposed section 3A, "State electricity objective", which is —

... to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to —

(a) the quality, safety, security and reliability of supply of electricity ...

It is looking like a massive fail in advance, because we have not even passed the bill yet. Maybe we need to desperately get this out there so that the government starts to take this particular issue seriously. But it is a fail across the board.

It is probably pertinent to make a few comments on nuclear energy, which I have commented on numerous times, but not specifically recently. In my view, there may come a time when nuclear energy is economically viable, but it is not yet. I am not frightened of the technology. I am not frightened of it being put into energy systems; it is in energy systems around the world. A number of new nuclear power stations are being built around the world. The issue for Western Australia is that with a peak demand of 4 000 to 4 500 megawatts, we do not want more than about 10 per cent of our generation in any one particular unit, because if that unit went down, we would have a problem. Right now, if we are trying to get our cost of energy production below \$US100 a megawatt hour, we have to use the big units, and the big 1 000 to 2 000-megawatt uranium units are far too big. We need many more units to be able to deliver any kind of accurate and reliable service.

There are many proposals around what they call small modular reactors. Again, I do not think we need to be frightened of those reactors, but they are not yet economically viable. The first truly commercial version is being built in Canada as we speak. I am watching that fairly carefully. It was a \$1 billion build at the start. Bear in mind that I can build my 300 megawatts of additional gas generation for probably \$300 million or less. Admittedly, I would have to pay for gas going forward. In a nuclear plant, obviously they stay there but there are costs and longer term issues involved in storage. At this point, it is \$1 billion but it is blowing out to probably \$2 billion-plus. For the state of Western Australia, it is not an economic proposition, but I do not think we should be ideologically opposed to nuclear technology. I think we need to understand it; and, if it becomes a viable option for Western Australia, we need to look at it with an open mind. I have said that repeatedly and I have said it in the house before. We will need to have a look at it if it becomes an economically viable option for this state because it will provide a reliable, low-carbon option. It is not quite zero carbon. When it is operating it is zero carbon, but it has carbon in its construction.

I understand that nuclear energy is the biggest export from France today; it is not champagne. Nuclear energy is used around the world. It is not currently economically viable in Western Australia, but it might be in the eastern states if they were to shut down some of those brown coal stations in Victoria, for example. That network is 10 times the size of ours, because it is an integrated system through Queensland, New South Wales, Victoria and South Australia, with a pipeline down to Tasmania. It was interesting when the wind knocked over the powerlines to South Australia. That was a problem. South Australia probably has more renewable generation than any other state. It also has horrendous power prices. If I have time, I will get to power pricing in a minute. This government's transition plan is going to oversee a massive blowout in power prices. The poor old consumer—the poor old purchaser of power—is going to end up footing that bill.

That is nuclear generation in a nutshell. We need to look at it when it is viable. It is not viable in Western Australia at the moment. Members do not necessarily need to listen to me say that here; they can read my comments in various bits in the media. That is exactly what I have said. I am not frightened of it. If it were to come into Western Australia, interestingly, the state legislation does not prohibit it. The state legislation prohibits only the storage of nuclear waste. Two federal acts prohibit nuclear energy. There is the Environment Protection and Biodiversity Conservation Act and a nuclear-something-or-other act, which I probably should remember off the top of my head, but I have not had a lot of sleep. Federal legislation would have to be changed for that to happen.

Bill Gates and I do not agree on a lot of things. I find most of his computer stuff problematic. However, we both agree it will be at least 10 years before small modular reactors are likely to be commercially viable, if they are at that point. I think that is something Hon Bill Johnston, the former Minister for Energy, and I probably agree on. Obviously, he has to take the Labor Party's ideological bent when it comes to these things, but that is precisely where it is.

I have still not got beyond this one particular clause, and I may well not. Unfortunately, we will have to look at reducing greenhouse gas emissions at clause 1. I do not intend to spend an inordinate amount of time on clause 1. Depending on what others want to do, we should get through this bill tonight, with a bit of luck by the dinner break. However, the cost of electricity is another thing. This new legislation will allow the government to “promote efficient investment in, and efficient operation and use of” electricity. The bill says —

The *State electricity objective* is to promote efficient investment in, and efficient operation and use of, electricity services ...

I hope that is not restricted to government generation because it is absolutely the case that the private sector has a role to play in this. The government is prepared to have the private sector invest in its distribution network; it is just going to take it over by stealth. This government has had a privatisation agenda, which is great to see, particularly in the electricity industry, because it has privatised wind generators. It is great to see a bit of right-wing policy creeping into the Labor Party.

**Hon Stephen Pratt** interjected.

**Hon Dr STEVE THOMAS:** Left—sorry, right; this is the right wing over here. I used to be in the right wing, but it looks like I am more central now!

I love that there is a bit of right-wing policy creeping in; it might be privatisation by stealth. When the government came in in 2017, the first thing it did was to privatise a couple of windfarms that had been nationalised. That was good! Well done! It joined the economic conservatives. It should push that along a bit; I think that is a great thing. The government will have to do a lot more of it, I suspect.

Interestingly, at the same time, this government looks as though it is deliberately trying to shut down the Bluewaters power station and put it out of business. That power station has contracts with Synergy and the Water Corporation. Both the former Minister for Energy and the new one have said that they do not like coal and will not renew any of those contracts. That puts enormous pressure on the private sector and coal-fired generation and impacts the viability of that industry.

Again, I have said publicly that because the government knows it will have to extend the life span of coal—it might not want to admit it, and might want to keep it secret, but it has already done it once with its own power stations—it will need to put those contracts out for a general public tender. May the best provider win. It can then be properly assessed. If a wind or solar provider is a better provider and can do it reliably and more cost-effectively than Bluewaters power station, then that would be great! Stick it up there and tell us. Show us how it is done. Again, we are back to the private sector getting shafted by not just the McGowan Labor government, but also the Cook Labor government. If the government is going to go that way, it is going to go that way, but I think the current plan will contribute to the certainty that, under this government, the lights will go out and the air conditioners will stop running. What does the government need to produce in this legislation? The result of this legislation should, in theory, be a plan that will deliver reliable energy no matter the circumstances. It needs to deliver reliable energy that keeps the lights on and the air conditioners running at a cost consumers can afford. That brings me back to the issue of cost, for the last couple of minutes.

Synergy is currently whacking up prices in Western Power, and it is clever. It does not do it by changing the general charge significantly; it does it by starting to shift around the categories in which it puts people. Right now, I have an issue down in the south west, where all these businesses' energy contracts with Synergy have gone up between 25 and 40 per cent a year. We have looked into this issue and have gone through the energy minister's office and tried to do it the right way. When the answer came back, it said that costs are higher, so everybody just has to suck it up. Costs have gone up between 25 and 40 per cent! I can tell members that the government is not paying a lot more for coal energy, and the government has long-term gas contracts, so it is not paying significantly more for gas. It is probably paying a bit more for distribution. Why is the government paying a bit more for distribution? It

is because the Economic Regulation Authority sets the price that Western Power can charge Synergy. Bear in mind that Synergy generates the power and then sells it at the other end. The government wants to make more money out of the energy system because it is not making any; it is a loss-maker. Ultimately, the way the government is shutting down power generation it might as well write down the complete value of Synergy to zero; it will basically be a retail arm. There will be a little bit of gas capital left, but it will basically destroy that system.

There has been a 25 to 40 per cent increase in Synergy prices for businesses that are trying to compete. It is not as though the vineyards and small business owners in the south west are rolling in money at the moment. Guess what? The cost of living is up. If they are constructing, costs are higher. Interest rates are up. Everything is up. The cost of labour is through the roof. Wages are starting to significantly lift. It is a problem that the state government is going to have fairly soon. It will have to somehow match its fat-cat pay rises for everybody else. Let us see how that goes for you guys. Prices are up. The government is already gilding the lily. It is not internationally competitive. When these people complain, parliamentary secretary, the answer they get from Synergy is that the international market price for energy is a lot higher and it has to compete with that and therefore it is going up. The government has set coal and gas contracts and it is not building significant new infrastructure; in fact, it is mostly letting the infrastructure die slowly on the vine.

Why is there an additional cost? It is because the finances of the energy system in this state are an absolute mess. I started a long time ago, Hon Darren West. I remember when Synergy and Western Power used to make a motza—hundreds of millions of dollars. I remember Eric Ripper putting in a capital fund many years ago to hide a couple of billion dollars for future use. That is how much money was floating around in the energy system. They are all broke now, and they are shifting the price of that management on to consumers. It is not good enough. It is an absolute disgrace to see even 25 per cent increases in energy contracts on a fixed system with fixed costs. The south west integrated system is not in an internationally competitive market place. Yes, the government has to buy some gas. It has contracts for most of that. It does not change the price for coal unless it cannot get it out and it has to pay a premium to somebody. Griffin Coal supplies the Bluewaters power station, not the government. It is an absolute disgrace to pass on those massive costs, and the government needs to take a very long, hard look at its performance in energy.

**HON NEIL THOMSON (Mining and Pastoral) [2.36 pm]:** I also rise to speak on the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023. This is obviously a fairly complex piece of legislation. I certainly do not claim to be an expert, but I want to make a few observations because of the feedback I get from my constituents about energy. Obviously, my colleague Hon Dr Steve Thomas raised the matter of the power blackout in Kalgoorlie on 17 January, but before I talk about that, I want to reflect a little on the regulation of the electricity industry in Western Australia. It has had a long and chequered history. We saw changes to the competition policy arrangements under Ripper’s management of the Treasury and energy portfolios. Then we saw changes under the Barnett government, but we have also seen changes under the current government. It does not fill me with a lot of confidence for the future, particularly with the rapid change in nature of the electricity generation systems in Western Australia and across the world.

The issue for me is the complexity of our arrangements. It is time for a top-down, holistic view of where we are going strategically. Certainly, this is not a reflection on anyone who has been involved in drafting these legislative changes. Proper scrutiny of the effectiveness of this needs to occur from a strategic point of view. Where are we going with energy generation? That is something that I would like more reassurance from the government on. There will be a change to the definition of “wholesale electricity market” and a new definition of “electricity system and market rules” in section 123 of the existing act. They will bring different elements into the wholesale electricity market. We know that is important because of the matters raised by my colleague Hon Dr Steve Thomas about the proliferation of other forms of energy generation across Western Australia—windfarms, solar farms and so forth. We are seeing changes to the definition of those distributed systems, which I think have a number of potential risks and opportunities. In the Committee of the Whole House, I would like to hear the extent to which the government has consulted with private providers of energy systems, like those within shopping centres in my hometown of Broome. For example, there is an off-grid energy startup company doing a fantastic job in delivering standalone systems and providing distributed energy systems into shopping centres and major retail outlets. That startup and other companies have the potential to deliver into much bigger settings. Generally, we do not trust the private sector enough to get involved because we are going to see a much greater diversity in the types of energy networks and distributed systems in Western Australia. We will see a trend because of the decentralisation of our energy systems. WA has a decentralised system of energy distribution. We have the south west interconnected system and we have the Pilbara interconnected system. A lot of the energy distribution in my region is through island systems, which operate within a town. There may be a gas-fired power station there with solar backup, increasingly moving to solar and other forms of battery systems.

There is a huge opportunity to see a more dynamic delivery of new technologies if we get the regulatory arrangements right. I think that is very important. Whilst I am not passing judgement on these legislative changes, I would like to think that a lot of thought has gone into it in terms of the promotion of the diversity of potential arrangements. I refer to the Kalgoorlie situation when I say how important that is. Kalgoorlie is part of the south west interconnected

system via a tenuous high voltage line, which runs from the south west interconnected system into the Kalgoorlie and goldfields region. I think it is an incredible travesty that we have a Minister for Environment; Energy who does not seem to take any responsibility for the three-day blackout that occurred in Kalgoorlie. I cannot believe that there was no change of portfolios or implications for that minister. Maybe that minister is relatively new to the job; maybe he pointed the finger at the previous minister—I do not know. This is unacceptable for the people of Kalgoorlie.

In May 2022, several blackouts caused a significant loss of goods and retailers were unable to conduct services, resulting in a loss of revenue in Kalgoorlie–Boulder and in the goldfields. It was a major problem for that community. At that time there was discussion in this place, and I regret taking on face value the reassurances that came from the government. At the time I thought that the reassurances of the state government were going to result in action. Clearly, that did not happen.

Instead, despite the reassurances from the then minister, who said that there was going to be all this work, and despite there being a lot of talk about the introduction of renewable energy options, about how many hours it would take the backup to start stand-up power into the community, and about all the management and maintenance that was going to occur on the backup system, that clearly did not stick when it was required.

People can make all sorts of excuses. The Premier came out and made excuses about the weather event. The Minister for Energy; Environment; Climate Action came out and said that it was a weather event and we will have more of them, so we have to put up with it. That is the most pathetic set of excuses ever presented by ministers of the Crown for the travesty of failing to delivery electricity into that community for three days.

The reason is that there will always be a problem along that transmission line, which suffers from fire, a vulnerability to road accidents in certain parts, all sorts of things that go on and the weather. There are weather problems. We saw a weather event come through and knock down the towers, and then the backup system, which was said to be properly established and maintained to provide backup power, failed. In the start-up process, apparently, some of the community started to get power restored and then it effectively tripped; that was the non-technical term given to me by people in the industry. It effectively tripped, and they were not able to restart the backup system.

In the meantime, TransAlta holds a significant gas-fired power facility, the Parkeston facility, which provides power to the Super Pit and some other mining operations in the region. We have a private provider operating. A couple of years ago, in 2022, I had the good fortune and took the time to visit both facilities. I got a briefing from the government about the backup facility, and the assurances were all given. I then had a look at the TransAlta facility; I was very grateful for that tour because it is quite an amazing facility. The gas turbines operate like great jet engines; it is an incredible facility. There is moderation or modulation—I do not know the technical term—for the operation of the power demand for a number of mine sites throughout the state. The control centre, with all the screens, looks like something out of the starship *USS Enterprise*. A number of technical people operate the control centre to make sure that the power demand is managed for a range of sites across Western Australia.

In chatting to the officers and staff there, I asked, “When the government’s backup fails, why can’t we just provide power?” I ask for some leniency here, but I think it is a worthy conversation because I am trying to home in on the point about outcomes. I am speaking on behalf of my community. I am paraphrasing, but the comment at the time was to the effect that some switching would be needed and some technical arrangements would have to be made before that process could occur. That was probably an off-the-cuff question without notice to the person who provided that response, but the answer seemed fair enough. I thought: why can we not get a provision of power when the other systems do not operate? Again, I would like to hear from the government about this, and there is relevance to this legislation. My understanding is that when the power situation became apparent and there was significant pressure, the local police and the City of Kalgoorlie–Boulder were involved in trying to lead the charge to unpack some of it and get a result for the community because it was suffering.

The community was suffering from some of the hottest weather it has had for a long time. There was considerable spoilage and wastage of food, and the people who, in this day and age, rely on the tap and go and electronic systems for the provision of their business, were not able to operate. My understanding of what happened is that power was eventually provided by TransAlta. I put this out there for either correction or confirmation because I, and I think everybody in this room, would like to know that even though TransAlta might technically be able to switch on the power and energise, or have the capacity to energise, the system in Kalgoorlie, whether there is some regulatory impediment to that occurring because of the way the Australian Energy Market Operator manages demand and supply across our state.

I am happy to be corrected because, again, a bit like the people of Kalgoorlie, we get treated like mushrooms in the dark. We do not know what is going on because the government tells us one thing in 2022 about this issue, and then when it is tested in any major way for the first time, due to a wind event, some collapse of the powerlines or power pylons, or the breakdown of the south west interconnected system, what happens is we end up finding that it is not working. Everything we were told in 2022 was not actually correct. The reality that stared us Western Ausin the face in January 2024 was that the system was not working. I would like to know whether any Australian Energy

Market Operator regulatory impediments impacted the decision. I believe there was eventually 20 megawatts of power, potentially through the solar energy market, but again, it is a bit of a guess because I have to kind of put two and two together to work out what is going on. I do not have access to, and I am not privy to, those briefing notes that are provided to the government on these things. We have a very secretive government that is not held accountable because of a very small opposition. That is the nature of this forty-first Parliament.

**Hon Dr Steve Thomas:** I think it would be a secretive government no matter what the size of the opposition was. I think you're being very generous.

**Hon NEIL THOMSON:** I would like to correct the interjection from my colleague Hon Dr Steve Thomas. If the opposition had the numbers in this place to effect a balance of power, the committees might operate more effectively and have more reviews, which would provide a deeper understanding and independent assessment of some of the government's actions on this. My understanding is that whilst there was capacity, the system had to have some power through another lesser line connecting to provide some power to Kalgoorlie. It was sort of hanging on a shoestring, with bits of wire and sticky tape holding it together, figuratively speaking, with some backup operating. The government was able to make some arrangements with TransAlta so that the additional base could operate and provide some short-term relief. The question I would like answered is whether anything in the regulatory arrangements will address these changes to make it easier for private sector operations to step in when the government has failed, because we will see more fail. We saw the challenges of the vulnerability of the Geraldton connection. We know that Western Australia has a unique energy system in Australia.

As I said, I want to speak on behalf of my community. I am very deeply upset to hear about the losses in my community of Kalgoorlie. There needs to be an inquiry. One retailer up there lost \$100 000 worth of fresh produce and I met another who lost \$90 000 worth of produce. There was no compensation for that. It was a few hundred dollars or whatever the figure was that Hon Dr Steve Thomas mentioned. There was no compensation. It was a case of, "That's too bad. Suck it up." It is really tough to deliver produce in the regions. We have to make sure that this does not happen again. From a holistic point of view, if anything in the regulatory framework is creating vulnerabilities, we should address it and move to a new energy system whereby we can have a much wider diversity of options for the provision of energy. Horizon Power does not have a great track record, but it does a reasonable job in some difficult circumstances. We see the inevitability of the delivery of some of our utility services being gold plated. I talk to people in the industry in Hedland and they say that they could provide those services a whole lot cheaper and for a lot less capital. I know that the government loves to crow about the changes that are occurring, such as the creation of renewable energy to supply remote communities like the Bidadanga project, but that is a very expensive energy system compared with the industry benchmark of the cost of delivering that service. We have to face the fact that because technology is moving very quickly, we need a better regulatory framework. From a first-principles basis, it would be good to see Horizon Power and the Economic Regulation Authority take a more regulatory oversight role for the delivery of services and allow a wider range of service delivery options, including private sector involvement in some small towns and small communities. That would provide a backstop to ensure that we could deliver cheap power. That may even present an opportunity for community ownership. That is an option that could be considered going forward. There are plenty of opportunities.

I come back to the response to the power loss in Kalgoorlie. I am sure that if the people of Kalgoorlie felt for one moment that they could manage their own power system, they would be very happy to disconnect from the ineptly run interconnected system, given how it has been run over the last couple of years and following the massive power outages. There are a lot of opportunities. Companies like Lynas Rare Earths had to go without power for some time. We have seen massive threats to our energy-intensive industries. Put aside some of the future challenges such as the cost of energy and how the carbon reduction requirements have affected our nickel industry. We have seen the challenges facing the nickel refinery in Kalgoorlie. We are facing very serious circumstances. A lot of this comes back to the provision of reliable and affordable energy that will meet our climate obligations. Of course we have to meet those. We are not immune from that, but it has to be done in a way that suits Western Australia. A petition will be launched in the coming days by one of the retailers in Kalgoorlie. The first point in the petition is that the petitioners would like an independent inquiry to be held into the response to the power blackouts in 2022, which would provide a transparent and open investigation into the processes that were undertaken by the Minister for Energy and his agencies, to ensure that blackouts do not reoccur. What actually happened? Could there be an independent inquiry into that? The second point in the petition is to outline the full and technical administrative reasons why, despite the warnings from the community, backup power was not effective in 2024. Be humble and learn from your mistakes. That is what the community expects.

The third point of the petition calls for an assessment of the full cost to business and the community generally, noting that some small businesses lost up to \$100 000 of stock, with total losses in the tens of millions of dollars. The Kalgoorlie–Boulder Chamber of Commerce and Industry has been very proactive in this space. It sent out a short email survey straight after the power cuts. Forty-one businesses lost, on average, \$16 000 each. That is a massive impact for small businesses. There should be a transparent process to assess that. I would like either a committee

of this chamber or the Economic Regulation Authority to undertake an independent, fully transparent review to provide that response to the community, so that we can see how the government performed.

The fourth point of the petition calls for an assessment of the fairness of compensation provided by government to businesses and individuals affected by power blackouts. That was a big issue for a lot of businesses. Some of them are giving up instead of filling in forms and sending them in. They will take it on the chin. Western Australia is becoming like a developing country because people are having to provide their own generators. People are talking seriously about disconnecting completely from the system because it is so unreliable. That is what happened in Manila in the Philippines, where there were brownouts all the time. I do not know whether it has those brownouts anymore, but there was a massive issue a few years back. Growth has been so great in some countries that they have not been able to keep up with the energy demand, so there are rolling brownouts across their cities. That should not be happening in Western Australia. Businesses in Kalgoorlie are having to buy expensive backup generation to give themselves the reassurance that they can fill their freezers with cheap and affordable food for the people in that community. They are having to build in backup systems. This should not be happening in one of the wealthiest jurisdictions in the world. If Western Australia were a country, it would be right at the top of the list. Instead, we got an inept and pathetic response from the Minister for Environment; Energy, who blamed the weather and climate change. We know that that is happening. The minister should get on with his job and actually deliver reliable power to our community. That is the number one objective.

The final point of the petition calls on the government to outline what urgent measures it has taken to make sure that this never happens again. I hope we get a big response to the petition because a message needs to be sent to the government. This is the canary in the coalmine. We know that the demands on the safeguard mechanism in Western Australia will be significant. Our capacity to deal with that will be limited not by our wealth or our capacity to deliver, but by the competence of the Labor government, whose members sit opposite. The Minister for Energy would rather get his photo taken to promote issues such as Containers for Change than do his real job, which is to deliver reliable and effective power for our community. It is one of the most basic elements that our community requires.

There is much I could say about some of the detail, but I am hoping that some answers can be given as we go through the bill clause by clause. Will this bill improve the capacity of the government to respond in a crisis? Will it improve the capacity of the government to have a more robust and secure energy system? Will it give the government the capacity to provide more affordable energy? We should have the most affordable energy in Australia and the world. Western Australia is blessed with an abundant supply of natural gas. Some amazing technology for carbon capture and storage is being rolled out by the likes of Chevron. I know they are not resting on their laurels on the capture of embedded carbon in that natural gas because people are working very hard for the future on how to capture those scope 2 and scope 3 emissions. We have to. The 2050 target is set. We have seen the legislated target. The challenges faced include the ineptitude of this government. I do not have confidence that we will go forward with reliability and affordability because the government cannot ensure a gas backup system in East Kalgoorlie can fire up when the power goes out!

It is a basic issue. It should take a few minutes to do so. Someone should be there with a switch ready to go—bang—and the power is back on in Kalgoorlie a few minutes later. Instead, the government blames the weather. The weather knocked out the line, folks! It did. But a backup system is needed; not only that, there is the potential to tap into the private sector provision that operates from the goldfields pipeline. There is no confidence. Like mushrooms, we are yet again presented with ad hoc changes. Maybe I am wrong, folks. No doubt, the government will give its presentation in response and say how wonderful these legislative and regulatory changes will be in delivering an outcome. However, there is no overarching provision of confidence to the community that these will address the issue.

I think there are some fundamental philosophical problems within the Labor Party that drive division within that party. The Labor Party used to have good thinkers—people like Eric Ripper—but sadly the influence of those people is slowly being dissipated by ideologues in the Labor Party who just want a press release and moment of fame to outline what they think they are doing for the environment, rather than placing a focus on the technical issues to make sure we deliver.

In closing, I want to make one last comment about the challenges we face with energy in our state. This story is unfolding about the shutdown of Alcoa and the risk to the nickel industry. It is a tragedy. I know cement production in Western Australia faces massive challenges. We are getting the short straw in the deal. Our Premier will not stand up to the Prime Minister on some of these issues and the uniqueness of Western Australia. This state has always been different from the rest of Australia. We have no massive interconnected energy system that runs from Queensland down to Victoria and South Australia. We operate in a very different way. Our mining industry has had to increase emissions because it provides raw materials to the rest of the world that are actually reducing emissions. Recently I was told that nickel production in Indonesia creates 80 times more carbon per tonne compared with the case of nickel production in Western Australia. Nobody is paying a premium on green nickel. There is not that market. What does the government do? It taxes the producers to the nth degree. It is not providing support and

demanding changes to emission reductions that could be carved out under legislative arrangements already in place; I refer to those labour-based legislative arrangements that could be carved out for trade-exposed industries.

Where is the Premier? He has not said a thing about it. What is the Premier doing to make sure our nickel industry will continue? Instead, the government placed other industries related to this bill like Lynas Rare Earths under immense pressure because it could not operate for a few days through lack of power. Nobody was told to cut back on consumption to provide a little more power as these operations were trying to survive over the three-day shutdown before power was eventually connected to Kalgoorlie and the long-suffering people of that community. That is my last point: it is a very personal issue for so many people who were affected. It goes right down to simple things like the ability to store medications, for example, and the retirees who sweltered in the heat and had to put up with that situation for days.

I was shocked. I went there as soon as it happened because my office is in Kalgoorlie and it is part of my region, so I made sure I was there. Libby Mettam, the Leader of the Liberal Party, came with me, and I was so pleased that she was able to be there to provide comfort and reassurance. We walked up and down the streets and spoke to members of the community; we talked to a number of people in that community, but it took days for the minister and the Premier to get up there. Do they care? Is the government's black-letter law that we are debating today going to make things better? I have my doubts, mainly because of the incompetence of the WA Labor government.

**HON DR BRAD PETTITT (South Metropolitan)** [3.10 pm]: In talking to the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023, I want to start by noting that there are some key things to like about it. Certainly, I think the new state electricity objectives to add environmental considerations to price and reliability and to approve new energy projects are very sensible and worthwhile additions that I think could actually help us make the necessary transition to a low-carbon energy system. There are also some pragmatic things that I think are worth noting and supporting, like moving voltage legislation into regulations and, importantly, allowing bigger renewable systems and new technologies onto the grid.

When I consulted some key people in the sector about this legislation, one of them said to me that they were pleased to see some of these changes, noting that commercial installations over 30 kilowatts are currently not easily managed, and that none of the advanced grid services—smart batteries and inverter technologies—have a home in the existing rules and regulations. In fact, they went on to say to me that technology companies are constantly battling to understand the compliance requirements and, in some cases, have given up on WA as a market altogether. I think this bill has some good provisions to help address some of these issues.

But I also want to raise some concerns. These concerns are really questions, in some ways, and I hope we can unpack them and get some certainty around them. Similarly, when I went out and consulted with key people in the sector on these matters, there were a lot of question marks. Most of them were not aware of this legislation, so obviously a key question to deal with in Committee of the Whole will be: who was consulted on this legislation? They certainly got their heads around it in a relatively short time since it appeared on the notice paper, and they have noted that there are some big questions. I would like to raise and unpack some of them.

The first question is: how can we be sure that this legislation is going to keep rooftop solar installations as a key component of distributed energy? How can we keep that happening in a way that is really efficient, and how can we get it onto as many roofs as possible? I am sure people know about this, but it is worth repeating: Australia as a whole, but particularly Western Australia, is a real leader in rooftop solar, in terms of the number of installations; I think around 38 per cent of households in the south west interconnected system have rooftop solar. We have some of the cheapest rooftop solar in the world on our roofs.

Saul Griffith, whom many members will be aware of from Rewiring Australia, has said that what we are doing in Australia is world leading. Some of the cheapest energy in human history is going on people's roofs here in Australia. He has made a really important point, one that we need to be cautious about as we go forward. Saul Griffiths and other experts have compared the Australian experience with the American experience. The Australian experience of very cheap, widespread rooftop solar contrasts with the American experience of rooftop solar that is substantially more expensive. We are talking now about \$1 a watt. In the US, sometimes it is \$2 or sometimes \$3 a watt. We are talking about a substantially higher cost per system. Certainly, \$1 a watt versus \$2 or \$2.80 a watt is really extraordinary. The reason is not hardware costs in the US. It is largely importing the same panels that we are importing from around the world. The reason is soft costs around regulation and the process of getting the panels on roofs. It is probably worth going through a few of the examples in the literature. In the US, those soft costs, which include permits, inspections, connection costs and the like, now account for 64 per cent of the total cost of a solar system. Those costs largely do not exist in the Western Australian market. I would hate for us to go down the US route through this process and make solar PV more expensive. I think that would be a real shame because, as I will come to shortly, in many ways solar is the only substantially growing renewable energy in this state. We have a very small number of large-scale wind and solar PV projects, so rooftop solar is leading the way.

To speak further on the US–Australia example, permitting in Australia can take as little as a day; it can be done over the web. In the US getting rooftop solar permitting up and running can take as long as six months, and customers just give up. I take that as an extreme example, but I put that out there. From the legislation before us, it is not clear what new costs and hurdles we will put in the way as we seek to better regulate the solar market. Small scale really does matter. Drilling into the numbers around what has happened in renewable energy in WA in recent years is not pretty, to be really brutal about it. We have seen very steep increases in the adoption of rooftop solar with almost a megawatt a day going on the rooftops of Perth households. However, certainly since 2020 and 2021, large-scale renewable projects have flatlined. If we take Flat Rocks and Quinns Rocks out of the equation, which are the only two wind projects that have been talked about for a long time, that is it. We also have one large-scale solar project in the pipeline and literally nothing else. The only growth in renewable energy in 2021, 2022 and 2023 was rooftop solar. Without that, there would be no renewable energy growth in this state at a time when we need to be rapidly growing renewable energy.

It is really important that we get this bit right because we do not want a new system that slows down what is happening. That said, I am always up for giving compliments when they are due. I think good things are happening in the battery space; Hon Dr Steve Thomas talked a bit about that. We are seeing that, but certainly we are not seeing it on a scale in the renewable energy space or the storage space that will—as Hon Dr Steve Thomas talked about—allow us to close down coal by the end of this decade. If we are serious about closing coal-fired power plants, we will need a huge amount of storage and more renewable energy from both distributed wind and solar, and the transmission that is needed to go with it. Rooftop solar will continue to play a really important role. I would add that there is probably potential for household batteries to also play a really important role. The more we can connect batteries with solar and shift that drawing down in the peak period, the better it will be for everybody.

I refer to the “lagged” jurisdictions, the Northern Territory and Queensland. The Northern Territory now has one of the biggest uptakes in batteries in the country; in fact, it has the highest proportion of solar take-up with batteries because it put the right incentives in place. Queensland has just gone down this route in the last couple of months. In this richer state of WA, there has been absolute silence on this. I despaired when I looked at the *Sectorial emissions reduction strategies for Western Australia: Pathways and priority actions for the state’s transition to net zero emissions* because it is silent on seriously enabling this to happen. The WA government has put all its energy into large-scale batteries. There is a good budget reason for the uptake of small-scale batteries because households are willing to pick up most of the costs if the government put subsidies in place. We saw this with solar power. Households are picking up most of the costs. We can do the same with batteries as we go forward. Hon Dr Steve Thomas talked about this in some detail. If we are serious about meeting some of the targets—80 per cent renewable energy by 2030—all the research and analysis that I have seen suggests that we will need at least 3 000 megawatts of new wind power and 1 500 megawatts of new solar power by then. That is a total of 4 500 megawatts if we are serious about that. We have two projects to talk about—King Rocks Wind Farm and Flat Rocks Wind Farm, which have a total of 225 megawatts.

**Hon Dr Steve Thomas:** They probably won’t get the approvals in place for the rest of them by 2030.

**Hon Dr BRAD PETTITT:** That is the problem and, frankly, it is making me nervous. We are hearing loud and clear from industry across the board that getting large-scale projects up in this state is proving very difficult, challenging and cumbersome. I am very nervous that the government will put the same hurdles in front of small-scale renewable energy as well. That is a warning; I am not saying that the government will do that, but we need to unpick that and make sure that the government does not do it. The hurdles in front of the big stuff mean that Western Australia has three per cent of total renewable energy projects and only one per cent of national total renewable projects connected to the south west interconnected system. The other two per cent are around big mining sites and those kinds of things. For a state that has a 10 per cent rule in terms of population and the like, we are at one per cent. We keep talking up WA as a renewable energy powerhouse—indeed, Hon Sue Ellery used that term earlier today—but that is not what is happening. We need to be clear about the big gap between the rhetoric and the reality of what is happening in this state. There are reasons for that, and I will give one example of the classic way in which the government puts its foot on the hose. I refer to transmission, which Hon Dr Steve Thomas talked about as well. The government says, “We would like users to pay up-front \$100 000 per megawatt so they can connect their wind to the transmission network, but we will keep that transmission contribution and you won’t even get a discount.” That is the most bizarre way of telling industry to not build new wind farms. That is what it is doing. It is basically making it harder to make the business case work. It is the weirdest way of trying to get investment in renewable energy in this state. The government is literally putting its foot on the hose of renewable energy investment when it is the state’s role, frankly, to invest in the transmission, get it up and running and provide a proper cost arrangement around accessing that transmission. That is what every other state is doing. It is a great mystery to me why WA is going down some other weird route. It is achieving something—it is slowing down renewable energy uptake.

I am making quite a strong point because, as I said, solar energy is the fastest growing renewable energy in this state. We are doing really well in that space. The government should not be slowing it down. If it wants to close

coal-fired power stations this decade, it should be finding ways of expanding and accelerating renewable energy. To do that, we need an accelerator, and it should be linked to as much storage and as many batteries as possible. When I consulted with industry representatives, they raised their nervousness from reading the legislation, because it seemed that the approach will be to put standards in place that are not linked to existing Australian standards or other well-known specifications, and that it will instead be quite WA-specific. Industry is certainly nervous about that because the more unique specifications are to WA—most specifications in the energy space are international or national—the more we will end up reducing customer choice, as technology providers will not be able to customise their products for the very small Western Australian market. We need to make sure that whatever requirements we put in place will align with broader international and national standards. A key question that I will ask during Committee of the Whole is: will the new regulations be consistent with Australian standards or other specifications used across other countries for energy systems or will they be WA-specific standards? It is pretty obvious that the less choice we have, the higher prices ultimately end up. Fundamentally, if we get this transition right, it should drive down prices.

People might not know this but in the research I have seen, WA currently has some of the most expensive energy in the country, at \$84 a megawatt hour. Whilst other members were talking I was reading some recent research that takes it closer to \$90 a megawatt hour. That is \$16 more than the next most expensive state, Queensland, at \$68 a megawatt hour, and three times the cost for Victoria, at \$26 a megawatt hour. From the evidence I have seen, we have some of the most expensive energy in the country. If we get this renewable energy transition right, it will drive down the cost of energy. Sure, there is a big up-front investment, but it is very well established now that renewable energy, especially onshore wind and solar linked with storage, is the cheapest form of new energy.

I will give some examples of this. This comes back to the rooftop solar example, which is probably the cheapest form of energy on the planet, as Saul Griffith said. To give members another Saul Griffith example, he said —

When solar is used to run a hot water heater with a heat pump ... calculations show, it can cut the cost of a shower by half compared to a gas heater. Even boiling water for a cup of coffee comes in at a quarter the price when compared to using natural gas.

If we get this right and enable more rooftop solar, we will need coal and gas less and we can bring down prices at the same time.

My other key concerns and questions are around the time line. There seem to be different stages throughout this legislation, and some stages do not seem to come in train until quite late in 2028. I am concerned that some of the key elements will not give industry certainty and will rely on the minister to deal with conflicting standards. To be frank about it, we need to get a large number of projects up before 2028 if we are going to deal with transitioning out of coal and getting these things on. It is unclear, industry wise, why some of these things are going to take so long. Why can we not progress these much more quickly?

I am interested to know who was consulted in this process. Certainly, the groups that I spoke with were not consulted and it would be important to make sure that they are consulted during the next stage of regulations. This is really important. It is a small bill that is not particularly complicated, on one level. There are some fundamentally good ideas in it, but we need to make sure that we get the details right so that we can grow distributed energy resources and not slow their important rolling out in this state, which will help us reach net zero as quick as possible.

**HON DARREN WEST (Agricultural — Parliamentary Secretary)** [3.29 pm] — in reply: I thank everyone for their contributions to the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023. I appreciate the opposition and crossbench support for the bill. This bill is necessary for Western Australia's energy transition. I think we all acknowledge that. We have a big job ahead of us in the transition to clean energy. We will meet that challenge head on.

I thank Hon Dr Steve Thomas for his contribution. He is obviously very knowledgeable about the sector and made some really good points. I join the Leader of the Opposition in acknowledging his efforts over the last three years as Leader of the Opposition and shadow Minister for Energy. It is a tough business. We are all humans underneath. I hope he is having a good day and that things look up tomorrow. I acknowledge his support for the bill and thank him for the points that he raised.

The member raised a couple of points, and I will cover those. The bill is necessary. The member referenced clause 53A entitled “State electricity objective” and talked about the situation in Kalgoorlie. I will address that a little bit more when I respond to the comments of Hon Neil Thomson. Those are all reasons we need this bill to be able to distribute energy regulations and to change, enable and regulate new ways of delivering energy right across Western Australia. We know that we need those.

I will give an overview of the current energy situation and the vision for the future. The member's vision for the future was very insightful and I thank him. I smiled to myself when he mentioned the Thomas train. Any members in the chamber who have had children in the last 20 years will go straight to that well-loved television show and

book series *Thomas the Tank Engine*. I could not help but make an analogy between the current coalition members and that yard. I will let members determine who is allocated to which train, but I did find the analogy amusing—I thank the member for it.

The member spoke of costs. There is going to be a cost to the transition, and nobody really knows what that cost will be. It is a difficult prediction to make. However, I will say that there is an even greater cost in not making the transition to clean energy. We all know that there will be a greater cost to not taking these steps for the planet, our industries and future populations.

We can look at the energy transition in one of two ways. We can take the view of scientists—that is, that we need to reduce emissions and reduce carbon dioxide on the planet—but if we go ahead with that and they end up being wrong, all we would get is a more efficient and sustainable energy system and a better long-term energy future across the planet. However, if we listen to people who believe that climate change is not real and that we do not need to transition and those people are wrong, we will end up in a much worse situation than that. It is pretty easy for someone like me to see that we have to adopt this challenge and put legislation in place that will enable the transition to a clean energy future and the regulation of new varied and distributed energy models across Western Australia.

It would appear to me from the comments of Hon Dr Steve Thomas—I am not going to go easy on him all day—that he still holds the policy position that a privatised Western Power would be better than a government-owned Western Power. I think that debate has been had in the electorate.

**Hon Dr Steve Thomas:** I don't think you could sell it —

**Hon Sue Ellery:** But you should keep prosecuting it. If you go out there, you should prosecute it.

**Hon DARREN WEST:** I absolutely agree. I encourage the opposition to take that position to the next election. I think that the people of Western Australia would much prefer the publicly owned utility of Western Power in which the government of the day owns the asset and the situations when things go wrong. I made an analogy about our privatised telecommunications company. Which one do constituents have more luck with when they ring their local member of Parliament?

**Hon Dr Steve Thomas:** When Labor sold the windfarms, was that privatisation?

**Hon DARREN WEST:** That is generation member, it is not distribution. We are talking about Western Power —

**Hon Dr Steve Thomas:** Who is building the 4 000 kilometres of new distribution line?

**Hon DARREN WEST:** We are going to agree to disagree on the privatisation of Western Power.

**Hon Dr Steve Thomas:** Tell Bill he is wrong.

**Hon DARREN WEST:** All right.

I think I also picked up from a couple of speakers that the coalition still holds an ambition for nuclear power. This is not an ideological argument; this is an economic argument. There will never be nuclear power in Western Australia, not because of ideology but because of cost. I encourage the opposition to take that position to the next election.

**Hon Dr Steve Thomas:** If it became economic, would you install it?

**Hon DARREN WEST:** It will not become economic. Hon Dr Steve Thomas is asking me to answer a question about something that will never, ever happen.

Several members interjected.

**The ACTING PRESIDENT:** Members, please!

**Hon DARREN WEST:** Again, we will disagree, and I encourage the opposition to take that position to the next election.

Regarding economics, nowhere in the world can transition to renewables more easily and more cheaply than Western Australia. Renewables and storage will be the least cost energy for us moving forward. The state electricity objective will apply to all ministers and coordinators and the Economic Regulation Authority under the legislation. That is an issue that the honourable member raised, and I thank him for his contribution. It was full of facts and hypotheticals, showed a genuine understanding of the sector and was well meaning.

Hon Neil Thomson has concerns about the past and the present and a fear of the future. I think that typifies the coalition quite well. It is all bad at the moment and it is only going to get worse. He also provided us with good reasons to implement this legislation.

I will touch on the incident at Kalgoorlie. I reject the notion that the government was missing in action when the generators failed to fire in Kalgoorlie after the storm event that took out the transmission line. The minister went to Kalgoorlie. He owned the outage and apologised for it. He allocated resources to get the power back on. I acknowledge the hardworking engineers and staff at Western Power who were able to come up with an interim

solution when we were unable to get frequency of the generator. The TransAlta facility does not have black start capacity, so we had to get that generator started. Working with electricity is a dangerous occupation. They went out there and came up with an interim solution. We were then able to fire up the resources that do not have black start capacity, and we got power.

**Hon Dr Steve Thomas:** How long did that take?

**Hon DARREN WEST:** It took a little while. Those towers are engineered to withstand wind speeds of about 250 kilometres an hour, and the winds blew over that. It was a freak storm. It was a freak set of circumstances. I think those workers need to be commended. The Premier went to Kalgoorlie and announced that the state government will replace those generators. I do not know how much more up-front we can be than that. We have acknowledged there was a problem and apologised to the people of Kalgoorlie. I acknowledge the member for Kalgoorlie, Ali Kent, who advocated tirelessly over that time on behalf of her community to get that outcome. Kalgoorlie will now get new generators because we acknowledged that there was an issue with the old ones. They have been there for quite a while. I do not think the criticism that has levelled at the Premier, the Minister for Energy and hardworking staff at Western Power is fair. I have just mentioned that the TransAlta facility does not have black start capacity and that was why it did not start. Hon Neil Thomson asked that question.

This bill will facilitate the review and modernisation of the access regime, making it easier for more private generation to connect to and participate in the grid. That is what this bill will allow. If companies have proposals—I will touch on this a little bit more—this bill will make it easier for those proposals to be part of Western Australia’s energy mix. The bill will transfer responsibility for the review of Horizon Power’s performance standards to the Coordinator of Energy, so an important regulatory step there.

I thought Hon Dr Brad Pettitt made a really good contribution. He shares my concern about needing to reduce emissions as quickly as we possibly can. He mentioned that the state electricity objective will add environmental considerations to an assessment. That is a positive step forward. It does not have to be all about costs now; it can be about the real cost; and, as I mentioned before, the cost of not acting is sometimes higher than the cost of acting.

Hon Neil Thomson asked about consultation. I happen to have a list that has been provided to me about who was consulted. Consultation on the state electricity objective was open for three weeks. Feedback was received from 16 stakeholders and five industry players. They were the Australian Energy Council, BP, Change Energy, Collgar Renewables and Energy Networks Australia. Feedback was also received from four consumers, being the WA Expert Consumer Panel, Noel Schubert, independent system operator Pilbara ISOC and the Western Australian Council of Social Service community services, and from four government trading enterprises, being Horizon, Western Power, the Australian Energy Market Operator and Synergy. A majority supported the inclusion of the environmental limb. A majority asked for guidance on application of the SEO. Half agreed with the inclusion of “security” as a separate term. The other issues raised were generation versus production, and that there be no retrospective application.

Consultation on the bill was open for four weeks and feedback was received from 15 stakeholders and five industry players. They are Fortescue, Licorette, Alinta Energy, Sustainable Energy Now and ATCO. Feedback was also received from four consumers, including Ivan Quail, ATCO and Noel Schubert from the ECP, and six associated GTEs, being AEMO, Western Power, Horizon, Synergy, the Economic Regulation Authority and Matt Bowen. They were all supportive of the intent of the bill and the drafting intent on issues such as the inclusion of immunities for AEMO, Horizon and SPS, and definitions such as “material improvements”, and four were completely in support. There has been significant industry consultation. As with any consultation, there will always be someone who says that we did not do enough, but I think that the bill has been widely consulted on. It is sound legislation and I commend the bill to the house.

Question put and passed.

Bill read a second time.

*Committee*

The Deputy Chair of Committees (Hon Sandra Carr) in the chair; Hon Darren West (Parliamentary Secretary) in charge of the bill.

**Clause 1: Short title —**

**Hon Dr STEVE THOMAS:** We discussed the generation capacity going forward. Is the government going to build any more gas-fired power plants to maintain supply and keep it going?

**Hon DARREN WEST:** Future generation is not within the scope of the bill. The bill is about enabling regulation.

**Hon Dr STEVE THOMAS:** I would have thought it was within the scope of the bill, but the answer is the answer, as we usually go.

A lot of this bill is effectively legislation to empower the production of regulation. Can the parliamentary secretary inform us how many clauses of this bill are, in effect, regulation-creating powers, and which clauses they are? I suspect that some of these are quite repetitive for various aspects of the grid. How many of these clauses that we are dealing with are, in effect, to create regulative powers? Obviously, we will not know the detail until sometime down the track.

**Hon DARREN WEST:** I cannot be definitive in how many, but I think the member will find that most clauses would make some reference to regulatory power, albeit that some of them will be transferred from existing powers to distributed energy resources.

**Hon Dr STEVE THOMAS:** Okay; that probably does not really help. Perhaps the simplest part of the question might be that I imagine the government has a staged approach to regulation delivery; how many new sets of regulations will come out of this bill? What is the time frame in which we can expect them to be delivered?

**Hon DARREN WEST:** We would expect that the transfer of existing content would take about three to five years.

**Hon Dr STEVE THOMAS:** At this point, does the government have a step-by-step approach to how those regulations are going to be delivered? Will somebody assess which of the regulations are of greater need in the early stages?

**Hon DARREN WEST:** The plan for the review of the regulations and how they will be released will be released around the middle of this year.

**Hon Dr STEVE THOMAS:** A range of things will be introduced in this legislation, which is effectively the first bill of a series to give regulatory power around the act. Does the parliamentary secretary have a time frame for when the government is likely to introduce the second group of changes, which will come under a separate piece of legislation?

**Hon DARREN WEST:** Could the member clarify whether he means the alternative electricity services bill?

**Hon Dr Steve Thomas:** Yes.

**Hon DARREN WEST:** The AES bill has passed the Assembly and is yet to come to the Council.

**Hon Dr STEVE THOMAS:** Following on from that, this is the first stage of this bill. The state electricity objective will be set and it will allow for regulations around market rules, but a second stage will provide a second range of rules under part 3 of this bill. It is basically about the access and metering codes. I presume that will come at a later date. Do we have a time frame for when it will be presented?

**Hon DARREN WEST:** That will come under the regulation plan, which will be released midyear.

**Hon Dr STEVE THOMAS:** The parliamentary secretary can kind of see the issue a bit. Although we are supporting the bill, we are effectively supporting regulation-making powers for things that are going to come in the future. I accept that they are absolutely going to be required and we have to do this differently from the way we have done it previously because we are in a whole brave new world in what distributed networks are likely to work out. I suspect that the next bill that will come through will deal more with the unusual versions of distribution—I am particularly thinking of the microgrid components and that process. This bill will very much focus on those parts of the grid that currently exist with expansion plans, which I will get to in a minute.

**Hon DARREN WEST:** Yes.

**Hon Dr STEVE THOMAS:** Thank you; that has sort of bedded that down.

One of the issues is that the planning for this system was originally put together in the whole-of-system plan, which was out of date as soon as it was done. Obviously, the government will have to replace it because the plan did not include much of the transition component, so, to go through that process, we need to know when the next whole-of-system plan is likely to be dropped.

**Hon DARREN WEST:** We are outside the scope of the bill, but the next whole-of-system plan will be released and developed by about September 2025.

**Hon Dr STEVE THOMAS:** Basically, the issue then is that the next whole-of-system plan, which will put together the outlook for what the system will look like, is not coming in until September 2025, which is not quite two years from now but not too far away. The difficulty I have is that the government is trying to work out what the system will look like with this plan, but we are trying to put together some regulations now, for which the system plan is not yet written. I imagine that there will be some cross-pollination of those plans, but is the government not concerned that it has no idea of where the system is going to go to in the whole-of-system plan? Or is it the case that the government feels that the regulations that it will create will be broad enough that whatever changes are in the whole-of-system plan it will be able to cover any outcome?

**Hon DARREN WEST:** Again, we are outside the scope of the bill, but I will just reiterate that the whole-of-system plan will be written, at the latest, by September 2025.

**Hon Dr STEVE THOMAS:** Again, I guess this is the joy of a clause 1 debate; we spread fairly widely, and clause 1 is about working out all of the bits and pieces around the bill. Although the argument is that my question is outside the scope of the bill, the reality is that many of these things will very much influence the time frames and regulations that the government puts forward. I know that we are getting into an argument, and we will probably have to agree to disagree, and I cannot necessarily win on that. But I think that is absolutely the case.

Regarding the storage component of 4 400 megawatts that the government is going to build—I am not getting into an argument about whether that is adequate—is there a clause of the bill that will ultimately end up producing regulations for storage; and, if so, where do we find that and how do we explore the adequacy of that? The storage component will be interesting.

**Hon DARREN WEST:** Large-scale storage is covered under existing rules for the wholesale electricity market, and will move to the electricity distribution system market, and small-scale storage will be integrated into the network.

**Hon Dr STEVE THOMAS:** I might just do one more before I give somebody else a go on clause 1. How will the bill impact on the current timetable for the closure of coal-fired generation in Collie? Is it simply the case that the time frame has been set by government and the regulations will be completely ambivalent to the time frame? Is the time frame based on production capacity, need and demand? I would not mind asking whether the time frame is going to remain the same, but I suspect that that might be pushing the friendship and out of scope. If the parliamentary secretary felt like informing us of the new closure time frame for coal-fired generation, that would also be a useful piece of information for our discussions.

**Hon DARREN WEST:** Sorry, member; the friendship is there to be stretched. However, that is not in the scope of the bill. The bill is about enabling and regulating distributed energy models in the network.

**Hon Dr BRAD PETTITT:** Firstly, does the government expect that the new requirements will add to the costs of distributed solar or other distributed energy systems; and, if so, has any modelling been done of what the new requirements will add to the average solar system in WA?

**Hon DARREN WEST:** We do not envisage the passage of this bill will add any costs to renewable energy. We think it will make it easier for renewable energy projects to get integrated into the energy system.

**Hon Dr BRAD PETTITT:** That is encouraging. My reading of it, and that of some of the others I consulted with, is that it will add layers of permits or connection costs. My reading of it is that it may add some costs. I gave examples from the US. Obviously, they might be connected badly and can be quite extreme. In response to the parliamentary secretary's earlier answer, how does he see this driving down the cost of solar in WA?

**Hon DARREN WEST:** There are a couple of things there. The member talked about the US, where it is largely privatised. In fact, in California, it is 100 per cent privatised. In WA, it is publicly owned, so there is a difference there. Western Power will do a review of the connection processes after the passage of this bill.

**Hon Dr BRAD PETTITT:** That gets to the heart of my concern. I will be up-front and say that it would be no secret that Western Power's delays in connection times for large-scale systems are rather legendary. If Western Power is going to do a review of the connection processes for small systems, I am trying to understand how this will not end up with a process that creates delays and, therefore, more costs.

**Hon DARREN WEST:** The process will be more about compliance and meeting standards rather than connection times; that is a separate matter. We are trying to make sure that when we have alternative, or distributed, energy models in the network, everything meets the standards and is compliant.

**Hon Dr BRAD PETTITT:** Could the parliamentary secretary give examples of which compliance standards will be added? I am trying to understand what this might look like for putting an average solar photovoltaic system on a roof. As I said in my second reading contribution, Australia has a very good reputation on this because people can get a system approved in one day. The uptake has been so strong because it is so quick. Will we see the compliance provisions extend those approval time frames? If they are going to be longer, how much longer will they be?

**Hon DARREN WEST:** Some examples are inverters and air conditioners. The standards will be aligned nationally, with a focus on compliance. Installers will need to provide proof that new systems meet the standards.

**Hon Dr BRAD PETTITT:** Will the standards apply only to equipment? I am surprised that air conditioners will be captured by this. Is that what was said? I understand that inverters will be captured. Is it simply the case that there will be a list of pre-approved compliant inverters, for example, that can be used and no others? I am trying to understand what that will mean.

**Hon DARREN WEST:** There will be a list of compliant equipment and configurations.

**Hon Dr STEVE THOMAS:** Can I confirm that there will be no significant additional compliance requirements for general connections? I am thinking about engineering works in particular. Currently, Western Power’s engineering works are probably the biggest shortfall in the state. Will that change at all?

**Hon DARREN WEST:** That is not within the scope of the bill.

**Hon Dr BRAD PETTITT:** Thank you for the answers to these questions. I think it is getting clearer. Is it fair to say that the primary piece of regulation for small-scale solar will be a list of approved products? I assume it would be panels, inverters and batteries. Is that the extent of the regulation and compliance or will there be another set of regulations that we should be aware of?

**Hon DARREN WEST:** It is probably more about configuration. We can presume that standard panels and inverters are fine; it is how those systems are configured that will need small-scale regulation.

**Hon Dr BRAD PETTITT:** I am trying to understand what “configured” means. It is a pretty simple process. There is a panel on a roof, an inverter down below and a wire in-between. I understand that one part is about being able to turn it off remotely, but that has been dealt with in previous regulations. I am trying to understand what is new here, because the truth of the matter is that they are already configured. How would that be different?

**Hon DARREN WEST:** A good example of how they are configured would be the settings on an inverter. When the settings on an inverter are set, for instance, people have to go to a drop-down menu and select WA. A lot of people do not do that, so they are not set or configured for Western Australia, which is an obvious issue that we need to address.

**Hon Dr BRAD PETTITT:** Is that WA setting primarily so that it can be turned off remotely? Is that the primary intent? I am trying to understand the benefit of setting an inverter to WA. What does that do that is different from what already happens?

**Hon DARREN WEST:** The main reason would probably be so it can manage voltage fluctuations without tripping out. Each network is different, and our network is obviously unique.

**Hon Dr BRAD PETTITT:** I am not aware of this. Is the main concern individual systems tripping out, because I am not aware that that is actually an issue in the solar industry? As someone who is pretty familiar with the industry, I am not sure what problem we are trying to solve here. Individual systems very rarely trip out, so what is this extra layer of regulation for? What problem is it trying to solve?

**Hon DARREN WEST:** It is not at all irregular for systems to trip out unexpectedly. The Australian Energy Market Operator released a paper on this, and there is quite a lot of data about systems that are not configured correctly tripping out and not providing power.

**Hon NEIL THOMSON:** I come back to the issue of consultation. I thank the parliamentary secretary for giving a brief overview of the consultation; I appreciate that. The Department of Energy, Mines, Industry Regulation and Safety, and Energy Policy WA put out a consultation summary paper back in 2023. It was good to see the department put that out. I am curious whether any analysis was done on the clauses that might raise concerns with private providers of solar systems, such as those that operate within a distributed network in a shopping centre. Has industry—not peak bodies—raised any concerns about the impact on it and about the impact of some of these provisions and the potential for any additional capture or red tape? I would be curious if it had.

**Hon DARREN WEST:** None were raised at all, member.

**Hon Dr STEVE THOMAS:** I am coming to the end of my clause 1 component. I want to ask the parliamentary secretary about the regulatory impact statement that has, apparently, been put together in part and will come with the regulations. Has that work already started and when can we expect it?

**Hon DARREN WEST:** The plan will be released midyear and the regulations and regulatory impact statements will be released after that. I understand there will be a consultation process for that. We will seek feedback on the plan and any changes to regulations will be consulted on.

**Hon NEIL THOMSON:** It would have been great to have a regulation impact statement done on the legislative changes as well. That would have been useful; I think that should have been done. By way of an observation that I have made many times in this place, it would be great if instead of just issuing the explanatory memorandum, it became standard for us to have access to copies of regulation impact statements, particularly these economic-based legislative changes. I think it would be very useful. If I could change any process within this Parliament, that is something I would love to see happen. I have said it many times before. For the regulation impact statement that is underway, were there any other reviews undertaken by the Economic Regulation Authority or any other authority or state government agencies that oversee these matters, leading to the recommendations and then the clauses that are here today?

**Hon DARREN WEST:** The bill implements the recommendations from the Energy Transition Taskforce 2021.

**Hon NEIL THOMSON:** Are any of those reports from the Energy Transition Taskforce available to the public or members of Parliament?

**Hon DARREN WEST:** They are all publicly available, member.

**Hon Dr BRAD PETTITT:** I have a question on consultation. I thank the parliamentary secretary for his previous answer in response to the second reading speech. From that, it was pretty clear that peak bodies in this industry were not aware of it in order to put in a submission. People I have spoken to from Smart Energy Council, Sustainable Energy Now, Clean Energy Council and other strategic organisations in this space, were certainly not even aware of this bill. This is partly a comment—and maybe a question to follow it up—but the parliamentary secretary needs to ensure that as he goes to the regulation stage he proactively engages with those groups. Can that happen; and, if it cannot, why not?

**Hon DARREN WEST:** All regulations will be widely consulted.

**Hon Dr BRAD PETTITT:** If the parliamentary secretary wants to play this game, what does “widely consulted” mean? Does he put it on his website? I want to follow that up because I am seriously pushing back on this. If he thinks what was done before could be considered “widely consulted”, we are on a very different page. Consulting is proactively trying to find out what it is from those people who are experts in this space. It is not putting something up on a webpage and hoping someone notices and puts in a response. The list that the parliamentary secretary gave me before was underwhelming, and clearly many experts in this space should have been informed, at least so they could have been aware of this. I suspect the fact that they were not, and they have told me so, means that a more proactive consultation is needed than what the parliamentary secretary is doing. My question again is will we be more proactive in consulting on regulation than we were on legislation?

**Hon DARREN WEST:** Energy Policy WA and the Department of Mines, Industry Regulation and Safety have a mailing list. They have emailed several organisations, including the ones the member mentioned, and there was a public forum at which over a hundred people dialled in. There have been plenty of opportunities for people to have their say on this bill and there will be plenty of opportunities for people to have their say on the regulations.

**Hon Dr STEVE THOMAS:** I take us back to the regulatory impact statements, because I am a little concerned. I think it was suggested in the briefing that the regulatory impact statements would be done, effectively, in conjunction with the development of the regulations. Is the parliamentary secretary now saying that there will be a time between the final form of the regulations being tabled, for example, and when the regulatory impact statement will come afterwards, or will the regulations potentially be in draft form while the regulatory impact statement is being done in conjunction with the regulations being formalised?

**Hon DARREN WEST:** The plan will be released midyear. Regulatory changes will be made as we transition from the wholesale energy market to the electricity system and market rules. That will happen over time. I believe that in the briefing there was a pretty extensive time line of how that would work. The regulations will be released after the RIS in every case.

**Hon Dr STEVE THOMAS:** I think what the parliamentary secretary said was that the regulatory impact statements will be released in each case before the regulations are dropped for each particular case.

**Hon DARREN WEST:** That is what I said; correct. Thank you.

**Hon Dr STEVE THOMAS:** That is what I was chasing. Thank you.

**Hon Dr BRAD PETTITT:** I want to come back to the matter of consultation. People who are involved in this are listening to the debate. I will not say who sent this to me, but I want to mention this so that the parliamentary secretary can understand the feeling out there. I am told that this person has spoken to others in the sector and that they were not consulted. After listening to the parliamentary secretary’s answers today, not a single renewable energy technology company or retail or industry association was consulted—just BP, ATCO, the Australian Energy Market Operator, Energy Networks Australia, maybe Collgar Renewables wind farm and some random individuals. That was from a group representing many in the industry. No-one in the industry was aware that this bill even existed. I want to put that on the record. The parliamentary secretary can say that a hundred people attended a Zoom meeting or whatever it was, but if the key people in the sector were not aware that this bill even existed, the department was not doing its job properly. What will the parliamentary secretary do differently as we go from the legislation to the regulations to make sure that those in the renewable energy sector who will be impacted will be made aware that this legislation exists?

**Hon DARREN WEST:** I can give the member an assurance that as we move through each stage of the bill, we will reach out to the Clean Energy Council and make sure that everyone who is involved in that organisation will have an opportunity to provide input into the regulations.

**Hon Dr BRAD PETTITT:** I want to be clear that that may or may not have come from the Clean Energy Council. In fact, to be clear, it did not. I read out the numbers. The Clean Energy Council, Smart Energy Council and Sustainable Energy Now are key, strategic organisations in that sector that are across this issue. I would appreciate it if the government could reach out to all three of those groups. I suspect that there are also others in the renewable space. The key bit—the frustration that the government is not hearing from the renewable energy sector—is that this sector will be impacted the most but it clearly was not involved or had a say in the previous iterations of the bill. That is more a comment than a question. I do have another question on a slightly different matter, but I thank the parliamentary secretary for his response. This question is more around the other issue that I raised in my contribution to the second reading debate about ensuring that the regulations are consistent with existing Australian standards and other specifications and not specific to WA. That was certainly one of the key pieces of feedback that we heard from the renewable energy sector. That is not clear from the documentation. Can the parliamentary secretary please provide some advice about that?

**Hon DARREN WEST:** We refer to Australian and international standards. We will align with the other states.

**Hon Dr BRAD PETTITT:** Is it the government's intention that all the regulations will align with what is happening in the other states or will there be some exceptions? Both the bill and the second reading speech refer to WA's unique circumstances. I am just wondering which bits will be unique to WA and which bits will align with national standards.

**Hon DARREN WEST:** All equipment standards are national or international. We will not create our own in Western Australia; we will align with the rest of the country.

**Hon NEIL THOMSON:** The parliamentary secretary mentioned the Energy Transformation Taskforce, which was established in May 2019 to deliver the WA government's energy transformation strategy. The website states that the taskforce concluded on 19 May 2021. Has that taskforce been wound up or is it still in existence?

**Hon DARREN WEST:** The Energy Transformation Taskforce has wound up. Its work will be continued by Energy Policy WA.

**Hon NEIL THOMSON:** I referred to what I could call the founding documents to drive this legislative reform, which was to be delivered by the Energy Transformation Taskforce. As I just pointed out, that taskforce wound up its operations in May 2021. We are now in February 2024. Is the parliamentary secretary saying that it effectively took two years to bring the bill to Parliament? My understanding is that it was introduced to Parliament late last year. Can I get comfort from the parliamentary secretary that I know everything I need to know about what drove the recommendations in the review by the taskforce, which concluded well over two years ago?

**Hon DARREN WEST:** Yes.

**Hon NEIL THOMSON:** The energy transformation strategy, which was produced by the Energy Transformation Taskforce, appears to have a number of documents that hang off it. Can the parliamentary secretary outline what those documents are?

**Hon DARREN WEST:** There are about 30 or 35 documents that are all publicly available. I do not have a list of them here.

**Hon NEIL THOMSON:** Thirty to 35 documents is a lot of documents, and there are about 50 clauses. Can I refer to any of those 30 to 35 documents to provide me, my constituents and community members more broadly some understanding of a plan for our future going forward?

**Hon DARREN WEST:** There is no shortage of information available regarding this bill for the member's constituents who would like to access and read it.

**Clause put and passed.**

**Clauses 2 to 3 put and passed.**

**Clause 4: Section 3 amended —**

**Hon NEIL THOMSON:** At the risk of a little repetition here, it is important to do due diligence. With this new concept of connected facilities, will there be any potential change to the regulatory arrangement impacting those smaller connected facilities, particularly those I mentioned earlier like the Broome shopping centre in my region, that would be able to provide energy into these facilities? Will there be any impact on the regulatory arrangements for such a facility?

**Hon DARREN WEST:** I think that will come under the Electricity Industry Amendment (Alternative Electricity Services) Bill 2023, which is the next bill for consideration. I do not think the situation the member is talking about is in the scope of the Electricity Industry Amendment (Distributed Energy Resources) Bill 2023.

**Hon NEIL THOMSON:** I guess the connected facility relates to a distribution system. This new concept of connected facility reads —

... means electricity infrastructure connected to a distribution system that manages or controls the flow of electricity to or from the distribution system ...

Some sort of definition is provided and dot points are listed below. Reading this, it appears it has a fairly wide scope. For the sake of my constituents and people in this place, can the parliamentary secretary give examples of the sorts of facilities that might be included in this new concept of “connected facility”?

**Committee interrupted, pursuant to standing orders.**

[Continued on page 384.]