

**BARROW ISLAND AMENDMENT BILL 2015**

*Second Reading*

Resumed from 25 March.

**MR C.J. TALLENTIRE (Gosnells)** [11.00 am]: I am very pleased to speak on the Barrow Island Amendment Bill 2015. This bill is principally about how we deal with the indemnification of the proponent of the Gorgon joint venture, Chevron Australia in particular, that has committed to the reinjection of large amounts of carbon dioxide gas into a saline aquifer below Barrow Island. The company made this commitment because when it initially sought approval for the Gorgon project back in the early 2000s, it realised it had a problem because the reservoir gas contained a very high level of CO<sub>2</sub>. Around 14 per cent of gas in the reservoir below the sea surface is CO<sub>2</sub>, which does not compare favourably with other gas reserves that we have in the state's waters or in commonwealth waters. Other gas deposits at gas reserves average around two to three per cent CO<sub>2</sub>. The North West Shelf is below two per cent, and other reserves that are about to be accessed do not have anywhere near 14 per cent. When Chevron and the other Gorgon joint venture partners realised they had a very high level of CO<sub>2</sub>, they accepted that they had to do something about it, otherwise claims that their gas project would contribute to a cleaner form of energy would be immediately dismantled. They realised that they had to do something, so they looked at the options.

For a long time in Western Australia we have talked about biosequestration, which is the idea of capturing carbon dioxide emissions in plantations and holding them in that form—taking CO<sub>2</sub> out of the atmosphere and trapping it in some form of biological product, or wood product, in fact. When we look at the scale of the gas emission involved with the Gorgon project, we can see that that option does not appear viable, so naturally enough Chevron and the other joint venture partners looked at the other options. Anyone working in the oil and gas business and looking at extracting gases from the various geological formations has a good understanding of what is below the surface. Naturally enough, a person starts to wonder whether it is possible to store this unwanted product below the surface. In some ways it could be said that we are taking out gas and using or selling the high-energy component and extracting the unwanted component and putting it back to where it came from. It is not quite as simple as that because 14 per cent of CO<sub>2</sub> does not go back exactly to where it came from; it goes back to other places, and I will explain why it would be problematic to put it back to where it came from. However, the important thing is to get some figures in place. The intention over the lifetime of the project is to geosequester some 100 million tonnes of CO<sub>2</sub>. I have seen some estimates published by Chevron that said it would geosequester 120 million tonnes, but I suppose it is understandable to get some degree of variability with the estimates over the years. The total figure for the annual rate of geosequestration is between three and four million tonnes per year. When I ask the Minister for Environment about the state's current greenhouse gas emissions, he is always vague and unclear of the figures involved. However, I understand that Western Australia currently emits around 75 million tonnes per year and that Australia as a nation is approaching 600 million tonnes per year of emissions. Sequestering 100 million tonnes of CO<sub>2</sub> over the lifetime of a project is a significant effort towards reducing Australia's contribution towards global greenhouse gas emissions.

It is probably relevant that I mention what is at stake and acknowledge the fact that this legislation is before the Parliament as an indication of how seriously the Western Australian Parliament takes the issue of making a contribution to reducing global greenhouse gas emissions. To that extent I am very supportive of this legislation. I also acknowledge that Chevron realises that it has to do something about the CO<sub>2</sub> emissions associated with the project. It is true that the Environmental Protection Authority identified it as an environmental factor during the assessment process and said that the company must do something about it, but prior to the project going to the Environmental Protection Authority we saw a great willingness by the Gorgon partners to do something about the CO<sub>2</sub> aspect of the project. I recall that before the project ever went to formal assessment that Chevron were keen participants in a forum on geosequestration held in 2003–04 that looked at this issue. The forum was held at the Duxton Hotel and organised by my former employer, the Conservation Council of Western Australia. Chevron was a willing participant at that forum. It was rather amusing when Chevron offered to make a contribution to our costs. Putting on an event at the Duxton Hotel did not come cheaply, so we asked Chevron if it wanted to make some gesture. Chevron said, "Sure, would \$20 000 be enough?" We declined the offer. In the early 2000s it was a very significant amount of money, and it still is. In the end I think we accepted \$2 000 from Chevron as a means to ensure that the forum was well marketed and promoted and that the people researching this topic were made aware of it and given the opportunity to hear and participate in the discussion in a comfortable environment.

It is worth noting the significance of the problem that we face in not only Australia, but also around the world. I note that a summary was produced upon release late last year of the Intergovernmental Panel on Climate Change's "Fifth Assessment Report", which states —

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To provide a two-in-three chance or higher of keeping warming below 2°C will require limiting total CO<sub>2</sub> emissions since 1870 to about 2900 gigatons. Two thirds of this amount had already been emitted by 2011. However, the remaining fossil carbon reserves (like coal, oil and gas) far exceed this remaining budget. The clear conclusion is that most fossil fuels have to stay in the ground.

Fossil fuels either have to stay in the ground or we have to find a way of significantly mitigating the amount of CO<sub>2</sub> released into the atmosphere. It is very good to be thinking in terms of budgets. How much of the global budget have we used, and what remains? According to the Intergovernmental Panel on Climate Change, we are into the last third of our budget. How do we allocate that? How do we equitably divide up that remaining piece of the budget? I suppose by producing and selling gas that we ensure is produced as cleanly as possible, we are doing our bit. Of course, we do need to be very clear about what Australia's contribution is, and see that we reduce things as dramatically as possible.

Another way to look at things is that we are attempting to stabilise global greenhouse gas emissions at about 450 parts per million in the atmosphere. We are already at 400 parts per million, which is way beyond the normal fluctuation of what the atmospheric content of CO<sub>2</sub> has been. We are entering a phase of unpredictability. Occasionally, over the tea break, members ask me questions on this point. I am disappointed those members are not in the chamber so we could continue that discussion. Perhaps they will join us during the course of debate, so we can have the discussion on the parliamentary record, rather than it just being something chatted about over a cup of tea. This issue merits that level of discussion. Perhaps those members will join us as we proceed. I note the fact that we have this legislation before us demonstrates the overwhelming support of this Parliament for some form of action on climate change.

Getting to the technicalities of this bill, I was briefed by the Premier's staff and the department, but when I asked for information on the technicalities—the chemical processes involved with geosequestration—the information I was subsequently provided goes back to 2005, when the joint venture partners produced a document entitled "Draft Environmental Impact Statement/Environmental Review and Management Programme for Gorgon Development". I was aware of this information in 2005, but I expected that it would have been updated somewhat and there would be some more contemporary information over the last 10 years that would give a clearer picture of what is going on. I know that companies have done lots of additional research, but I suppose in the short time that the Premier's advisers had to put together some information, they thought that the simplest thing to do would be to forward me the information from 2005.

I note that in the documentation provided the outline is that there are four trapping mechanisms for holding CO<sub>2</sub> in the Dupuy saline aquifer below Barrow Island. There is the solution trapping mechanism, and the indications—I did think this information would have been refined—were that the solution trapping mechanism would account for 10 to 20 per cent of the total CO<sub>2</sub> injected. That is a mechanism by which CO<sub>2</sub> is pumped into the ground under pressure. I quote the document —

... will bring the injected CO<sub>2</sub> into contact with this formation water, enabling CO<sub>2</sub> to dissolve into the water until the water becomes saturated with CO<sub>2</sub>.

Hence the name "solution trapping mechanism". There is quite a degree of variability about how much of the gas would be trapped using this solution trapping mechanism, but 10 to 20 per cent sounds like a reasonable contribution.

We then move on to the residual gas trapping mechanism, which is said to account for about 20 per cent of the final amount that goes into the Dupuy formation. The document states —

... about 20% of the pore space through which the CO<sub>2</sub> has migrated will contain trapped CO<sub>2</sub>.

I am not entirely sure that that is the same thing as saying that it will account for 20 per cent. In fact, it could be that it is up to 40 per cent. Again, we see this uncertainty based on the 2005 document as to how much gas can be trapped using the residual gas trapping mechanism. There is uncertainty about how much CO<sub>2</sub> that will enable to be trapped in the Dupuy formation. Reading on, there is a mineralogical trapping mechanism. Further —

... over tens of thousands of years, up to 10% of the injected CO<sub>2</sub> could be trapped by this mechanism in addition to that trapped by the mechanisms described above.

The mineralogical trapping mechanism will account for only a smaller amount of the overall CO<sub>2</sub> that will be held. Finally, there is the large-scale geometric trapping mechanism. To describe that, I quote the document —

The most easily envisaged trap type is a structure in which the shape of the barrier approximates that of an inverted saucer. Mapping from the ... seismic data set indicates that there are few conventional

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geometric traps at the Dupuy Formation level and those which can be mapped are small. This process is shown diagrammatically ...

In order to reduce the uncertainty associated with large-scale geometric trapping, there is hope that the other mechanisms will provide some sort of backup. There is a high degree of vagary about the presentation of this information. I think we accepted that in 2005, as a lot more proving up needed to be done, but, surprisingly, when I requested more detailed information this time around, I was provided with that 2005 information. Back in 2005 when we asked questions about geosequestration, people asked these questions and requested that more information be provided. It was always put back that we would get that information in time. I am concerned that we are looking at this issue of indemnity but have not been given the full picture and there is no ongoing assessment. My concern is that the people of Western Australia are signing off on accepting risk after 15 years, not of the operation of the gas field but from when the reinjection process ceases.

[Member's time extended.]

**Mr C.J. TALLENTIRE:** The bill is very clear on this. It states that the liability or indemnity situation changes once the process ceases. I will quote the proposed section because it is something that I think the Premier needs to address —

*CO<sub>2</sub> injection site closure notice* means a notice issued no earlier than 15 years after the CO<sub>2</sub> injection cessation date in accordance with clause 8 of the collateral deed;

We know from other parts of the approval process that the company has committed to doing geosequestration, but the words are hedged; there is the option that if it becomes too expensive, the company can abandon the idea of doing geosequestration. It is feasible that we could see the sequestration and reinjection plan go for a couple of years, but is then deemed to be too expensive. We are talking about a project that probably has a lifetime of 40 to 60 years. There is a high degree of variability about that. It depends on the construction of additional gas trains and the likelihood of other gas fields being fed through the Gorgon facility. However, the obligation on the company responsible for any undue consequences of reinjection will cease 15 years after it has finished the reinjection. I am concerned that that is not what people had originally understood. I think it would have been reasonable—it is fairly standard practice when talking about mine closure plans and what have you—for responsibility to cease at a point in time perhaps, but after an operation ends, not when an activity associated with the project ceases. Nevertheless, that is something the Barrow Island Amendment Bill 2015 contains and is something we will have to deal with as we look further at this legislation. Should we be further giving away the issue of how long the indemnity situation should stay with the proponent? Fifteen years in the minds of many is an exceptionally short time. We are, after all, talking about something that is relevant to geological time, so the time frames we would normally talk about are not, five, 10 or 20 years; they are thousands and thousands of years. We hope that this CO<sub>2</sub> will be sequestered for many hundreds of thousands of years. If, in a short time frame, some terrible leakage of the gas occurs, let us hope it is not in a site-specific catastrophic way and just leaks out in some sort of diffuse, fairly benign way and percolates through a few fault lines that might have been provoked by the pressurisation. The 100 million tonnes of gas being pushed into part of the aquifer could just trigger some movement in a fault line that could lead to some sort of seepage, which, hopefully, will be fairly benign and percolate into the water column and we will become aware of it because various pressure monitoring wells around the place will detect that the pressure is dropping. We would be aware and be able to perhaps pick up a higher CO<sub>2</sub> level in the area. If that happens, who will pay for the amount of CO<sub>2</sub> that is emitted into the atmosphere?

It seems that after 15 years past the cessation of the injection point, the people of Western Australia will pick up the liability. This clashes with an idea in a report of a committee chaired by Petro Georgiou, who I understand was a former adviser to Malcolm Fraser and a member of the federal Parliament. He chaired a federal parliamentary standing committee that looked at geothermal sequestration and that made the very firm recommendation that liability should rest initially with the proponent, of course, but when the proponent finishes the operational stage, the liability should be shared between the state, the commonwealth government and the proponent—the three should always retain some degree of responsibility. That seems reasonable, because if we are talking about the eventual leakage of something like 100 million tonnes of CO<sub>2</sub>, depending on what the carbon pricing system tells us at the time, in all probability there will be an international carbon pricing mechanism in decades to come; in fact, it might be less than a decade away. Of course, the debate on this issue has been thrown back but that is only a quirk of our present federal government's weird ideas on this issue. The global trend will still be towards some form of carbon pricing mechanism. Let us say it is around \$23 a tonne—the price established before—and we are looking at leakage of 100 million tonnes, so simple mathematics tells us the financial cost to the state of Western Australia would be about \$2.3 billion just because of the leakage of the CO<sub>2</sub>. Given that the company will have moved on and that we have signed an agreement that we will take on the responsibility, the people of Western Australia will be held liable for that amount. That is a worrying possibility. I ask that in his response, the Premier address how we got to the 15 years. What is so magical about

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15 years? Is there some scientific reasoning behind 15 years? Is there some justification for no additional information coming forward, bearing in mind that, since 2005, when the information provided to me in the last few days was prepared, to today, 2015, it does not seem that a substantial body of additional information has been made readily available? I am curious to know why the government thinks 15 years is a magical time frame for us.

I want to raise some of the other matters that we saw as concerns. I quote from some of the submissions made during the original assessment. One report in particular states —

“Sequestration into saline aquifers has the lowest storage efficiency of the geological sinks suitable for the disposal of CO<sub>2</sub>, with some estimates as low as 2% of the pore volume ... This is due to unstable displacement fronts or ‘fingering’ that occurs when the connate fluid is displaced by much lower viscosity CO<sub>2</sub> ... Also the effect of buoyancy results in the CO<sub>2</sub> filling only the uppermost part of the aquifer, away from the injection well.”

This information was presented by Sherlock and Dodds in “Geophysical monitoring of subsurface CO<sub>2</sub>” at the Australian Society of Exploration Geophysicists’ 16th Geophysical Conference and Exhibition in February 2003. In the context of information I have been provided, this is still reasonably contemporary information. Perhaps from the information presented to Sherlock and Dodds at that 16th Geophysical Conference and Exhibition their concerns have been allayed, but I was not given any additional information to suggest that they were.

I want to turn now to the 2005 draft environmental impact statement and the final environmental impact statement put forward by Chevron on behalf of the joint venture partners. I note that it states that the Dupuy reservoir appears to have adequate capacity to contain the approximately 125 million tonnes of CO<sub>2</sub> that will be potentially available for sequestration over the full life of the development. We see again that high degree of variability in the actual figures. With the budgeting of this project we have seen the most extraordinary amount of variability: when this project was talked about in 2004, it was referred to as a \$9 billion project and now it is getting up to a \$60 billion project. It is amazing how in the corporate sector there can be that degree of variability in project costs.

Finally, I want to comment on other companies in the state that must be looking at this project and thinking, “They’re spending a considerable amount of money on geosequestration.” According to the Environmental Protection Authority, the Wheatstone project will account for about 10 million tonnes of CO<sub>2</sub> emissions a year—a very high amount—and this government has let the Wheatstone proponent off entirely from any legislative environmental approval constraint on those emissions. There is no constraint whatsoever. Initially, the government said that it would be covered by federal government legislation, but then the Abbott government got rid of the carbon pricing emissions trading scheme that was in place and to which the Wheatstone project was to be party. Now we find that the Barnett government is refusing to regain responsibility for those emissions. That is 10 million tonnes a year from a gas project that is not being accounted for, and is under no form of greenhouse gas emission control mitigation strategy. It is just a total free kick that the company did not even ask for, to my knowledge. It was prepared to pay something towards a greenhouse gas mitigation strategy for that project, yet the Barnett government said, “No, we are not going to worry about it.” The question now is: What is the Barnett government going to do about all future projects in which the Environmental Protection Authority identifies that greenhouse gas emissions are a major environmental factor? Is it going to say that the direct action plan is going to tackle the emissions? Or is it going to say that as a state we will instigate some system, or is it just going to give these proponents a total free kick? Is it the case that now in Western Australia we are moving towards an era of no greenhouse gas control?

**MR P.C. TINLEY (Willagee)** [11.31 am]: It is good to rise to make a contribution to the second reading debate on the Barrow Island Amendment Bill 2015. I noted the desire of the government to declare it urgent and move it through this house, with the agreement of this side of the house, and see it out of this place by, I think, three o’clock this afternoon, and we will earnestly endeavour to do so. I note the contributions of several members from both sides of the chamber, notably, of course, the government’s partner, the National Party, about a few downstream issues, as we might call them, in relation to the development of the resources generally in the north west, but specifically in Wheatstone. I hope those comments also get their due attention from the Premier this afternoon.

Once again we are dealing with a piece of legislation in relation to the resource sector. We say time and again in this place—I am not a lone voice in this—that as a mature jurisdiction in the development of its natural resources and natural endowment for the benefit of the entire state we are probably the most legislated, regulated and governed by policy in the area of natural resources, principally around minerals, and, moving into more latter years, oil and gas. That is a very good thing. It is a very good thing that the sovereign chamber of the people of Western Australia has such a detailed oversight; in fact, many of the committees of the Parliament of Western Australia investigate and inquire into any range of matters that are either directly or indirectly related to

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the resource sector. I just make the point as a casual observation that the number of state agreements or like instrument in the jurisdiction of Western Australia is greater than any other jurisdiction in the commonwealth, I suspect, although I would take advice on that.

**Mr C.J. Barnett:** The commonwealth does not have any; Queensland has a few—about 15 or so.

**Mr P.C. TINLEY:** Yes. We would not have twice Queensland's, but we are significantly ahead of it.

**Mr C.J. Barnett:** We have about 70 or 80, I think.

**Mr P.C. TINLEY:** The debate about the value of state agreements and so on is a matter for another day.

So often is it that we deal with the resource sector in our professional and personal lives in the state of Western Australia that we have almost become numb to it. We almost let it sort of glide on through in the background, when in fact it is the central piece of our economy. No other sector is greater than the resource sector. The resource sector—these figures depend on which organisation defines them, whether it is the Chamber of Minerals and Energy or whatever—contributes in excess of \$100 billion to the gross state product. The next nearest sector, I think, is agriculture, which is in single-digit billions of dollars, and the education sector is after that, depending on how we want to slice and dice it. The services sector more generally employs 46 per cent of Western Australians. Sometimes statements of the obvious are important, particularly in this place. When we talk about something like the Gorgon project, we must understand the enormity of the scale of what is being undertaken. Although we should never shy away from critique, debate and investigation into the claims, veracities and objectives of the commercial sector extracting and leveraging the natural endowment of this state, we should also, similarly, when appropriate, give due regard and recognition to the enormous undertaking that happens in the resource sector.

In the minerals sector—iron ore particularly—we have seen an uptick in capital investment since 2004, in a massive, once-in-a-lifetime injection into that sector in terms of dollars that was not related to a price cycle. It was helped a lot by an iron ore price of up to \$160 a tonne at the time, but the residual effect of that capital investment has left us with a production output of, I think, nearly double what it was before the injection of dollars; there is certainly close to one billion tonnes of iron ore in store capacity in the north west. We are in a different space than we were in 2004. We are in a different space economically. The nature of our previous cycles, which have typically been driven by price cycles in relation to iron ore—our major commodity—are now more ellipse in their shape than peak and trough. I say that because the productive output, as the Premier is on record as saying, is a significant influence on the state of the economy and the capacity for other businesses to operate inside that sector.

The oil and gas sector has probably more recently come to the fore. Again, we gloss over it quickly with the idea that it will always be there, but we must be careful because, as we are seeing, the global constraint of capital is starting to really bite into these companies. I am not so sure Gorgon in its current form and in the current climate would be approved or get past the final investment decision. To find and extract a resource about 130 kilometres off the coast, transport it to a processing facility on a class A reserve nearly 70 kilometres off the coast, and then establish a domestic gas line as well in the process, is a significant undertaking. It has a \$US55 billion price tag at the moment, with a \$15 billion same cost increase. Those figures are not insignificant. In talking about the economics of this project, at the time of FID the joint venture partners were very conscious of the possibility of a price on carbon, and if members look at their publicly available documents relating to their statements to the stock exchange in relation to the FID, they looked at the quantity of CO<sub>2</sub> and the potential cost over the life of the project, should they offset the value of the CO<sub>2</sub> emissions, was not insignificant. That is important. The investigation of the Massachusetts Institute of Technology into carbon dioxide capture and storage notes that the gas contains about 14 per cent CO<sub>2</sub>. So, the nature of the gas in the greater Gorgon fields is about 14 per cent; we could compare that with Mumbai, but I did not have time to look up the facts. Wheatstone gas, I understand, has a significantly different profile, and I think it has as little as two or four per cent CO<sub>2</sub> associated with it, notwithstanding the member for Gosnells' comments about the total tonnage of venting. It is also worth noting —

**Mr C.J. Barnett:** I think the North West Shelf is about two or three per cent, and I am guessing Wheatstone is about four or five or a bit lower than that.

**Mr P.C. TINLEY:** Two per cent rings a bell.

**Mr C.J. Barnett:** Yes, it is similarly low. Two to three per cent, I think; you are right.

**Mr P.C. TINLEY:** So, the cost motivator is there, and, with the nose to the international wind in relation to dealing with carbon, the joint venture partners dealt with it in what we must recognise as a very innovative way. The technology was not necessarily innovative, but undertaking this additional arrangement to deal with the CO<sub>2</sub> gas must be recognised, given the undertaking Chevron is already dealing with to work on a class A reserve in

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which the quarantine matters themselves are onerous enough. As I said in my opening comments, that is not to suggest Chevron is not open to critique, criticism, investigation and/or any other action. Our interest in this bill is to make sure that the government, including the Labor Party when it inherits government in due course, will own the responsibility for Western Australians to have the correct onus on it. That does not mean that we should ignore it. The questions the member for Gosnells raised about this bill are instructive and necessary. A subsequent committee of the Parliament might undertake an investigation in the future. The validity of the claims by the proponents will then be tested in evidentiary ways by the regulators who are watching the arrangements put in place.

The project site is on a class A reserve. One does not always understand the nature of impacts on commercial operations. While studying, my son had a casual job on the wharves at Fremantle and Kwinana running cling wrap around any bit of kit that was ever going to go onto the island. Barrow Island has been a class A reserve for a very long time—since 1910. The quarantine regulations put on Chevron are quite new in many ways. Let us not forget that we have had oil production on that island since 1948, I think, with West Australian Petroleum Pty Ltd. I can imagine that any and all amounts of equipment came and went from that island without the least bit of attention. We are now better informed and more conscious and aware of the need to protect the island.

**Mr C.J. Barnett:** The presence of Chevron and the industry on the island means Barrow Island is protected better than other islands on the north west coast. People often argue that industry is anti-environment. This is a case in which industry has actually proven to be pro-environment compared with, say, the Montebello Islands and so on. It has cats and rats and everything.

**Mr P.C. TINLEY:** That is a fair point. We should also recognise that Chevron conducts its own monitoring, whether through the employment of wildlife officers to capture non-native species of animals or de-weeding various parts of the island. I make it clear that I am not here as a cheerleader for Chevron, but it is really important that both sides of the chamber put on record the significant undertaking and the risk capital that has been injected into our fair state.

The numbers speak for themselves. Four species of marine turtle nest on Barrow Island, including the flatback turtle and the green turtle. The island has 24 species and subspecies not found anywhere else in Australia. That in itself is worthy of note. There are also 378 species of native plants, many of which are significantly endangered. The quarantine process involves 300 different procedures that have to be undertaken to achieve the required quarantine ticks, and at times Chevron has failed.

There is some debate whether this is the world's biggest or the second-biggest CO<sub>2</sub> injection process. It is truly a moot point because it is the only LNG train that I can find that does CO<sub>2</sub> injection. That is to say that every other gas producer in the world is simply venting CO<sub>2</sub> into the atmosphere. We must accept that at least in this attempt, whilst there are commercial reasons for injecting the CO<sub>2</sub> and Chevron understands that the cost of carbon is coming either now or into the future, this is a good, safe bet, I would have thought, to provide some insurance for it. The issue is what we do not know. We do not know the nature of the aquifer that is being processed. I am also thankful for the additional information we received from the Department of State Development about the term "aquifer". It is probably worth recording that often we talk about an "aquifer" as a place from which we get drinking water. In this case, the formation fluid in the reservoir is salty water rather than fresh water. The sand grains in the rock are composed predominantly of quartz. The way quartz and various materials act and react are really important. We are never really going to know the impacts of this sort of activity potentially until long after they are undertaken.

We have talked about the scale of the project and it has been noted that with the advent of this project and Wheatstone, Western Australia probably will be the largest LNG producer in the world, although it may be Qatar. We will have to wait for the final figures to come out; they are a bit loose. A trusted third party will determine whether Western Australia will be the world's largest LNG producer. However, one thing is for sure: we are a significant contributor to the energy market and the energy mix of the world. We cannot get away from that. The reason I say that is it is important that this chamber, above all other institutions in Western Australian society, understands that Western Australia is a global business. The small business called Western Australia, with 2.57 million people, sits isolated in a prehensile insertion of the Indian Ocean and is just a small business in global terms. That does not mean that we are just a corner store for China to pick up a bit of iron ore on the way home. We need to understand our place in the world, own that place in the world temporally, rise above it in terms of our partisan views on different things and understand as a global player in the world economy that we are obligated to provide leadership in the way we extract and leverage our natural endowment for the benefit of all Western Australians. I would hazard a guess that in certain fields of study, if we do the right thing ethically and morally as a developed jurisdiction, we should be sharing that knowledge with the rest of the world. We should be sharing it by action, not necessarily by invocation, media release or simple statements of how

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good we are. The actions we undertake, such as imposing strict environmental controls on proponents who want to leverage the one-time-use resource of this state, is absolutely essential to send a message to the rest of the world on how it can be done.

[Member's time extended.]

**Mr P.C. TINLEY:** Because this bill will amend the Barrow Island Act, we must look at the total economic and social benefit that a project of this scale will benefit not only the people of Western Australia who are currently enjoying the benefits of our state, but also those who are either yet to be born or are yet to arrive in this state. Their opportunity is yet to come. It is incumbent on us to understand what we need to do as a global participant to participate in a meaningful way to deliver a tangible outcome to my kids and their kids.

When I talk about “walking” in global terms, we get an entree by virtue of the fact that we are a global contributor to the energy mix, certainly to the commodities mix—minerals and steel—that is enabling activity for the economic miracle that we hope in the end China will become as it moves towards 52 per cent urbanisation of its population. That is no small undertaking. Many historians will look back at that and marvel at the undertaking of the Chinese economy and its downstream impact. There is more to the global story, particularly in our region, than China. The United States has picked up on it with what I might call its “stutter step” towards a pivot strategy in relation to its global reorientation, recognising Asia, and South-East Asia in particular, as a significant advent on the horizon. It is certainly driven by China, but the other aspects around it are the emerging economies of South-East Asia, and none more so than our nearest neighbour, Indonesia. I believe that we have an obligation to Indonesia, as Australia's closest neighbour, to ensure that we understand intimately as best we can the relationship between Indonesia and the globe and what we might do to facilitate the development of Indonesia into a strong, democratically led economy. Our contribution is not small; it is quite large. We have the opportunity to engage with Indonesia in every sector of government and economic activity to ensure that we are the first country that it might go for assistance, knowledge, expertise, services and support, and right now we are losing the race. Evidence that we are losing the race can be seen in the government's simple decision to close the trade office in Jakarta. That decision was reversed, which was recognised. After whatever internal conversations were had, the government recognised the importance of being in there in some form, even if it is suboptimal. Two people sitting in the Jakarta office trying to represent the interests of the entire economy of Western Australia is suboptimal and would be the first port of call should we want to talk about meaningful outcomes when building a relationship with South-East Asia, particularly our nearest neighbour, Indonesia.

I might be accused of straying from the bill but we cannot divorce ourselves from the fact that this bill and, more importantly, the operation that it represents—a \$US55 billion investment in our state—has to be leveraged for a longer term purpose than the end of the life of the resource. It is about the longer term purpose of who we are as a member of the wider Asian geography. I want to be careful about the words that I choose because I note the general view of the population of the big Australia and our place in Asia. We are not an Asian country—I completely understand that—but it does not divorce us from our responsibility of intimately understanding Asian culture and Asian economics long before we need to understand any other European economy or culture from which we might extract the majority of our heritage.

In the time remaining, I want to drive back to the point of bill. The members for Gosnells and Cannington raised some interesting points. It would be really good if the Premier, either in his response or during consideration in detail, could provide answers to some of these issues. What is the reason for the 15-year time horizon and why is that important? The bill says it is 15 years from injection cessation date. It is really important for me to understand—I may have missed it while reading the bills, which would not be hard as reading bills is always an interesting exercise and a unique way of trying to interpret legislation—the parameters by which the proponent or the operator can cease injecting. What are the preconditions that determine who gets to say that injection will cease because the 15-year clock starts from the time of cessation? I note that this project has a current horizon of somewhere between 20 and 30 years. What would happen if five years down the track we find that the technology does not work, has limited value, is uneconomic, probably more importantly, or not commercial? That is a term I have learnt from being on the Economics and Industry Standing Committee. The difference between “profitable” and “not commercial” are quite nuanced for a lot of people but not for the companies, that is for sure. At what point and what are the preconditions that would set a cessation arrangement for CO<sub>2</sub> injections?

I am also interested to know the limits of the liability and the triggers for the liability. Yes, we have accepted the limitations of the liability. Are consequential damages achievable as a result and what are the expected proofs for the consequential damages that may occur from a leak? It is hard to predict, and it may be asking for an opinion, but what will be the accepted science if a leak occurs as a result of technology failure or natural formations? Who will have the determining judicial jurisdiction for the application of fault and what will be the process for that? I accept it may be difficult to answer but it is important in this place that we put on the record the doubts,

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concerns and critique that we have in relation to something. Quite often what we are doing in this place is predictive; we are trying to determine the unintended consequences of legislation, to which we see corrections and amendments from time to time. It is really important that we put on the record the limits of the intentions of these pieces of legislation so in some future iteration, if the worst case did come to pass, we know what process people could rely on that is appropriate. It is important for the Premier, the lead minister on this bill, to address that if he can.

The other question that rolls from that is which, if any, third party could have access to that liability? I am talking about the global situation as well. We are about to sign the Trans-Pacific Partnership Agreement, which is fraught with all sorts of interesting, secret components of what we are working hard to try to unpick and unpack. Implicit in that, from my limited reading of it, is the capacity for international third parties to take international governments to court and undertake litigation for recovery of consequential damages to their own business. We now have multicultural global companies potentially cutting across the jurisdiction of other sovereign entities to achieve a commercial outcome. If we go into consideration in detail, I would be very interested to know which third party groups might be recognised at law in undertaking this liability under this legislation. For example, if an international conservation organisation comes to Western Australia and there is no demonstrated commercial loss for farmers or anything else but it decides to undertake some testing or extrapolate the publicly available data, which I hope it would be, and then undertakes to recover that under the liability listed in this legislation, what are the limits of that? A few more questions may present as we go through the bill in more detail. I look forward to hearing from the Premier.

It is important that we record on the permanent record of this chamber the fact that we wholeheartedly support and recognise the risk capital and endeavour of the commercial entity—the joint venture partners of Gorgon, and Chevron in particular as the lead in that joint venture. It is a significant undertaking for a company that has never before built a facility. I also note recently that Chevron, like Woodside, has a salaries freeze in place. It also announced a hiring freeze just this week and there will be further rounds of redundancies in those companies. They are undergoing a significant readjustment, as is the whole sector and the whole economy, to the new global reality of the price that they are now projecting to get for gas and other commodities. More significantly for Chevron, it has to undertake this round of constraints, if you like, as it goes from project to operations. It has delayed its start to next year. It was meant to have test gas through the first train a few weeks ago. That was delayed. The cyclone caused problems. These sorts of things are always in its way. I wish it well as it transitions to a new constrained commercial environment while it brings this very worthwhile project to book.

**MR V.A. CATANIA (North West Central — Parliamentary Secretary)** [12 noon]: Barrow Island and Wheatstone, two of the biggest projects when it comes to oil and gas in Western Australia, if not Australia, are in my electorate. When I read the Barrow Island Amendment Bill 2015, I think about my constituents asking me why we bother putting CO<sub>2</sub> back into the ground when we cannot even build a regional community. Chevron and the Premier made the decision to allow the workers' village to be built on the site in the Ashburton North Strategic Industrial Area in Onslow, rather than house the workforce in Onslow town centre, which was part of the agreement reached between Chevron and the community some years back. These two issues are related, because I have concerns, as the member for Willagee was right to highlight, that Chevron down the path might come back to the government to say that it does not think this process will work or that it is not commercially viable. Chevron has a history of saying that processes are not commercially viable.

To give members some idea of the Onslow situation, an agreement was in place between the community of Onslow, the Shire of Ashburton and Chevron to build a workers' village in the centre of town. To build a workers' village in the centre of town enabled LandCorp and the community to underpin a housing development, which meant that workers could have some sort of normal life on the Wheatstone project while interacting with the community. That was important. That has been the philosophy of the Liberal-National government, particularly the National Party, when it comes to regional development. Gone are the days in which the mining industry needed a get up and go, and camps were allowed to occur outside towns. In this day and age when the government has invested so much in regional communities such as Karratha and Port Hedland, and other surrounding towns like Tom Price and Paraburdoo, to go back to the old ways of allowing a company like Chevron to put a workers' village on site 25 to 30 kilometres away from town is utterly ludicrous in so many ways. For a worker on the project to have some sort of normal life, integration with the community is needed. Also, having a workers' village in town underpinning a housing development allows that town to prosper, to grow, and to have the amenities that people in the city take for granted.

That decision by the Premier and Chevron to move away from that agreement sets Onslow back in time to where Karratha was 15 years ago. It creates all sorts of question marks over the investment needed in Onslow through private developers and so forth, because there is no confidence about what Chevron says and what it actually does. The rhetoric that we often hear is that \$220 million is being invested into Onslow with a great community

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outcome from the negotiations between the state and Chevron. I just want to get on the record what that \$220 million means. There is a community benefit. There is a new airport that hopefully—but not yet—the community can use. Jets are seen flying workers into Onslow and back out, but the community is yet to be able to use that service that Chevron currently utilises to get their workers from Perth to Onslow. It is a brand-new airport worth over \$40 million, yet the community cannot use the jet service because it is for Chevron employees. I understand that Chevron is making moves, hopefully in July, to change that to allow a limited number of seats for residents to utilise that service. A road going from North West Coastal Highway into Onslow has been widened because of the road train traffic going into Onslow to build the Wheatstone plant. It is a great benefit to locals because it has improved safety of the road. It has some passing lanes now so that locals can overtake the road trains going in or out of Onslow. There is obviously a benefit there.

Then we come to water and power. The Wheatstone project agreement was to redo the power and water in the town centre. The situation was that if development was to occur in the Onslow town centre, facilities had to be upgraded. Those facilities are pretty much redundant now because there is no development of a workers' village in town now and workers are 25 to 30 kilometres away on site on which the water and power is needed. They already have that service. Investment into water and power has occurred there and the water is about to be turned on in town—but with no customers. If Chevron had put its workers' village in Onslow town centre, as per the agreement between the community and Chevron, a whole heap of development would have occurred around that workers' village. There was a huge amount of private investment ready to build houses for contractors for people providing services, because there was going to be a workforce in town. That meant that a café could be opened. It underpinned the pharmacy that is struggling there, a shopping centre, the restaurants and so forth, because workers would be able to walk or drive to amenities that, as I say, Perth people take for granted. The ability to get a coffee, to go to a bar, a shop, a restaurant or the pharmacy has now been taken away. Confidence has been taken away from private investment to provide those amenities for people wanting to make Onslow their home.

The consequence of Chevron and the Premier making that decision has been a downturn in Onslow, which means that private investment will struggle because it does not have a support base of the workers' village that Chevron committed to the community. I would like to hear from the Premier exactly how he came to this decision.

I know that Chevron Australia has used the issue of safety to justify placing a workers' village 25 kilometres away from the town centre. That decision will undermine housing development in Onslow. I have been a member of Parliament since 2005 and in my time covering the Pilbara region, not once has the issue of health and safety been brought to me by any of Chevron's representatives or any government department as a reason for Chevron to back out of the agreement it made with the community—not once! Did Chevron provide the Premier with a list of its reasons for not having a workers' village in town that would have underpinned local investment and regional development in the local community, or was it basically a commercial decision because it would cost too much? Did Chevron decide it was cheaper to increase the population of the workers' camp already on site from 5 000 to 7 000 people? Chevron could wrap chicken wire around its site and control its employees and not allow them to go into the community to start up a football team or be part of whatever the community could offer. Chevron could have been part of the community. Currently, when Chevron brings entertainment to town for its workers, it is based at the camp 25 kilometres away. Chevron provides that service for its workers, but it is not available to the people in town who want to be part of the Chevron experience. Wheatstone is not going to be around for only a week; it will be around for 50 years, so it is important to have a partnership between Chevron and the community. In that way, the community can benefit from having a company such as Chevron in town. At the moment, some people benefit because they have contracts and so forth with Chevron, but ultimately we need to attract private investment in that region. How do we do that in a regional town? We do it by allowing a company such as Chevron to walk the streets and be part of the community. That will generate private investment in the town. The community will benefit from an investment of \$220 million, but ultimately that benefit exists because Chevron needs to provide infrastructure to allow it to conduct its business.

My concern is that this bill sounds great, but my constituents ask why the Premier would spend hundreds of millions of dollars—he can correct me if I am wrong—putting CO<sub>2</sub> back into the ground when Chevron cannot even build the community. We cannot have confidence in a company that has shaken hands with the community and said what it would do for that community because it believes in regional development and growing that town, but has reneged on its decision. My question for the Premier is: how do we make sure that Chevron cannot back out of this? Down the track, when we have all moved on from this place, Chevron could come back and say this project is not commercially viable or there is a possibility it might not work. Chevron could use this as a good way of getting out of spending hundreds of millions of dollars. As we know, projects blowout and costs become a problem for companies. I think that the real basis for Chevron's decision is finances rather than doing the right thing for the community and their workers.

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Members opposite have in the past brought up issues about fly in, fly out work and the problems that families face from that lifestyle. This is a perfect opportunity to get away from the FIFO lifestyle. Chevron could house its workforce in the town. I will correct the member for Cannington: I have been totally opposed to the decision to move the workers' village from the centre of town to 25 kilometres away in the Ashburton North Strategic Industrial Area. I have made my total opposition to that known to the Premier and to the public. I am disappointed in the opposition when its members stand and talk about the effects of FIFO lifestyle on families that are evident in the number of suicides that occur and the breakdown of family networks, but they have said nothing on that issue in this debate. It did not say, "Hey, we're going away from the practices of the past where we built these villages 20 or 30 kilometres away from the town." We are trying to rebuild regional towns and, as I said, Karratha and Port Hedland are classic examples of how investment can occur and deliver an outcome so that people are able to purchase their own homes and be part of a community, joining a football or netball club, and for kids to play T-ball. That is what comes out of investing in and developing a regional town. I am very disappointed that the Labor opposition has not brought up this issue. I have not heard members opposite say anything about the effect on FIFO workers from Chevron putting its workers' village 25 kilometres outside of town. Not one opposition member raised that issue. I suspect they support Chevron's move and what that has done to the community.

All I can say to members opposite and the Premier is: let us correct what has happened in Onslow. Let us not make it a trend or go back to the situation of 40 or 50 years ago in which governments ticked and flicked and did whatever the mining company wanted to do based on the company's costs. Here is a great opportunity for the Premier to get up and tell us about Chevron's real reason for breaking its commitment to the community and building its workers' village 25 kilometres out of town, which is severely impacting on the potential for growth that so many people geared up for in Onslow. More importantly, here is an opportunity to build a regional community with all the amenities that a lot of members in this place take for granted. People in Onslow and the north west would love to be able to go to a pharmacy and get services that often they do not have.

I have reservations that this project will actually be delivered. I would like to find out why the Premier has signed off on allowing Chevron to extend its workers' camp, which is 25 kilometres out of town, and why it was not forced to build that accommodation in town.

**MR C.J. BARNETT (Cottesloe — Minister for State Development)** [12.19 pm] — in reply: I thank members for their contributions to the debate and, indeed, for their support of the Barrow Island Amendment Bill 2015, which deals with one of the unique features of the Gorgon project on Barrow Island. As members are aware, this is the largest resource development project in Australian history, worth some \$US55 billion. It is also the largest project that Chevron has undertaken either inside or outside the United States of America. There is nothing particularly unique about the offshore facilities, the subsea facilities, which are well developed and used around the world, but having it on an A-class reserve, which is an issue that goes back to the 1990s, reflects Chevron's high standards in the management of Barrow Island since the 1960s when it was an oil producer there. I think that decision is a good one. The 2003 agreement act reflects that and the project is now nearing completion. The first gas should arrive on the island midyear and the first liquefied natural gas should be exported towards the end of the year. The project represents extraordinary engineering and environmental achievements and will underpin a lot of economic activity. It is expected to have a 50-year life on current reserves, but it could well be much longer than that. Along with the Wheatstone project, it has provided an enormous economic impact and it will provide an enormous future for both the Exmouth and Onslow regions, that southern Pilbara region.

There has been a lot of commentary about geosequestration. I and other members have all learnt a bit. I think we had a very knowledgeable debate on this issue, which reflects a fairly widespread knowledge of resource projects that is fairly unique to any Parliament, but Western Australian members of Parliament have that knowledge.

A couple of issues that were raised include geology and the basalt layers that make the structures below Barrow Island suitable for geosequestration. As I said during the debate, I raised that possibility in the 1990s when I dealt with the Gorgon joint venture. With 14 per cent carbon dioxide, it was clear that the project was not going to go ahead unless something was done. When I suggested Barrow Island, I did so somewhat flippantly; I did not have any sense of the geological structure underneath the island. But to Chevron's credit, it went away and worked on it and ultimately came back with a proposal at the time of a Labor government, a proposal that I supported at the time. This bill deals with the more than 100 million tonnes of carbon dioxide that will be injected below Barrow Island. I think its geological structures mean that the CO<sub>2</sub> will not get out and, if it does, it will be a very long slow seepage of probably fairly small proportions. The arrangement provides that Gorgon is responsible for any liability arising from the CO<sub>2</sub> injection process during the life of the project, however long that might be, and for a minimum of 15 years after the project. The 15 years is a minimum period for site closure, which will be determined by the Department of Mines and Petroleum. It will have to be satisfied that there is no leakage, that the site has worked well and that there is no significant danger of emissions of CO<sub>2</sub>

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into the future. If that is not established, then the 15-year period will extend until that point is reached. I think that that will be established 65 years into the future. It is not strictly a 15-year period, because if there is leakage or risks of leakage, the liability will remain with Chevron until that issue is resolved. Thereafter, the state takes liability, but the commonwealth has agreed to indemnify the state for 80 per cent, leaving the state with 20 per cent of the liability. That was the final piece of the jigsaw, which was negotiated in 2010-11 and has resulted in the project ultimately proceeding.

I have talked about the scale of the project and the necessity of that scale. Construction has gone well. The project is 95 per cent complete and Wheatstone is about 60 per cent complete. The liability issue will probably come up. Interestingly, it begs a question given the debate that we have been having over the past year or so about floating liquefied natural gas. I am not sure that geosequestration would be possible from a floating liquefied natural gas project. If there was another high CO<sub>2</sub> reservoir of gas, that project would have to come onshore and we would probably look for access to a similar geological reservoir that could be reinjected.

There was some discussion about the coal industry, but I do not think that that is particularly pertinent. There was quite a bit of discussion by the members for Pilbara and North West Central, not so much about this project but its sister project in Wheatstone, just to the south of Onslow. I am a bit disappointed about some of their comments. I make this observation: I have been around resource projects for a long, long time, probably longer than anyone in the history of the state except for Charles Court. These projects are long life; they are not simply about the initial construction and, with rare exceptions, companies have shown a commitment to their communities and workforce over the life of a project. The benefits that will go to Onslow just from this construction phase are immense. No other community in Western Australian history has received as much out of a project in its construction phase than has Onslow—no other. I have a bit of a history with Onslow. The first time I went to Onslow was in the mid-1990s for the salt project. It did not have a lot going for it when I first went there. It was a struggling fishing town with a bit of tourism, particularly the grey nomads. It was not an impressive place at all and was really run down because there had been no investment in it; indeed, nothing much was happening. The Onslow salt project, which was a relatively straightforward project that has proved to be successful, had two problems. The first was a one-in-100-year cyclone, which wiped out the banks and levees that had been built, which was followed by a second one-in-100-year cyclone a year or so later. It took a lot of effort and goodwill to convince the Dutch owners to build the levees stronger and higher and to continue with the project. They and I as the minister stuck with Onslow, which gave Onslow the salt project and was the start of its economic revival. It continues to produce and will probably expand into the future. Not every project is a walk in the park. Every project has its challenges similar to the Wheatstone project. I remind the house about what is being funded principally by Chevron, but also the state government, in the types of facilities going into Onslow. They include a ring-road, the airport, land development, wastewater services, a power station, a desalination plant, a swimming pool, a shire administration centre, employees' housing, conservation tourism projects, road upgrades, town centre improvements and the most recent decision, a \$40 million hospital jointly funded by Chevron and the state. No other community has received all that. The closest would be Karratha, which was built from nothing at the start of iron ore operations, and then the North West Shelf.

Members may take some objection about the decision to have a fly in, fly out camp at the site. Chevron approached me about that and, similar to any other resource project I have dealt with, I dealt with it in a pragmatic way because it was not part of the agreement act. I agree with Chevron in that it is not safe practice to have workers travelling in buses probably 40 minutes a day to and from the site of work when they are working 12-hour shifts doing in many cases quite physically demanding and stressful work. Workers who are there on a roster arrangement do not want to spend the best part of an hour on a bus travelling to work to have breakfast and all the rest of it before having to travel again by bus after each shift. Workers do not want that. I do not want that because it is dangerous and unnecessary. If these projects are to succeed, they need reliability and consistency of the workforce; we do not want a high turnover of workers. A one-hour trip or even a 45-minute trip at the beginning and end of every working day will add to that turnover. The safety issue was enough to convince me. I took that decision as the Minister for State Development in terms of the agreement act, and it is the right decision.

With respect to Onslow, the shire could have done a better job in handling itself in a lot of areas. The shire was put under administration or suspended, not only on this particular project, for a period. The Minister for Local Government and I had to deal with and manage conflicts through that process. It was unimpressive, yet we have managed to get all those community projects completed. There will be more in the future. The future of Onslow will include the growing of small businesses, medium-sized businesses, services, catering and whatever else around that project and around what will be stronger activities around the town. That is Onslow's opportunity, and it is a huge opportunity. The fly in, fly out camp will be relatively small and it will be located on site rather than in Onslow, and I take responsibility for making that decision. The people in those camps will

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not go out shopping; they are there to work. They had a 12-hour day, and now they will have a 14-hour day, the best part of which will be to get on the bus and to work. They will not go shopping in the community or play in the footy team. That is not going to happen; those days have gone. However, Chevron has committed to build a significant number of houses in the town, with the prospect of more to come in the future. Onslow will grow. What I would say to Onslow is: Get over it. You have had the best infrastructure put into any town for a new project like this. The benefits, particularly the state government contribution to the new hospital, will be fantastic. You now have a power and water supply that allows for town growth. You have had fantastic community facilities put into your community. Forget the issue of where the fly in, fly out camp is located, and work with me as the Minister for State Development to ensure that we get the real benefits into the community.

**Ms M.M. Quirk:** You are so open to new ideas and alternative suggestions.

**Mr C.J. BARNETT:** I do not know what that means. That is not related to this bill.

I made the point about the 15-year extra period. I think they are probably the major issues. I am sure a couple of other issues will come up. The Gorgon project is an extraordinary piece of engineering and development. I know a number of members have seen the site. If members get the opportunity—I know that Chevron is amenable to this—they should go up to Barrow Island. I am sure Chevron will give members a ride up there so they can look at this project under construction on Barrow Island. Last time I was up there, I said that I can imagine this is like watching the pyramids being built. There were 6 000 workers on site in all sorts of areas, including construction, environmental protection and scientific and information and communications technology work. It is an extraordinary exercise. This project will be around for at least 50 years, possibly much longer, because it allows other gas to be brought into the project. I think it is a great achievement and I think the geosequestration project solves the last piece of the puzzle for this project. There will be very strict monitoring of the geosequestration project to ensure that CO<sub>2</sub> does not escape. The Department of Mines and Petroleum will monitor this project throughout the life of the project. I thank members for their support of the bill.

Question put and passed.

Bill read a second time.

Leave denied to proceed forthwith to third reading.

*Consideration in Detail*

**Clauses 1 to 3 put and passed.**

**Clause 4: Part 5A inserted —**

**Mr W.J. JOHNSTON:** Proposed section 14B inserts provisions under the heading “Notice that Commonwealth representative is satisfied of certain matters”. Are we seeking to bind the commonwealth? I have read the indemnity agreement that we have entered into with the commonwealth, and I will not worry about trying to get on the record how that operates, but page 2 of the agreement states that the governments have agreed that at the date of this agreement, the formation would appear to be suitable for the permanent storage of CO<sub>2</sub> et cetera. Later the document states that it has to be done by 30 June. We cannot require the commonwealth minister to do something, so I am wondering how this provision works. Will the commonwealth have mirror legislation or is it only the agreement that it has signed that holds it to account? If it is only the agreement, what will prevent the commonwealth government from walking away from the agreement?

**Mr C.J. BARNETT:** I am advised that this represents the conditions that the commonwealth would want to be satisfied to reach this agreement with the commonwealth. I think those conditions are detailed on page 6 of the bill. For example, subclause (b), at the bottom of that page, refers to the commonwealth wanting to be satisfied, logically, that the CO<sub>2</sub> will not have a significant impact on geotechnology—the geological conditions below. The memorandum of understanding for the bill states —

- (a) the injected ... CO<sub>2</sub> is behaving as predicted in the modelling ... provided by the Joint Venturers ...
- (b) there is no significant risk that the CO<sub>2</sub> in the formation will have a significant adverse impact on the geotechnical integrity of the formation;

There are two more reasons —

- (c) there is no significant risk that the CO<sub>2</sub> in the formation will have a significant adverse impact on the environment or other geological resources, including groundwater;
- (d) there is no significant risk that the CO<sub>2</sub> in the formation will have a significant adverse impact on human health or safety;

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If these reservoirs, sand formations or whatever they are, were anywhere else, there might be a risk to a third party, but, obviously, because it is an A-class reserve there will not be any people living there in private residences or any factories or anything else. If there were some CO<sub>2</sub> emissions, we would not expect to see a violent event that would damage other people's property—that simply cannot happen. If emissions ever get out, I think we all understand —

**Mr C.J. Tallentire:** There is an oilfield there.

**Mr C.J. BARNETT:** Yes, I suppose there is. The oilfield is Chevron's for a start. If it caused an earthquake, I guess, arguably it could split a pipeline somewhere. But, again, I do think that is likely. If any CO<sub>2</sub> escapes, it is likely to slowly bubble to the surface. But, yes, in theory, it is possible.

**Mr W.J. JOHNSTON:** I agree with the Premier. In fact, in the second reading debate I made the point that it is lucky that it is not like the south west project. But that is not an answer to the question I asked. It appears that this legislation tries to bind the commonwealth. Proposed section 14B(2) states —

The matters in respect of which the Commonwealth representative must be satisfied are as follows —

It then lists a series of conditions. I understand that those conditions are reflected in the agreement that the Premier and the Prime Minister signed. The question is: How can we put conditions in our legislation about a decision of a commonwealth minister or the commonwealth? Is there an expectation that the agreement signed with the Prime Minister is the commonwealth's side of the obligation? If it is only that and the commonwealth Parliament will not have back-to-back legislation, is there any guarantee that the commonwealth will not walk away from this agreement? How do we know that in 87 years' time if a liability came to foot that the commonwealth will actually stump up the money?

**Mr C.J. BARNETT:** The advice I have is that it is not an attempt to bind the commonwealth; it is more to satisfy the commonwealth that its indemnity for 80 per cent of the liability requires that these conditions are met. The state will probably also have an exit at that point, and the liability could well return to Chevron during that, say, 50 plus 15 years. That is a possibility, but I think if there is a serious situation—I do not see how one could arise—we would find 200 years in the future that the federal and state governments will have to deal with it. Presumably new technologies will be available to deal with it. The commonwealth is saying that it will indemnify for 80 per cent, so long as we meet these conditions, and the state is saying to Chevron that it has to meet those conditions. I think we agree that the risk of something happening is remote.

**Mr M.J. COWPER:** I am interested to know who has tested the proponents' understanding of the formation under Barrow Island. The Premier mentioned that there is a certain formation of a prescribed size. Who has independently tested the information on which we have based this project?

**Mr C.J. BARNETT:** That is obviously a technical geological issue. It comes under the governance of the Department of Mines and Petroleum. I am advised that five due diligence exercises have been undertaken. The initial one was done in 2003—there has been testing, retesting and examination of the data. The government and the Department of Mines and Petroleum are satisfied that that is correct and has been agreed. When the 50 years of the project, plus the 15 years, come to an end, the Minister for Mines and Petroleum, I guess through the agreement act, will not issue a site closure notice until satisfied there is no problem with the geosequestration. If there are problems or evidence emerges that gas is escaping, it will be unlikely Chevron will get closure, so its responsibility will continue until any leakage is corrected. I think the safeguards are there.

**Mr M.J. COWPER:** I take it that for the life of this project, with the extraction of CO<sub>2</sub>, and I understand 12 per cent, there is capacity within that aquifer for the life of the project. Will we find ourselves adding other fields to the site? I guess I am asking: is the tank big enough to store the required CO<sub>2</sub>?

**Mr C.J. BARNETT:** I have just been told it is well and truly big enough. I imagine that other geological structures will be in the general area, if they are subsea structures. The initial due diligence review completed in June 2003 agrees that multiple intra-formational layers and baffles in the Dupuy formation and multiple overlaying seals—that is the basalt—mean it can be approved. Although the company has selected the most suitable structures, other structures are there. I think the answer is that if, for example, the Gorgon gas is depleted and other gas is brought into that area, extraction could be continued. Certainly, there is capacity for 125 million tonnes of CO<sub>2</sub>, which will certainly see through the expected life of this project. If another major gas field is brought in, it might be necessary to see what else we can inject. Most of the gas is not as CO<sub>2</sub> intensive as is this gas.

**Mr M.J. Cowper:** You mentioned that this may not be possible on a floating plant.

**Mr C.J. BARNETT:** I think it would be a lot more difficult. Presumably, theoretically, it could be done. A stream of CO<sub>2</sub> could be extracted and put down a pipe into a reservoir, but I think it would be a lot more difficult. Without being too negative about it, the fact that a couple of weeks ago a drilling rig in Cyclone Olwyn

Mr Chris Tallentire; Mr Peter Tinley; Mr Vincent Catania; Mr Colin Barnett; Mr Bill Johnston; Mr Murray Cowper

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dragged its anchors, broke free and drifted a few kilometres shows there are issues. That was just a drilling rig. I think a 400-metre-long LNG vessel without its own propulsion will be at risk in cyclones. Olwyn was only a level 2 cyclone. A level 5 cyclone, such as the one that went across on the North West Shelf a few years ago, would be a risk. There remains a doubt in my mind about floating LNG. All the experts will say it will be fine, but a level 5 cyclone went across Varanus Island, probably 12 years or so ago—possibly Cyclone Olivia—and I was told no-one could find any accommodation on the island—it had been stripped clean. Even the measuring equipment for wind speed broke, so no-one knows how strong the wind got. I would not want to be sitting on a floating LNG—no-one would be—but that is a risk factor.

**Mr W.J. JOHNSTON:** I move onto proposed section 14D, “State to indemnify”. In the third line it says “after the liability assumption date”. I understand—I would like my understanding either confirmed or corrected—that the proponent operates the project and does the injections of CO<sub>2</sub>. It then tells the government it has finished the re-injection. The state government then does whatever it wants to verify that the project has been completed and that the CO<sub>2</sub> is capped and all stored away. The company then has liability for 15 years. At the end of the 15 years, the commonwealth and the state negotiate the matters we have discussed under proposed section 14B. It is only when the commonwealth confirms that it is happy that everything under 14B is right that the state government accepts the liability from the joint venture partners. It might be 15 years plus potentially three or four years. It is not 15 years; it is 15 years plus all the time it takes?

**Mr C.J. Barnett:** Yes; 15 years is the minimum.

**Mr W.J. JOHNSTON:** Yes—plus all the time it takes for the commonwealth to be satisfied.

My next question on this clause relates to proposed section 14F(1), which states —

... Minister may, at any time, disclose to the commonwealth representative information or any document that —

Proposed subsection (2) provides that however the minister gets the information, he is able to pass it on. Therefore, no information is ever given by the joint venture partner to the state minister that the state minister cannot give to the commonwealth minister.

**Mr C.J. Barnett:** That is correct, yes. They might get information from third parties, too.

**Mr W.J. JOHNSTON:** Yes, indeed, and regulatory authorities et cetera. I am particularly interested in the idea that the company might be able to give a document to the state on the basis it is not given to the commonwealth. It is everything the minister has available to him. Finally, if it has been given to the state on a confidential basis by the proponent, is that confidentiality also an obligation on the commonwealth?

**Mr C.J. BARNETT:** I guess it will take agreement from both the state and the commonwealth that that document will be confidential. If they agree, it will be on the same basis, yes—so the information is available on an equal basis to the state and the commonwealth.

**Mr P.C. TINLEY:** It might be in the act. Is there a need—if not, why not—and does it state the jurisdiction in which any liability matter would be heard? If someone brings a case of liability against the state after the commonwealth takes liability, which jurisdiction would hear it? If an international body brings the case, would it naturally have to go to the Federal Court?

**Mr C.J. BARNETT:** It would be the Western Australian Supreme Court, although they would have a right to appeal to the High Court if they wish to.

**Mr P.C. Tinley:** That is not stated in the bill.

**Mr C.J. BARNETT:** No, but it would be the jurisdiction that would apply.

**Clause put and passed.**

**Clause 5: Section 17A inserted —**

**Mr W.J. JOHNSTON:** This is a simple question that could be answered by interjection, given that we are about to run out of time. I am not quite sure, but this protection does not seem to apply to the matters that we are dealing with under proposed section 14D et cetera, but rather to any matter regarding the agreement. I am just wondering whether that is correct; so, in other words, it is not just the carbon sequestration process that we are giving this liability protection?

Debate interrupted, pursuant to standing orders.

[Continued on page 2335.]