PETROLEUM LEGISLATION AMENDMENT BILL 2023
PETROLEUM AND GEOTHERMAL ENERGY SAFETY LEVIES AMENDMENT BILL 2023

Second Reading — Cognate Debate

Resumed from 22 February.

MS M.J. DAVIES (Central Wheatbelt) [1.30 pm]: I rise to speak on the Petroleum Legislation Amendment Bill 2023 and Petroleum and Geothermal Energy Safety Levies Amendment Bill 2023 as the lead speaker for the Liberal–National opposition. I thank the minister and the manager of government business for accommodating the switching of timing for the last session so that I could attend something that was quite important in my electorate. I very much appreciate it.

Mr D.A. Templeman: Always happy to help.

Ms M.J. DAVIES: Thank you.

Mr D.R. Michael: Thank you for accommodating the few amendments as well.

Ms M.J. DAVIES: Okay. We will get to that, minister.

Having a little bit more time allows me the opportunity to go over the second reading contributions of both the members for Swan Hills and South Perth. Although we are on opposite sides and are not prone to paying each other profuse compliments, there is no doubt that both of those members have a keen interest in and understanding of the energy sector. It was quite interesting to be able to go through their contributions and look at it from their perspective.

Members may be interested to know that one of the first roles I had when I was working for the former Leader of the Nationals WA Hon Max Trenorden was in the capacity of a research officer. He was the shadow Minister for Energy prior to the 2005 state election. I was in a research role when the then Labor government was pursuing the disaggregation of Western Power. Western Power was formed back in 1995. There was a monopoly of electricity and gas under the State Energy Commission of WA, which was disaggregated into separate suppliers. We saw Alinta Energy and WPC—or the Western Power Corporation—come into being.

In 2006, when I was working for Max, we also had a further round of disaggregation for Western Power, Synergy, Horizon Power and Verve Energy. It was an interesting time to be involved in energy policy. There were many debates in Parliament at the time. A year later, I was working for the Chamber of Minerals and Energy as its Pilbara executive officer. This was at the time when Chevron Corporation had been awarded environmental approvals for a 10 million tonne per annum LNG plant and domestic gas plant on Barrow Island. This was prior to the project even commencing. It was later expanded. In 2009, it got its final approvals and construction commenced. It was also a very interesting time.

I spent some time with Chevron. It talked about an enormous project that obviously had some challenges regarding where it would be located and future energy supply, but it did not have the project at the time as it was going through the whole process of getting approvals. We then had another discussion 10 years later, in 2019, when the project was actually up and running and Chevron began the operation of its carbon dioxide injection system at the Gorgon natural gas field on Barrow Island.

At the time, it stated —

> … the carbon dioxide injection facility will reduce Gorgon's greenhouse gas emissions by about 40 percent, or more than 100 million tonnes over the life of the injection project.

It has been intriguing to watch that project develop—both the gas and the accompanying carbon capture and storage component. There is no argument between the Labor government and the National Party—I suspect the Liberal Party as well—that gas has to be, and will remain, a part of our energy mix for the foreseeable future. That is something that I think we all agree with. There are those in the community who say that we need to turn the tap off immediately, but I think that is an unrealistic proposition. As such, we work in an environment in which we seek to abate some of the impacts of these projects so that we can keep the lights on and continue to support the industries that create jobs for our state and play a part in the energy transition for some of our global partners. We have a responsibility, given that we have built such a significant industry here. Our state, national and international trading partners all rely on this product to, as I said, keep the lights on, underpin industry and drive our economy. That is why so many people watch that project by Chevron and its partners and the others that are underway at the moment.

For those interested in the process itself, in the case of the Gorgon project, the gas extracted contains around 14 per cent carbon dioxide, which is too high to meet the requirements of the regional gas market. A large part of that has to be stripped out from the gas. It sounds like I know what I am talking about. If I were tested on this later, I would hazard a guess that some of it would have left my head. The gas in the carbon dioxide has to be separated, and the carbon dioxide then needs to be pressurised and cooled to a point at which it has properties between a gas and a liquid. It

then has to be transported or piped to where it can be injected underground. Essentially, we are talking about creating a regulatory framework for that model for others to pursue.

The geological structure into which the carbon dioxide is injected contained water and other substances—which has been part of the problem with that particular project—that need to be pumped out first and injected somewhere else. The process is complex. I have just overly simplified a system that I know many engineers, scientists and experts have been working on for some time. It has been well covered, particularly for that project that is being watched closely by people here in Western Australia.

I note that back in July 2023, Peter Milne made the following observations in an article. I will quote from it. He stated —

> Carbon storage at Gorgon is of international interest as it is the largest attempt in the world to bury CO2 to reduce carbon pollution.
>
> Its disappointing record to date is tarnishing the credibility of a technology that some tout as essential to slowing climate change and others damn as an excuse to produce more fossil fuels.
>
> The predicted poor performance in 2023 that will result in more carbon pollution released to the atmosphere was detailed in an annual report to the WA government obtained with a freedom of information request from WAtoday.
>
> As carbon dioxide is injected underground, wells several kilometres away should pump water out of the same formation to ensure the pressure does not become excessive. The water is then injected into a different geological formation under Barrow Island.
>
> However, according to the report, the presence of solids, gas and oil in the water pumped to the surface has made the water difficult to dispose of.
>
> Chevron, which has already spent $3.2 billion on CO2 injection at Gorgon, plans a "significant additional investment" to modify the water wells and do other work to allow 4.6 million tonnes of water a year to be moved to make way for storing carbon dioxide.

I, like many of my parliamentary colleagues, and I suspect the minister, have been briefed on a number of occasions by the Chevron team and they all recognise the importance of getting this right. There is keen interest from not only an emissions perspective, but also a technological perspective, in the proof of concept and capability in that part of the world and in making sure that Chevron gets it right with the national and international gaze on the project.

Carbon capture and storage is a critical component of the emissions reduction strategies of the state and federal government and other jurisdictions. It is true to say that without it, it is very conceivable that our net zero targets will not be met. Of course, there are differing views on how much this will play a part in the role of reducing emissions. It is viewed by some in the environmental lobby that it will enable or permit some of those companies that have significant emissions to continue to emit, and they oppose it point blank and say that it is window-dressing. However, I think those arguments ignore the peril that our energy system, and our responsibility in a global context, would be put in without accessing this technology. We are essentially all hands on deck. We use every opportunity and tool in the toolbox to try to address these challenges.

The CSIRO published a paper in September last year. It stated —

> The global pipeline of CCS projects currently stands at 30 projects in operation, 11 under construction and 153 in development …

I will not name all of those, but the same paper notes that the Global Carbon Capture and Storage Institute has observed that there has been a 44 per cent jump in the development of CCS facilities over the last 12 months. There has been an escalation in the number of organisations, businesses and science institutes pursuing and seeking to get this absolutely right. The Global Carbon Capture and Storage Institute posits that there are significant opportunities for Australia. I know that the state government has spoken about that and having the appropriate regulatory framework in place. We have large quantities of geologically stable land. In addition to storing our own carbon dioxide, there is the potential for us to store carbon dioxide from countries that are less able to rapidly reduce their own emissions. The Global CCS Institute points to that potential opportunity with one of our oldest trading partners—think of places like Japan. Given that we supply more than 40 per cent of Japan's liquefied natural gas, there is an obvious opportunity because Japan has limited storage potential but generates carbon dioxide when it burns our gas to generate electricity.

Carbon capture storage is not a silver bullet to achieve our ambition of becoming net zero, but, as I said earlier, it is an important tool in the toolbox. Presently, there is no regulatory framework guiding its development or monitoring in Western Australia, hence we are having a conversation about this bill. My understanding is that Chevron's project operates under a state agreement but that other projects would likely not have that same type of framework under which to progress. There is a sense of urgency from all industry stakeholders. That was clearly articulated

during the consultation on the bill early last year. It has taken just over 12 months since that consultation occurred to get this legislation to the house. I seek the minister's advice, or perhaps he would like to comment, on the urgency that was expressed by industry during that consultation period about why this legislation had not been brought forward earlier. Further down the track, I will ask the minister about the regulatory framework, the regulations and all the enabling work that needs to be done to allow industry to work on this with some immediacy. Earlier, I think with his tongue firmly in his cheek, the minister welcomed the opposition's support for the amendments that the government will make to its own legislation.

Mr D.R. Michael: I think I said you would understand.

Ms M.J. DAVIES: We acknowledge that the government is once again making amendments to its own legislation. Unfortunately, it has become pretty common for this government to bring legislation to the house that is then amended. I will leave it to the minister to provide an explanation about why that is required. As I understand it, the amendments were not requested by industry, although I may have misunderstood at the briefing. I think they are all administrative amendments as a result of some oversights during the drafting process. We all know that the departments and the people involved in drafting this legislation take great pride in putting together accurate legislation that does not require an amendment unless we have had a debate around the policy of the legislation. To have 10 or so pages of amendments is probably disappointing from their perspective. I wonder what the conversation was between the current minister and the previous energy minister, who is not fronting the opposition, about having to move 10 pages of amendments to his own legislation.

I would like the minister to perhaps address the fact that we saw an iteration of this legislation under the previous government. We are talking some time ago now—in 2013. That was a standalone piece of legislation, from memory, and this legislation before us is an amendment bill. I have to confess that it was slightly complex to follow all the pieces of legislation. I am not sure how the member for Cottesloe found it, but when I was trawling through the various acts that it will amend, I understood the general concepts. The amendments were helpfully grouped at the briefing but then when we went through the bill clause by clause, it was not the simplest legislation to follow. Ideally, given that this act is what the government would like industry to understand and use to minimise the risk, there is something to be said for having legislation that is as straightforward as possible to follow from their perspective. I am not sure whether that has been achieved. I think I have used the word "Frankenstein" previously in the house to describe this legislation. It is a little untidy. In my view, it is quite challenging to go through and it requires a fair amount of technical expertise as well.

We are debating the bill before us. According to a report in the Australian Petroleum Production and Exploration Association journal titled *Carbon capture and storage role within Australia's energy transition: necessary, safe and reliable*—I will provide the reference for Hansard —

> There will soon be a significant number of large (multi-Mt) CCS projects under active development within Australia, both offshore and onshore. Most of these projects will be 'new builds', wherein the project proponents will be undertaking a whole-of-life-cycle project process, starting with the assessment of new greenhouse gas (GHG) assessment permits or simply applying for the release of GHG storage acreage. These projects will then extend to the CO_2 injection phase over a multi-year or decadal timeframe. These projects will be complemented by a progressively increasing number of small to medium-sized projects, many of which will probably involve repurposing existing but depleted oil and gas facilities and attendant reservoirs as GHG storage hubs.

In addition to the number of potential private sector projects, I also understand that the state government completed a project known as the South West Hub project, which was led by the Department of Energy, Mines, Industry Regulation and Safety. That was completed in 2019. There was a long-running investigation into the feasibility of storing carbon dioxide underground as an alternative to releasing it into the atmosphere. DMIRS led the investigation in the Shires of Harvey and Waroona. That was undertaken from 2007. The previous Minister for Mines and Petroleum advised the house in February 2019 —

> The models —

That have been released —

> have been peer reviewed by representatives of the private sector, universities, CSIRO and international experts, and have been determined to be robust. Multiple scenarios were considered in the reviews, including "stress" cases that attempted to break the storage concept. The results have bolstered the confidence that the South West Hub project area could meet its specified success criteria of injecting at least 800 000 tonnes of CO_2 per annum over 30 years.

I understand that further work has been undertaken that resulted in the release of the carbon capture underground storage hub study that was completed by the CSIRO and Global CCS Institute in November last year. That study was accompanied by a $4.3 million commitment by the state government to establish, in the Premier's own words,

a "world-class" CCSU industry in Western Australia. I suspect that $4.3 million is the very bare minimum that is required to realise the ambitions of the Premier and this government. There is no doubt that this is an opportunity for Western Australia to grasp with both hands. I am very interested to hear the minister's comments about the progress that has been made since that announcement. What resources will be allocated? What will the department look like in progressing the state's ambition to establish a world-class CCSU? What role does the government believe it has in doing that? Obviously, there has been long-term investment by the government in the industry for the South West Hub, and other industry-led projects will be established as a result of us allowing the regulatory framework to be put in place.

I wonder what the government sees its role as being beyond making the announcement in terms of any future investigations of that nature, which occurred over a significant period. We debated that when we were last in government—I am sure that the minister has looked at *Hansard*—and it was pretty contentious from our own side. The debate occurred when there was a heightened debate in the community around fracking when I was the Minister for Water and was dealing with significant concerns in the community about the impact of fracking on the watertable. There were discussions about injecting carbon dioxide into the Eneabba–Lesueur aquifer and the South West Hub. A number of members of Parliament were concerned about the science and about the impact of pipelines and access to private property, and the inequality between the well–heeled mining companies negotiating with individual property owners to access land for exploration and infrastructure.

To a degree, I think that whilst the science is being done, there will still be challenges in terms of land access and negotiations and, I guess, an increase in competition for the available land that we have, particularly in the south-west corner of the state. It is fine when we are talking about big areas in the north of the state that are potentially offshore; however, the south-west corner of the state is slightly more challenging. Will the minister provide detail about what will come after this is put in place, because I think there will be hurdles? I think his colleagues in Canberra are intent on making life pretty difficult by adding another layer of environmental regulation to what I would say is already a fairly robust regulatory environment, which is challenging for many in the gas and mining industry here in Western Australia. It gets pretty tricky when another layer of red and green tape is added to an already bogged down approvals pathway.

Setting aside those regulatory challenges, I am sure there are conversations—well we hope there are—being held with federal Labor about how to minimise and streamline those challenges. There may be a requirement for fiscal incentives and investment in infrastructure. What role does the government see itself playing in terms of any infrastructure development, or is this purely for the private sector to take up?

If the document is to be believed, with the launch of the report and the ambition that the government has laid out, then we need to move posthaste. Design, planning and approvals need to be in train now. The document outlines that if there is to be only one hub, particularly if we are talking about a hub up in the Pilbara by 2029, we need to start the process today, which means we need the regulations and framework to be available as soon as possible. Indeed, if members read the consultation paper that was circulated at the beginning of last year, they will see that the feedback from industry was to bring this legislation on as soon as possible. I have said that we have responsibility for this. Legislation that was brought on by our government did not progress. I think the sentiment that was around in 2013, which caused some of the pushback, has moved on; however, I think the government would be wise to consider the impact on private property rights and the practicalities of delivering on promises when the rubber hits the road. The Labor government has made action on climate change one of its key planks, and to make good on those promises it has to do more than release plans and bring legislation to Parliament. We need to understand what the next pieces of work will look like.

Let me touch briefly on what the bill proposes to do. There are environmental amendments with the introduction of a polluter-pays principle. In the event of an escape of petroleum, the registered owners will be responsible for eliminating, controlling and cleaning up any escaped petroleum. Remediating and monitoring the environment, care and maintenance, decommissioning and rehabilitation will be recognised as petroleum operations by including specific references in the definitions of key terms. We will go through a number of others during consideration in detail. There is an element that introduces the calculation of royalties, which is an amendment to the Petroleum Act 1967. That will allow meters to be installed on infrastructure for the assessment of royalties on third-party assets. Of course, a framework will be introduced to allow for the underground storage of petroleum and it will revise the way that approvals for underground storage of petroleum are administered, introducing a standardised criteria and requirements for applications to establish a petroleum storage management plan. It will be done in a similar manner to well management plans and field management plans. It will allow for the exploration and production of naturally occurring hydrogen. There are amendments that will enable the existing suite of petroleum titles to explore for and produce naturally occurring hydrogen through a new concept of regulated substances. Naturally occurring hydrogen activities will be permitted on an opt-in basis. Titleholders will be able to apply to the responsible minister for additional rights for a prescribed regulated substance. Existing titleholders will be impacted only if they elect to opt in and pursue a prescribed regulated substance.

There are elements around the storage and transport of greenhouse gases. The bill will develop property rights for greenhouse gas storage formations. If we look back at the debate by the former minister when he was in opposition, we will see that what a formation is and how is it defined was talked about at length. We might have a conversation about that during consideration in detail. The bill will also allow for direct access for existing petroleum geothermal lessees and licensees for suitable storage sites under specific circumstances. It also talks about acreage releases. We will seek an understanding of how often that will be done and what the process will look like. It will allow for tenure to be provided through greenhouse gas exploration permits, retention leases and injection licences.

The bill discusses the transport, injection and permanent storage of greenhouse gases and, very importantly, site closure, which includes the transfer of liability from the licensee to the state government. We are talking about something that will hopefully be encapsulated for hundreds or thousands of years—I do not know how many—but that will not always be the responsibility of businesses or those companies that are doing it. How will we make sure that we are looking after the environment and making sure that the liability sticks with the business that is responsible, before transferring that across to the state government and taxpayers?. The long-term liability requirements will be aligned with the commonwealth's approach and the requirements already in place by the Gorgon project. There will be a minimum time of 15 years post issue of a site closure certificate. I am interested to hear from the minister about why 15 years was chosen instead of 20 or 10. Some people say that is excessive and some say it is not long enough.

A consultation draft of the bill was made available, as I spoke about earlier, that ran from 20 January last year until 14 April. I understand that 16 submissions were received and published in the government's response, along with the concerns that were raised. In brief, the Chamber of Minerals and Energy simply said that it urged the WA government to prioritise the passage of the legislation and fast-track the development of regulations and supporting policy frameworks underpinning the bill.

The Australian Petroleum Production and Exploration Association stated —

> Reaching net zero by 2050 will be "virtually impossible" without carbon capture utilisation and storage …
>
> CCUS needs to be deployed across the Australian economy as a matter of urgency, as emphasised in the ongoing reform of the safeguard mechanism.

It went on to say —

> To achieve the IEA Net Zero Emissions (NZE) scenario, it will require "*more than ten new CCUS equipped facilities to be commissioned each month between* [November 2022] *and 2030*".

I will repeat that —

> To achieve the IEA Net Zero Emissions (NZE) scenario, it will require "*more than ten new CCUS equipped facilities to be commissioned each month between* [November 2022] *and 2030*".

The APPEA's view is —

> **The timelines for developing and implementing the Draft Bill and associated regulations as well as the time required to permit CCUS operations will have a direct impact on the emissions reduction trajectory of numerous Western Australian industrial and energy facilities.**

Woodside encouraged the state to consider measures to expedite time lines. Similar to APPEA and the Chamber of Minerals and Energy, Chevron stated that deploying CCS at scale in WA will support state and federal emission reduction targets. Submissions were made by the Environmental Defenders Office recommending that the bill proceed from a science-based position that petroleum activities should be phased out and no new petroleum fields should be developed, and the legislation should not promote or encourage the use of CCS to sustain the fossil fuel industry. I spoke about that position at the beginning of my contribution. I do not agree with it. The Conservation Council of Western Australia made a submission along a similar line that essentially these amendments allow for what they term "big polluters"—those that have a heavy emissions target—to be given a carbon pollution reduction strategy when it is not.

Debate interrupted, pursuant to standing orders.

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