PETROLEUM AND GEOTHERMAL ENERGY LEGISLATION AMENDMENT BILL 2013

Consideration in Detail

Resumed from 27 June.

Debate was adjourned after clause 74 had been agreed to.

Clauses 75 to 77 put and passed.

Clause 78: Section 69 amended —

Mr W.J. JOHNSTON: Clause 78 amends section 69 of the principal act and proposes to insert new subparagraph (iii) after paragraph (a)(ii). I will read it for the benefit of our discussion —

> (iii) an eligible GHG storage formation that is partly in a particular licence area of a GHG licensee and partly in another area, whether in the State or not, in respect of which another person has authority, whether under this Act or another written law or under the law of another State or of the Northern Territory, to carry on GHG injection operations in the eligible GHG storage formation;

That is quite a mouthful; that is the first thing we would all note. Again, we get this question about whether the storage formation extends beyond the licensee's licence area. Firstly, we do not know where it ends, so we do not know whether it is a formation that is suitable for doing this work. Until we know where it ends, we cannot determine whether it is suitable for storage. The first question I have is that given that unless it is on their licence, the licensee cannot know whether it is suitable, how does the minister know whether it is a GHG storage formation? That is the first question.

Obviously, much of the state abuts South Australia and the Northern Territory. The minister might enlighten us about whether the state of South Australia and the Northern Territory have laws that equate to the laws that we are considering here. How does the minister go about consulting and dealing with the ministers in the other states and where there is an overlap into commonwealth borders, which I assume is less probable? Perhaps the minister could answer those two separate but important questions.

Mr W.R. MARMION: I am not usually good at answering two questions at once, but I wrote them down because they are interrelated. The member has to realise that a storage formation would have to have been proven up first before anyone gets to the stage of injecting. It could cross a border and it could go into commonwealth land. So the licensee would have had to have proven that it is a formation that nothing can leak from, in simple terms. It could go into South Australia or the Northern Territory. Whoever is going to use it as a storage formation would have had to ensure they had done the work to prove that the storage formation is a tight storage unit and nothing will leak, which is similar to what is happening down in the South West Hub. That work would have to have been already done, which would mean we would have to coordinate with other states if it were in South Australia or the Northern Territory. So a licensee obviously could not be injecting in WA thinking: we have checked out our site and we know that it will not leak into WA, but we do not know what will happen in the Northern Territory and South Australia. It would not get permission.

Mr W.J. JOHNSTON: Let me ask the first question again, because the minister did not answer either of the questions, which is sad. He is usually agreeable under normal circumstances. Is the minister saying that this comes into play only when someone has already determined the whole extent of the storage formation? That obviously raises a question, which is: how does the applicant know what happens when it is not on his licence? If he only has his licence, he does not have any other ground to look at, he keeps following the formation up to the South Australian border and the formation continues on to the other side, how does he know the limit of the formation? It states here that this section applies only when the formation goes beyond his licence. I will read that again —

> (iii) an eligible GHG storage formation that is partly in a particular licence area …

That means it cannot be all in his licence area because it says it is only partly. These words mean that the formation is outside his licence.

Mr W.R. Marmion: We know that.

Mr W.J. JOHNSTON: How does he know where it finishes?

Mr W.R. MARMION: I thought I answered that. Maybe I am not on the same wavelength. Let us say we are at exploration stage, there would have to be concurrent exploration in South Australia or Northern Territory. The licensee cannot do just WA. They would have to know whether it is a confined storage formation. Someone doing exploration in WA might also have a licence in the Northern Territory or South Australia to do that, so they are doing it concurrently, or the licensee may have a partnership with someone else and they may be doing

it. But it has to be done concurrently otherwise the licensee has not proven that it is a confined formation. Does that give the member the answer?

Mr W.J. JOHNSTON: I want to explore this issue a bit further and then we will talk about my second question. Is the minister saying that the only circumstances in which this would apply are when the interests of the licensee in Western Australia are aligned with the potential interests of a licensee in another state? If XYZ Pty Ltd had a licence in Western Australia and followed the formation up to the border, it would be impossible for it to know what it is like on the other side. XYZ Pty Ltd might go and get a licence from the South Australian government, but it could be ABC Pty Ltd. Who knows? As a Western Australian Parliament, Western Australian minister, we have no control over that. Until we know where the formation goes on the other side of the border, there cannot be a storage formation. I agree with that; we are not going to inject if we do not know. Someone else might have a licence on the other side and that licence may or may not relate to the interests of the people here in Western Australia. We will have no control over it; it is another jurisdiction. Is the minister saying that the only way this provision would come into effect is when the people in South Australia and the people in Western Australia have concluded that it is the one formation? They have found their bit under their legislation and we have found our bit under our legislation; we want to put our two bits together. Is that the only circumstance in which this would apply? I will stay here until the minister takes further conferencing. Is the minister happy with my question?

Mr W.R. MARMION: Sort of. Let us say somebody in Western Australia has a unit developed and they want to inject it in a formation that might go into South Australia, and someone else in South Australia has the same right and wants to inject also. This provision allows a more efficient use of that formation so that someone can inject in the Northern Territory and South Australia as well as WA. Another analogy could be a gas field where there might be a number of different tenements overlapping. It is actually the same gas field, and if people are taking gas out, they have to do the geotechnical work to work out how much everyone gets, so that is what this is about. I am probably jumping to my own conclusion here, but if there is a formation and a party has rights over a certain spot, another party could have ownership in a different area, so the first party could say, "Well, hang on, I'm the first one that got the bore in; bad luck". This provision covers a situation in which there is a site that other people can use; they have to work out how much everyone gets to use, in layman's terms.

Mr W.J. JOHNSTON: I think I now understand that we are talking only about circumstances in which, for whatever reason, the licensees have decided to cooperate. I go back now to the second part of my first question, which was: what is the procedure? There must already be established protocols because there might be an oil reservoir—the Browse field is a classic example—that extends from state waters into commonwealth waters. Could the minister, for my benefit as a new boy, described to me the protocol that he will use in his conversation with the minister in the other jurisdiction?

Mr W.R. MARMION: The advice I have is that there would be a commercial agreement. Let us say there is one operator in Western Australia and one operator in the Northern Territory; between them, as private operators, they would reach a commercial agreement, but both injections would be monitored and regulated by the respective state authorities.

Mr W.J. Johnston: So is there a protocol between you and South Australia, or you and the Northern Territory for that?

Mr W.R. MARMION: I assume that once a commercial agreement is reached, each state will know what they are regulating.

Mr W.J. Johnston: Do you have a protocol? That is the question I'm asking, effectively.

Mr W.R. MARMION: No, because it has not occurred yet, but this will allow a protocol to be developed.

Mr W.J. JOHNSTON: I turn to the provision on page 76, clause 78(3), which proposes to delete the existing section 69(3) and insert a new section 69(3). This is difficult; it took me a little while to work this one out when I was looking through the marked-up bill. I might just turn to the marked-up bill. The question is about the words in the paragraph at the end of the dot points. This is quite confusing, because it refers to the minister and the minister's own motion, but then proposed paragraphs (a) and (b) are actually alternatives to the minister's own motion, so we just ignore everything after the comma and read that the minister "may, for the purpose of securing the more effective recovery"—blah, blah, blah—and then the three directions that the minister is capable of issuing are listed out, under paragraphs (c), (d) and (e). There is then reference to an instrument in writing served on the licensee, to enter into an agreement in writing. Who is that agreement with; is it between the minister and the proponent, or is it the proponent and someone else? Because it reads —

> … for or in relation to the unit development of the petroleum pool, geothermal resources area or eligible GHG storage formation …

I am not quite —

Mr W.R. Marmion: I'll need to read this slowly.

Mr W.J. JOHNSTON: Yes indeed; that is the same problem I had. It is a very long provision and one has to ignore parts of it to get the proper sense of it. As I say, the first line makes reference to the minister's own motion, and then there are two other people who can ask him to do it. There is also the "may" at the start of the paragraph under the dot points. Who is it that the minister is able to direct, and who are they agreeing with?

Mr W.R. MARMION: The minister can basically direct the two licensees to reach an agreement, which can be put on the title to be enforceable.

Mr W.J. Johnston: So you're directing the licensee?

Mr W.R. MARMION: Yes, if there are two and it is overlapping, to work it all out and to reach an agreement.

Mr W.J. JOHNSTON: What is the substantive difference between the final paragraph, which starts with, "by instrument in writing", and the words that are being deleted? On reading the marked-up bill, there seems to have been many more words in the deleted section than there are in the proposed new section. I am not as familiar with this as are the people sitting around the table with the minister! Could I have an explanation of what has happened to change that paragraph?

Mr W.R. MARMION: I am not a lawyer either, but parliamentary counsel has obviously determined that this is a far more efficient way of saying the same thing with fewer words.

Mr W.J. JOHNSTON: I am not clear about what we are changing. Can the minister explain it? We both agree that this is a complex provision and it takes a couple of readings to get to the key issue, which is that the minister is directing the licensee to enter into an agreement in writing for, or in relation to, the unit development of the petroleum pool. I am not quite sure what we are taking out.

Mr W.R. MARMION: I cannot explain the wording, but the one that is being deleted covers only petroleum and geothermal, and the new wording covers petroleum, geothermal and greenhouse gas, so it actually brings that into it. Cleverly, they have been able to do that in fewer words.

Mr W.J. JOHNSTON: I am sure that the term "unit development" is probably well understood by the department; I am just wondering whether the minister could point out where in the existing act it is defined. I assume it is there and not in the proposed amendments.

Mr W.R. Marmion: Do you want a definition of "unit development"?

Mr W.J. JOHNSTON: Yes.

Mr W.R. MARMION: "Unit development" is apparently a very common term used in the industry. To fully understand the meaning of "unit development" unfortunately the member has to read the whole of proposed section 69.

Mr C.J. TALLENTIRE: I refer to this new insertion in section 69, which states —

> … as the case requires, under cooperative arrangements between the persons entitled to carry on —

Mr W.R. Marmion: Excuse me, member, because it is such a very, very long section, it would be handy if you pointed out the page and dot point.

Mr C.J. TALLENTIRE: I was referring to the marked-up bill, and I am on page 143. I understand that the minister would prefer me to refer to the amendment bill.

Mr W.R. Marmion: No, I don't care; as long as you tell me what part, clause or subsection!

Mr C.J. TALLENTIRE: I am on page 143 and I am referring to (b).

Mr W.R. Marmion: There are a lot of (b)s.

Mr C.J. TALLENTIRE: The blue (b), the inserted (b).

Mr W.R. Marmion: There are two instances of blue (b) on page 143.

Mr C.J. TALLENTIRE: The first one.

Mr W.R. Marmion: Under section 69(1)?

Mr C.J. TALLENTIRE: There are proposed subparagraphs (i), (ii) and (iii) and then there is —

Mr W.R. Marmion: Is it "(b) a person who is lawfully entitled"?

Mr C.J. TALLENTIRE: It begins —

> … as the case requires …

Mr W.R. Marmion: So you are talking about proposed section 69(1)(b)?

Mr C.J. TALLENTIRE: Yes that is right, I thank the minister. It refers to "cooperative arrangements". In the discussion between the minister and the member for Cannington, the minister suggested that there would be times when he would be able to force cooperation, so it would not actually be a cooperative arrangement; it in fact would be a forced amalgamation, which is a curious term. Under the legislation as it presently stands, there is not that same emphasis on cooperative arrangements between persons entitled to carry on such operations in each of those areas—that is in the section being deleted.

Mr W.J. Johnston: The member for Gosnells is referring to clause 78(1)(c) just so Hansard and the clerks do not get cranky!

Mr C.J. TALLENTIRE: I am just curious about this term "cooperative arrangement". It may be that we do not have a cooperative arrangement and that two or three parties involved do not really wish to cooperate. If that is the case, how would we describe this arrangement? It is a forced arrangement rather than a cooperative one. I am worried that the provisions of the act would only work if there were actually a cooperative arrangement between the different parties.

Mr W.R. MARMION: It is very simple in the sequence. This bill is rather well drafted I have to say; Parliamentary Counsel has done a rather good job. Proposed section 69(1)(b) states —

> … as the case requires, under cooperative arrangements …

That is the first and preferred step. If that does not work, particularly if there can be a more effective recovery of petroleum or geothermal energy, or a better way of injecting greenhouse gas, the minister has the ability under proposed section 69(3) to —

Mr C.J. Tallentire: Force the arrangement.

Mr W.R. MARMION: Yes, force it, and not just because a cooperative arrangement has not been reached, it could be ineffective or inefficient. In that case, I would have the power to step in for a more effective methodology.

Mr W.J. JOHNSTON: I want to go on further in clause 78, which is on page 79 of the bill. I refer to subclause (9) "delete section 69(12) and insert:". This is another case in which we are dealing with something that extends.

Mr W.R. Marmion interjected.

Mr W.J. JOHNSTON: Page 79 of the bill or page 147 of the marked-up bill.

Mr W.R. Marmion: Proposed section 69(12).

Mr W.J. JOHNSTON: Yes. I will ask one question first and I will ask a second question that is unrelated to the first one, so I will keep it very simple. In respect of this proposed section, what happens if there are no laws in the other states, then what? We are dealing with things extending beyond the state of Western Australia, what happens if —

Mr W.R. Marmion: So what's your problem?

Mr W.J. JOHNSTON: What is done if there are no laws in the other states?

Mr W.R. Marmion: To do what?

Mr W.J. JOHNSTON: The proposed subsection states —

> If … formation extends, or is reasonably believed by the Minister to extend, from an area of the State into —
>
> (a) lands to which other written laws or the laws of another State or of a Territory relating to the carrying on of GHG injection operations apply; or
>
> (b) the adjacent area of an adjoining State or Territory,

So what is done? If it is (b), what happens? There are two alternatives. One is if the law applies and one if it does not.

Mr W.R. MARMION: This is obviously new legislation. South Australia does have legislation and the Northern Territory does not, so we would obviously have to be extremely cautious at the moment, but one would assume that they eventually will have legislation. The development of geosequestration is in its infancy and it may be some time before we get to a project in which we actually inject greenhouse gas. However, assuming that in the intervening period in which we pass this legislation the Northern Territory has not got its legislation, we

would have to work closely with the Northern Territory government to ensure that it is fully across things and in particular its department.

Mr W.J. Johnston: Why don't you stay on your feet for a second, minister?

Mr W.R. MARMION: Yes, I might have to ask my advisers what the answer is for the next question.

Mr W.J. Johnston: Sure, that is fine, but it is probably easier for me to interject. Are you saying that there is a circumstance in which someone could inject when there is no law in another state?

Mr W.R. MARMION: No.

Mr W.J. JOHNSTON: That is fine, but then I do not understand why we have the alternative. Surely if it is not intended that proposed section 69(12)(b) be used, and the minister says he does not intend to use it, why is it there? Proposed section 69(12)(a) refers to "other written laws", so we are clearly talking about laws of another state or territory and proposed paragraph (b) refers to "the adjacent area of an adjoining state or territory" Clearly, proposed paragraph (b) contemplates the event in which proposed paragraph (a) does not apply. Proposed paragraph (a) applies where there is a law in the other state or territory. The minister has already said in *Hansard* that he does not intend to give approval where there is not a law in another state, so why would the legislation not just state "only where there are lands to which other written laws, the laws of another state or of a territory relating to the carrying on of GHG injection operations apply" and not worry about proposed paragraph (b) at all, because proposed paragraph (b) is the free pass?

Mr W.R. Marmion: I will slow down and read a bit slower than you. I think you are getting confused here.

Mr W.J. JOHNSTON: I am not confused, minister; I am not confused in the least. Let us read it again.

Mr W.R. Marmion: You're reading it for me by just going over and over and talking.

Mr W.J. JOHNSTON: Proposed section 69(12) states —

> If an eligible GHG storage formation extends, or is reasonably believed by the Minister to extend, from an area of the State into —

Then there are proposed paragraphs (a) and (b). Proposed paragraph (a) is not a problem because it states —

> lands to which other written laws or the laws of another State or of a Territory relating to the carrying on of GHG injection operations apply; …

No trouble, because it is regulated.

Mr W.R. Marmion: Yes. So what is wrong with (b)?

Mr W.J. JOHNSTON: Proposed paragraph (b) states —

> … the adjacent area of an adjoining State or Territory,

Mr W.R. Marmion: It does not say that there are no laws in (b). The next bit states that if (b) applies "each Minister concerned", so you are consulting with a minister in the other state.

Mr W.J. JOHNSTON: But that applies if (a) exists. Therefore, the only reason (b) is written there —

Mr W.R. Marmion: Why does it not apply? I am just an engineer, but my initial reading of it —

Mr W.J. JOHNSTON: It is because of the word "or".

Mr W.R. Marmion: But it is common. If the member looks at the next bit, it says "each Minister".

Mr W.J. JOHNSTON: No, this is the point I am making. If (b) does not apply because South Australia has the law already and the Northern Territory will have it soon, the bill does not need (b) because if it is a state or territory and there is a law relating to the GHG injection, that is cool; but (b) is the free pass. It is for injecting in the Northern Territory because it does not have a law. But the minister has said that he will not agree to it if there is not a law; why would he bother?

Mr W.R. MARMION: But the clause does not say that. It says if there is not a law —

> each Minister concerned must consult concerning the carrying on of GHG injection operations in the eligible …

Mr W.J. JOHNSTON: Yes, but if the minister says he will not agree to it, as is —

Mr W.R. Marmion: That is the advice I got from my —

Mr W.J. JOHNSTON: Will the minister change his mind?

Mr W.R. Marmion: I going to phone and ask them.

Mr W.J. JOHNSTON: This is the minister's decision. It is about his capacity as an authority as the minister. I am not trying to be rude or disrespectful at all.

Mr W.R. MARMION: Can I let my brain think a bit and listen to my advisers?

Mr W.J. Johnston: Okay. All right.

Mr C.J. Barnett: We do not have that much time!

Mr W.R. MARMION: This legislation has been specifically worded for a future amendment to the Petroleum (Submerged Lands) Act. Therefore, when we are doing GHG sequestration outside or in state waters not applied by this bill that are terrestrial—that is, there is a bit of land in the water—the amendment will cover this instance.

Mr W.J. Johnston: Sorry?

Mr W.R. MARMION: The instance of geosequestration in state waters—offshore. Therefore, off the terrestrial; in state waters. Apparently, the wording of (b) is to cover a future amendment to that act. Parliamentary counsel has decided that is a good thing to do.

Mr W.J. JOHNSTON: I am terribly sorry, but I am not convinced by the minister's answer because proposed subsection (12)(b) states —

> the adjacent area of an adjoining State or Territory,

If it is offshore Western Australian territorial waters, then this section does not apply. I am homing in just on (b) because I got the minister to say on *Hansard* that he would not agree to injecting GHG if there was no law in the other jurisdiction. If I have missed a jurisdiction —

Mr W.R. MARMION: If the member stops talking a tick, I can actually get advice from my adviser. I have the point and will certainly concentrate on that point.

It is very complicated. We are going down to about the nth degree on the drafting. I gave half the answer last time. The other half of the answer is if the other adjoining state or territory amends their legislation as well for offshore, this is the adjacent area of joining state and territory for when we amend the offshore legislation.

Mr W.J. JOHNSTON: I am still not convinced why the minister would need to do it.

Mr W.R. MARMION: I am not parliamentary counsel, but parliamentary counsel would need to explain that level of draftsmanship.

Mr W.J. JOHNSTON: I am not going to pursue it, but I am not happy.

Mr W.R. MARMION: When looking at the level of drafting, I need parliamentary counsel who drafted the bill to explain why they did it. But I will see if these guys can come up with another answer that is more precise.

I am not saying this is why, but (a) is to cover the land; and (b) is for offshore water. Therefore, (a) is the terrestrial side and, as I understand it, (b) has to be amended so it is covering future —

Mr W.J. JOHNSTON: I am having a light-bulb moment. What the minister is saying is that (a) is land and (b) is anything that is not land.

Mr W.R. Marmion: Yes.

Mr W.J. JOHNSTON: Sorry, I got it. Again, I ask why do we not have the adjacent area of an adjoining state or territory to which other written laws or the laws of another state or territory relating to the carrying on of GHG injection operations applies?

Mr W.R. MARMION: Because this is the way that parliamentary counsel wrote this.

Mr W.J. JOHNSTON: Fair enough; a light-bulb moment. I understand the difference between the two paragraphs and I apologise for not having done so earlier. But I still think that paragraph (b) should state that the laws of an adjoining state or territory should be a condition precedent because I do not think we want to have a situation that we are injecting where there are no laws. The minister has already said that he does not want to do that—I am not accusing the minister of wanting to do that—but it seems reasonable that the act should reflect that provision. I appreciate the work of the minister's advisers who, through the minister, explained to me what was being got at, and they did in the end, but it still should only be eligible where there is a written law.

Mr W.R. MARMION: Yes, I am happy with the way it is worded.

Clause put and passed.

Clause 79: Part III Division 3A heading amended —

Mr C.J. TALLENTIRE: I note the use of a term that does not actually appear in the bill, but it is in the blue bill—that is, we are amending the title for Part III Division 3A. We are amending it to include titles, geothermal titles and GHG titles. The title then goes on to say, "may subsist in respect of same blocks." The term "subsist" is puzzling me; I do not think it is common usage. I would have thought "coexist" would be a more frequently used term in talking about different forms of title overlaying one another. I have checked the dictionary and I note that "subsist" is defined as to keep oneself alive—that is the common usage. There is a meaning, I think it is an intransitive verb, to "remain in being, exist". So possibly on those grounds we could legitimately use the term "may subsist". I am wondering why we did not take the opportunity to bring more common parlance into the title that we have before us. We are amending other parts of the legislation, but we are keeping the term "subsist", which I think is a little outdated given that there is a much clearer term, "coexist".

Mr W.R. MARMION: Parliamentary counsel has gone for "subsist" and I am happy to leave it as it is.

Clause put and passed.

Clause 80: Section 69A amended —

Mr C.J. TALLENTIRE: I refer to page 80 of the Petroleum and Geothermal Energy Legislation Amendment Bill 2013 and proposed subsections (6A) and (6B) that outline the conditions by which a minister can allow the overlaying of titles. We are allowing the overlaying—or the subsisting, to use that term—of a GHG title, a geothermal title and a petroleum title. The minister can allow those three titles to coexist but in doing so, the minister has to check with the existing titleholders. There might be already a petroleum title and a geothermal title and then the minister has to inquire whether those two titleholders would be accepting of a GHG title coming into place as well. I want to check with the minister whether I have that right. If that is the case, what is the protection for the state in the situation that a petroleum titleholder or a geothermal titleholder wants to block or prevent a GHG titleholder coming in? What is the mechanism to counter that situation—that sort of banking that could go on?

Mr W.R. MARMION: This section is about making sure that proper processes have taken place. If someone has the right to geosequester greenhouse gases, all the technical side would have been taken into account. If someone has a petroleum licence, we have to go through this process to make sure that they are aware of it, but all that technical side would have been done by the department to make sure that it was not going to impinge on anyone's operations. Given that, this legislation allows again the two titles, in this case it is petroleum and geosequestration, to subsist and this provision basically states that it can. That is what this section is about; that the titles can subsist and there is a mechanism to do that. For that to happen, the registered petroleum titleholder is given not less than one month's notice of the process and the minister takes into account all the matters submitted to the minister.

Mr C.J. TALLENTIRE: Is there any chance, though, that somebody could intentionally obstruct the arrival or the bringing into effect of a GHG title? Could the petroleum titleholder or the geothermal titleholder say that they do not want their project compromised or put in jeopardy in some way by the potential GHG title through another form of activity that could perhaps put pressure in the wrong places and could jeopardise the extraction of petroleum or geothermal energy from an area?

Mr W.R. MARMION: Let us say that the petroleum licence holder does not have the power of veto, but they do have the right to be heard. So their issues have to be taken into account as per proposed subsection (6B)(c), but they cannot veto the geosequestration.

Mr C.J. TALLENTIRE: My final point on this is that we list petroleum and geothermal titles and the subsistence with GHG titles, but what others—a mining title, for example? Noting that progressively mines are going deeper and deeper, I know that the short answer to that might be that a GHG title would be much deeper, but I think it is possible that in the coming years we will see mining activity reach a point at which it is getting deeper and deeper and there could be some meeting of a GHG title and some form of mining title. Why is that subsistence limited to only petroleum titles and geothermal titles?

Mr W.R. MARMION: I have some technical advice, but in reality we will not get that happening because people will not be mining that deep.

Mr C.J. Tallentire: Even the Super Pit wouldn't be going down deeper?

Mr W.R. MARMION: Someone mining the Super Pit does not have a confined formation to sequester into; if they have mined into it, they have opened it up, have they not? That is from a practical point of view. But we would never get to that; if someone has a formation, it would not have been proven. I cannot envisage an example in which there might be mining and a geosequester formation. I do not know whether my advisers can think of one. It is a different type of geology.

Clause put and passed.

Clause 81: Part III Division 4A inserted —

Mr W.J. JOHNSTON: Madam Acting Speaker (Ms L.L. Baker), you will be pleased to know that although I may have one quick question on clause 88, I basically have questions only on clause 81. Of course, clause 81 stretches to 26 pages, so we might have a few questions on the way through!

On page 82 of the bill, starting at line 15, proposed section 69B(1) states —

> (b) the permittee, holder of the drilling reservation, lessee or licensee has reasonable grounds to believe that —
>
> (i) a part of a geological formation is an eligible GHG storage formation; and
>
> (ii) that part is wholly situated in the permit area, drilling reservation area, lease area or licence area.

It then goes on to specify all these rights. This, of course, relates to proposed sections 6AA and 6AB, which we dealt with in clause 7. This question was dealt with briefly by the member for Bunbury, by way of interjection as well as a couple of comments. The minister will remember that we agreed proposed sections 6AA and 6AB are the guts of the bill; they are the provisions that set everything in train. The idea of the eligible GHG storage formation relates back to those clauses. A storage formation is part of a geological formation, and we will let them have these rights only if we know that formation is entirely within their permit area. I will not go over it again, because we went over this at great length, but we do not know in advance where that eligible GHG storage formation is going. Is it correct that a corporation is only able to make this application to the minister if it has found the limits of the storage formation? That may have taken a number of years to identify because of resources and whether they have had to amend the original application for their drilling reservation, lease, licence or whatever. Am I correct that it is only at the end of the process that the application is made to the minister, who grants the right to start injecting? Am I telling the story correctly?

Mr W.R. Marmion: That is sort of right! Why not read proposed section 69B(1)(b)? This section applies if the —

> … holder of the drilling reservation, lessee or licensee has reasonable grounds to believe that —
>
> (i) a part of a geological formation is an eligible GHG storage formation;

They have to have reasonable grounds to believe that.

Mr W.J. JOHNSTON: Yes; they would have done many years of work.

Mr W.R. Marmion: Or someone else did.

Mr W.J. JOHNSTON: But one way or another, when they apply to the minister, he expects a very detailed set of information. Proposed section 69B(2) then states —

> The permittee, holder of the drilling reservation, lessee or licensee may apply to the Minister for the declaration of the part referred to in subsection (1)(b) as an identified GHG storage formation.

As we understand from those other provisions, if it is not a GHG storage formation, the applicants cannot get a permit to inject CO_2. This is the crucial bit: they now know what they are looking for and they go to the minister and say that they have got the details. We have gone through all the issues that the members for Murray–Wellington and Bunbury raised about trying to find the edge of the formation, but now an application has been made to the minister. That is the way it works. I am going to run out of time.

Mr C.J. TALLENTIRE: I would like to hear more from the member.

Mr W.J. JOHNSTON: We now have this question of what is permanent. If the minister remembers, proposed section 6AB, "Eligible GHG storage formation and related terms", reads —

Mr W.R. Marmion: You are getting ahead of me!

Mr W.J. JOHNSTON: I am not referring to that, as we have already dealt with clause 7. I am just making a point that an eligible GHG storage formation is defined in proposed section 6AB(1) —

> … an eligible GHG storage formation is a part of a geological formation that is suitable for the permanent storage ...

I am not returning to clause 7; I am making the point that an eligible GHG storage formation is defined in proposed section 6AB.

Mr W.R. Marmion: You are way ahead of me!

Mr W.J. JOHNSTON: That is fair enough; I am happy to be cooperative.

Mr W.R. Marmion: We spent a lot of time on that clause.

Mr W.J. JOHNSTON: Yes, we did. I will not go over it again, except for this part.

Proposed section 6AB(1) refers to this question of permanent storage. What sort of information does the minister expect to receive that will satisfy him that GHG can be permanently stored in this formation? If the applicants cannot satisfy the minister that it will be permanently stored, the application will not succeed. Can we have some guidance on the sort of detailed information that the minister requires the applicant to provide that will satisfy him that they have a permanent storage solution?

Mr W.R. MARMION: The volume of information required to get the licence will be massive. We have committed $52 million already and we have not even started on the South West Hub. The applicant would have to provide enough technical information to satisfy my department and the technical team that it is a permanent geological formation suitable for injecting CO_2. Surely the member does not want me to provide him with all of that!

Mr W.J. Johnston: Why not give me some examples of how you would be satisfied?

Mr W.R. MARMION: It could be an easy one, such as a depleted gas field, where we know there was once gas and it was confined. There might be a lot of geological data, records, monitoring bores, data on the pressure of the gas when it came out and what is left there now and whether there are leakages. All sorts of amazing information is required and the applicants might have to do some testing to confirm it. For all intents and purposes, a depleted petroleum site could be considered as a possible injection site because a lot of data might be available. That is one example, and probably the easiest to explain. However, if it is not a depleted gas void but something like the South West Hub, then we have to determine the boundaries through a lot of work, including seismic data, drilling, the material that will be injected and how that will react with the CO_2 or a combination of gases. A massive amount of data is required. I have been given a note on that, but I cannot read the handwriting! It could include core samples, extensive modelling, use of similar examples elsewhere, trapping mechanisms above the reservoir, the nature of the reservoir and seismic data, which I have already mentioned. We would require all the geological and technical information necessary to convince my department that it was suitable as a permanent storage site. That is about as good an answer as the member can possibly get.

Mr W.J. JOHNSTON: It could well be related to the performance of the trial. I think the correct wording in the bill is “to inject, on an appraisal basis”. An amount of 999 999 tonnes of GHG could have been injected into the reservoir on an appraisal basis, and because the appraisal rules are separate from those for permanent storage, anything less than 100 000 tonnes might have been injected, which is the appraisal amount. We have been through that in detail. Let us say that 999 999 tonnes of GHG is injected into the ground. If there were, say, a one per cent rate of escape from that reservoir, would that be considered an example of permanent storage? Is that the sort of limit for the injection of GHG that the minister is looking for from the appraisal? Would that be satisfactory for the demonstration of permanent storage?

Mr W.R. MARMION: We would be going for zero, basically. One per cent of 999 999 tonnes is a large figure.

Mr W.J. JOHNSTON: What if it were one-tenth of one per cent, minister? This appraisal scheme is in the bill for a purpose, I imagine. We spent some time the other day talking about appraisal matters. I was satisfied with all the answers that I got, and I am not criticising the minister in any way for that, but now we are asking for proof of permanent storage. That is why I referred to the other two clauses. An eligible GHG storage formation is only one formation that we can be confident will permanently store the GHG. What is the threshold that we expect from those appraisal injections? Exactly how low will we demand? I know that the member for Murray–Wellington must be very interested in this particular topic, because potentially he will be the first member impacted by GHG injection. What are we seeking from this? Are we seeking a zero per cent rate of escape from trial sites, or one-tenth of one per cent or one-hundredth of one per cent? What exactly do we expect from these appraisals to demonstrate permanent solutions?

Mr W.R. MARMION: The international standard is 99.99 per cent over 1 000 years of the filled formation. One would expect pretty close to zero in the trial, because the international standard is for 99.99 per cent to still be in there over 1 000 years.

Mr M.J. COWPER: Clause 81 covers about 26 pages, as mentioned by the member for Cannington. I have a couple of questions about this clause. This clause adds a significant amount to the existing petroleum and geothermal legislation. I am curious to know why this bill was not presented to this place as a stand-alone bill that dealt with the issue of geosequestration without it piggybacking on what is essentially a different process. Petroleum and geothermal energy involves the extraction of energy. This involves pumping waste CO_2 into the ground. How did the department arrive at the decision to piggyback this legislation as opposed to presenting a fresh, stand-alone piece of legislation, and why?

Mr W.R. MARMION: The department looked at a number of options, including what has been done in other jurisdictions that have developed GHG storage legislation to date. The commonwealth and South Australia have amended their petroleum acts in a similar way to this bill. Queensland and Victoria have developed stand-alone legislation, but the Victorian Greenhouse Gas Geological Sequestration Act is based on Victoria's Petroleum Act. We have decided to use the same method as the commonwealth, South Australia and Victoria. Why would we do that? We have done that because there are synergies between the geological sequestration and petroleum industries—for example, in seismic surveys, drilling wells, reservoir appraisal, monitoring, data collection and the technology required for both. Geological sequestration utilises the same petroleum and geothermal energy safety environmental regulations, so doing it this way reduces unnecessary duplication of the same legislation, which I understand was one of the recommendations of a Council of Australian Governments committee some years ago. This method allows for future amendments to planned resource management regulations currently being drafted to cater for the greenhouse gas following the passage of this bill. It allows the state to benefit from the commonwealth's ongoing development of its legislation, regulations and guidelines and builds on the regulatory processes of petroleum operations accepted by industry and administered by the Department of Mines and Petroleum. It also prevents duplication across different acts and in future amendments to petroleum and geothermal regulations. As I said, it is consistent with the ministerial council report in 2005 and with a number of other reports that have been written on the efficiency of legislation.

Mr M.J. COWPER: Clause 81 refers to an applicant for an exploration permit for a drilling reservation or a retention lease and various other aspects. Is it possible that the government could be an applicant? Obviously, the government envisages that there will be some benefit to corporations that capture carbon and pump it under the ground. Is it possible that the government could be the applicant?

Mr W.R. MARMION: Technically, it could. Hypothetically speaking, Western Power could want to do it. My advice is that the government could be an applicant, but my department is the regulatory body in this respect so it will get involved in any pre-approval of a reservoir or a formation. It would be unlikely that my department would be involved in doing that.

Mr M.J. COWPER: If it were the case, would the Crown be bound by the same provisions in this legislation?

Mr W.R. MARMION: Yes.

Mr M.J. COWPER: I am leading to a particular point; that is, $52 million is currently being stumped up by the federal government and we have spent nearly half that amount on some exploration work on the South West Hub in the Riverdale Road area of Cookernup to put in a rather expensive test drill. I am curious about why the government is stumping up the money to do this and allowing the beneficiaries of such a trial to sit back and just observe. There are a number of allegedly interested parties, including Alcoa, Worsley, BHP Billiton Ltd, Griffin Coal, Perdaman Industries and a host of others. How is it that they have not been party to contributing to the experiment in the South West Hub?

Mr W.R. MARMION: We are currently in a pre-competitive situation. Proving up that a formation is suitable for geosequestration is a very risky and expensive exercise. The commonwealth was happy to stump up with the dollars and, basically, take the risk. One would assume it is very unlikely that the private sector would have been involved in putting in the capital.

It may not be proven. It may be that all the work that has been done for the South West Hub might show that it is not a suitable storage formation, but let us assume it comes out that it is a suitable storage formation. It would then be available for competitive bids in the private sector to utilise. I am not quite sure where the member is coming from. As the minister responsible, I do not know why the commonwealth wanted to put money into the project. The member may want to ask the commonwealth. There are certainly benefits for the universities that are involved. The CSIRO and industry have an interest down there. Alcoa and Verve, obviously, have an interest as well. As with some of the questions asked last time, we will not get small players in this field because it requires a lot of capital and there is a fair bit of risk.

Mr M.J. COWPER: My point is that if Alcoa, for instance, had an epiphany and decided it would have a new car industry, does the minister think it is right for the taxpayers of Australia to stump up a feasibility study for whether it should manufacture a new vehicle in Australia in the current climate? We already know that people can purchase carbon credits in Europe for cents, as opposed to the cost of such a matter. Does the minister think it is wise use of taxpayer money? An amount of $52 million is no small change on what is still relatively new technology.

Mr W.R. MARMION: The member is asking my opinion of how the commonwealth wants to spend its money. The member may have to ask the commonwealth.

Mr M.J. COWPER: Further, it perplexes me why we as a state got into partnership with the federal government. I would love to ask Martin Ferguson a question. I understand he is a very intelligent and agreeable sort of a chap, but, unfortunately, he is not on the scene these days. I am curious about why the Western Australian government got on board with this project.

Mr W.R. MARMION: My understanding is that all the states have agreed. It is a national initiative. This project, the South West Hub, has a lot of spin-off benefits for research and a greater understanding of the area. Scientists—researchers at universities and the CSIRO—are interested. One could assume that other states might have grabbed the opportunity. We have the opportunity. It is not even proven so —

Mr M.J. Cowper: CSIRO is a federal government body.

Mr W.R. MARMION: Is that by way of interjection?

Mr M.J. Cowper: It is a statement. CSIRO is not a state government body.

Mr W.R. MARMION: I did not say it is.

Mr M.J. Cowper: You are saying the spin-off is for the state, but CSIRO is —

Mr W.R. MARMION: It is based in Western Australia. People who work for CSIRO are in Western Australia and they earn their income and spend their money in Western Australia.

Mr M.J. COWPER: The CSIRO, along with the Australian National University and others, I understand is very keen to be offered $52 million. I understand a bunch of academic types there like to ply their trade and often are starved of a funding source to use for exciting things such as finding out whether the Lesueur aquifer is suitable for geosequestration. I understand there might be some spin-offs from it and a lot to be learned from the process, but as the member for Murray–Wellington, I must stress that the Lesueur aquifer is saline and a lot of people are very uncomfortable with the prospects of CO_2 being injected into the ground into a saline aquifer, notwithstanding the fact that we may be able to contain the CO_2. I understand it will be contained in some sort of solid formation. I understand that under pressure it becomes a solid—H_2CO_3 or calcium carbonate. It is an acid.

Mr W.R. Marmion: It will remain a fluid unless it has a chemical reaction and becomes a solid.

Mr M.J. COWPER: Calcium carbonate, yes, which is very similar to a limestone formation. The actual displacement of other materials, particularly water, is of major concern. It may well be said that we can contain the CO_2 within the body of the basalt that lays across the top of the Lesueur aquifer, but we are very anxious and concerned about the potential for CO_2 to be pushed, which I mentioned when we debated this issue some time ago. As those who have been involved with spearing a keg would know, if we inject CO_2 into a liquid formation and up she comes when we turn the tap on, out comes the frothy, bubbly, nice and cold beer. But in this case, the farmers in that area rely on the very clean 350 parts per million water that exists in the Lesueur aquifer. We are concerned about the contamination of that in particular. This provision goes on, as I said, for 26-odd pages. Page 84 is about declaring a storage formation. Does it go on size or capacity? What factors are taken into consideration when declaring whether a formation is suitable? I refer to page 84 and proposed section 69E.

Mr W.R. MARMION: Is the member asking what constitutes the viability of a permanent storage formation?

Mr M.J. Cowper: Correct.

Mr W.R. MARMION: Firstly, it would have to be confined, as we said before. It would have to be proven that it is confined so that nothing can escape. Does the member want to know what size?

Mr M.J. Cowper: Yes—to make it viable financially.

Mr W.R. MARMION: If we do the numbers, it would have to be a certain size to hold a certain volume to make it viable and to make it stack up commercially. It would be a pretty simple calculation to do. We could do the calculation on the back of a postage stamp.

Mr M.J. Cowper: I reckon you would need a big postage stamp.

Mr W.R. MARMION: It may not work now and that may fluctuate in time. It may depend on a lot of factors. It may not be viable now. It may take five or 10 years. A lot of things might make a formation viable, but that is not for me to determine. Today we are talking about putting in place some legislation so that if someone wants to do that, a framework is in place. We do not have anything in place at the moment. We are changing a current act so that we have a new legislative framework. If we do not have this, we cannot have any regulations. We are putting in place the legislation and the framework for the regulations. Once they are in place, someone can put in an application to geosequestrate CO_2 gases anywhere in Western Australia. They are already doing it on Barrow Island, so we have had to have a state development act for that. A licensee has to do a massive amount of work to comply. It has to be proved that it is a permanent formation and that it will not leak, and a whole lot of

monitoring will be needed. A massive amount of work must be done just to put in an application. The government is nowhere near that at the moment. But today it is putting in place a legislative framework, which most other states have, including the commonwealth, and it would be nice to think that WA could lead other states in this technology and that there is some legislation in place. That is what the government is doing and I believe it is something most people support.

Mr M.J. COWPER: What arrangements are in place for the current project? What authority does that exist under?

Mr W.R. MARMION: It is not relevant to what is being done tonight. It has no relevance, because we are putting in place legislation for, as I said, geosequestration to happen anywhere in Western Australia. The specific investigation being done in the South West Hub is being done under section 115 of the Mining Act.

Mr W.J. JOHNSTON: I draw the minister's attention to clause 81 on page 84 of the bill. . Proposed section 69E(1)(b) states —

> the Minister is satisfied that, using the fundamental suitability determinants set out in the application …

It appears that the only information the minister is allowed to use is the information provided to him in the application. Is that correct? I accept that the minister might refer that information to his department to see what the department could recommend based on that information, but it appears that he is not able to use other information not included in the application. Is my reading of that correct?

Mr W.R. Marmion: I would have had to read it slowly.

Mr W.J. JOHNSTON: I am sure the minister does, and that is up to him.

Mr W.R. Marmion: But I have to read it in the context of the whole provision, so let me do that, and I will get advice at the same time.

Mr W.J. JOHNSTON: I would be concerned that the only information that the minister would be allowed to use —

Mr W.R. Marmion: So would I.

Mr W.J. JOHNSTON: I will read it again for the minister.

Mr W.R. Marmion: Please do not read it again. Let me read it myself because you read at a different pace. I have to read it again after the member reads it out.

Proposed section 6AB defines the fundamental determinants. However, proposed section 69C allows me to ask for more information. Proposed section 69C is the main one.

Mr W.J. JOHNSTON: I accept what the minister says. An application is made under proposed section 69B. If the minister is not satisfied with the information, he can require additional information from the applicant, but it does not say anywhere that the minister can seek other information from other sources. Even in what the minister is drawing to my attention, it states that the minister can require the applicant to provide extra information, but the minister still does not appear to have a power to be satisfied one way or another regarding the information that the applicant has not provided to him. That is strange. If an environmental application were made to the Minister for Environment, he would be able to go beyond the information provided by the applicant. Even if further and better peculiars are requested, which is effectively what is in proposed section 69C, the minister must still rely on only that information. How can that be right? If I am misreading any provision, I am happy for that to be drawn to my attention, because I am going to ask another question on this proposed section.

Mr W.R. Marmion: I am going to get advice.

Mr W.J. JOHNSTON: I am not about to ask the other question, but I do want to ask another question on this topic.

Mr W.R. Marmion: I cannot concentrate while you are chatting away. I am getting advice about your question on proposed section 69F. I do not have all the advice yet.

As per the normal course of business, when a department has a lot of experience and advice, it provides that advice. So if I am not happy with the proposal, I will not approve it, which is in proposed section 69F. That is how that will work; I will refuse it.

Mr W.J. JOHNSTON: So what the minister is saying is that I am right. The only information he can use in determining an application is the information provided by the applicant, whether under proposed section 69B or proposed section 69C.

Mr W.R. Marmion: I do not understand where you have got that from.

Mr W.J. JOHNSTON: The minister has not drawn my attention to any other provision.

Mr W.R. Marmion: Why does it have to be in the act? I can get any information I like.

Mr W.J. JOHNSTON: No, minister; that is the reason the Parliament deals with legislation. It gives the minister power or authority. If I am misreading it, please draw it to my attention, because I cannot see any provision that allows the minister to deal with any issue that is not included in the application. If I am wrong, please let me know which clause says that. So far the minister has drawn my attention to proposed sections 69B and 69C. Proposed section 69B is about the application and proposed section 69C is effectively about further and better peculiars, and I accept that they may be very technical further and better peculiars, but that is all they are. Then the minister has the right to say no. I will talk about that in a moment as well. But in making a determination under proposed section 69E, the only information I can see that the minister is able to use is the information provided by the applicant. I want to know why that is the case. If it is not the case, please draw my attention to the provision under which other information is able to be used in accordance with the minister's decision making under proposed section 69E.

Mr W.R. MARMION: To go back to proposed section 69C, the department does not rule out using third party advice in respect of proposed section 69C, not just advice from the proponent. Indeed, in the course of business, as I said before, an act does not have to prescribe everything that a minister can do in getting information. With regard to the use of proposed section 69C in the petroleum sector, the department gets third party advice, not just the proponent's advice, to verify any information and be satisfied that it is satisfactory.

Mr W.J. Johnston: Which clause lets you use something that's not in the application?

Mr W.R. MARMION: Why would there have to be a clause?

Mr W.J. Johnston: Because this is your authority to make a decision.

Mr W.R. MARMION: Under proposed section 69F, "Refusal to make declaration", where does it say that I have to use only the provisions in this legislation to make my determination?

Mr W.J. Johnston: I'm referring to when you make a decision to approve. It refers to the minister being satisfied, using the fundamental suitability determinants specified in the application. How does that give you authority to use any other data?

Mr W.R. MARMION: It goes to proposed section 69C.

Mr W.J. Johnston: That's just to ask for further and better particulars.

Mr W.R. MARMION: Yes, and I can get third party advice on that.

Mr W.J. Johnston: Where?

Mr W.R. MARMION: That is what we do. Look at proposed section 69C(1), which states —

> (b) to —
>
> (i) carry out such further analysis of relevant information as is specified in the notice;

The notice can be given by the Department of Mines and Petroleum.

Mr W.J. Johnston: That's to them, isn't it?

Mr W.R. MARMION: Yes.

Mr W.J. Johnston: So that's information they then go and collect.

Mr W.R. MARMION: But it can specify that it wants that information from a third, independent party.

Mr W.J. JOHNSTON: Okay. Let us assume that the minister's reading of proposed section 69C is correct; quite frankly, I do not think it is, but let us assume that it is. He is still unable to go to other sources of information because he still can deal only with the issues that are contained in the application.

Mr W.R. Marmion: Sorry; I missed that. I was listening to my advisers.

Mr W.J. JOHNSTON: Proposed section 69E specifies that the minister can use only the information that is in the application, so it all gets filtered through the company before it gets to the minister's desk. If the company does not include it in the application, it will not get to his desk. That is extraordinary; I do not understand the public policy reason for having a provision that provides that the only information that the minister can consider is the information that has been filtered through the executives of the company. That is just extraordinary, and I do not understand why we would have that provision. Why would we have a provision that states that the minister is satisfied that —

Mr W.R. Marmion: I'm not convinced it does, so let me just read it slowly. You are saying "only". I am just reading it slowly with my advisers to see whether I agree with what you're saying. If you stop talking for a tick, I can read it. While you're talking, I can't hear myself think!

Mr W.J. JOHNSTON: What this comes down to is the words in proposed section 69E(1)(b) that state —

> (b) the Minister is satisfied that, using the fundamental suitability determinants —

Mr W.R. Marmion: You said "only" using.

Mr W.J. JOHNSTON: It says "using".

Mr W.R. Marmion: It doesn't say "only using". Obviously you're going to use the application.

Mr W.J. JOHNSTON: It does not say that, minister. It is not a question of "or"; this is all it says. The only words on the piece of paper are the words on the piece of paper. It states —

> (b) the Minister is satisfied that, using the fundamental suitability determinants set out in the application —

Mr W.R. Marmion: Yes.

Mr W.J. JOHNSTON: If the minister wants to use other sources of information, why does it not say "other sources of information"? Why does it say "set out in the application"?

Mr W.R. Marmion: If you put an application in for anything—a rock concert or anything—that's —

Mr W.J. JOHNSTON: Let us take the rock concert as an example. The idea that the police commissioner uses only the information provided —

Mr W.R. Marmion: You used the word "only".

Mr W.J. JOHNSTON: Yes, but there is no authorisation in the clause we are talking about that says —

Mr W.R. Marmion: I disagree.

Mr W.J. JOHNSTON: Show me the word.

Mr W.R. Marmion: You show me where it says "only".

Mr W.J. JOHNSTON: It says "using".

Mr W.R. Marmion: It doesn't say "only using".

Mr W.J. JOHNSTON: It would need to say "using the fundamental suitability determinants set out in the application, and other information that the Minister considers appropriate", or something like that.

Mr W.R. Marmion: I disagree; I think it's well worded. The starting focus is the fundamental determinants, and that is what you present to me, and then if I want more information, I use proposed section 69C to get it, and if it don't like it, I use proposed section 69F and refuse it.

Mr W.J. JOHNSTON: But that is the point. If the minister is referring back to proposed section 69C, then I am right, because proposed section 69C is about further and better particulars; it is not seeking advice from some other source. If the minister is saying that he has this right to go off somewhere else, where is the right? Where is the right for him to use information that has not been filtered through the applicant?

Mr W.R. Marmion: As I've already said about 100 times, proposed section 69C(1)(b)(i) reads, in part —

> carry out such further analysis of relevant information as is specified in the notice;

I can specify a third party.

Mr C.J. TALLENTIRE: I would like to hear further from the member for Cannington.

Mr W.J. JOHNSTON: The minister can continue through interjection.

Mr W.R. Marmion: I'm just repeating myself over and over again. If you are analysing someone's application and they have provided you with the fundamental suitability determinants, as required under the act and regulations et cetera, and you wanted to check it out, you could use proposed section 69C to ask them for further information and, as is the current practice for everything else the department does, specify an independent third party report on any area you have a concern about. That's how they do it.

Mr W.J. JOHNSTON: Is the minister telling me that he is going to choose the specific further consultant?

Mr W.R. Marmion: No, I'm saying the department will, delegated by the minister.

Mr W.J. JOHNSTON: It is the minister's prerogative, so whoever makes the final decision will do so in the minister's name. The minister is saying that he is going to specify, for example, that he is going to use GHD to do the additional —

Mr W.R. Marmion: I'm not saying that at all; I'm saying —

Mr W.J. JOHNSTON: That is the problem here. If the minister is saying that the applicant needs to go away and do more work, then they will still be making the decision about how they get the information to the minister. I do not understand; it would be pretty simple to add a paragraph to proposed section 69C that says that the minister may direct the department to seek additional information and send the bill to the applicant, but it does not say that under that clause. It says that the applicant will do the work. The problem I have is that this is a way of preventing any external consideration of the issues that are brought to the minister by the applicant.

Mr W.R. Marmion: I disagree, because you're actually asking for a third party. That's how auditing works; you have a third party auditor.

Mr W.J. JOHNSTON: Let us take auditors as an example. There is a set of rules about what they are.

Mr W.R. Marmion: This is prescriptive enough without being more prescriptive.

Mr W.J. JOHNSTON: I am talking about the powers of the minister. I do not understand why we are not giving the minister more power. The words are only the words; I did not write them.

Mr W.R. Marmion: Nor did I.

Mr W.J. JOHNSTON: I did not bring them into Parliament, either.

Mr W.R. Marmion: Proposed section 69F gives me the total power.

Mr W.J. JOHNSTON: To say no.

Mr W.R. Marmion: Correct.

Mr W.J. JOHNSTON: We will talk about that in a second. I think this is a fundamentally flawed provision. I indicated earlier that we will not divide on this bill, but I want to clearly flag where things are going to —

Mr W.R. Marmion: Would you like to move an amendment?

Mr W.J. JOHNSTON: No, I am not going to move an amendment, but I am flagging to industry that if there is a change of government, these provisions would clearly change because they are not satisfactory. The minister has made his point and I want to go on and ask another question.

Mr W.R. Marmion: So you'll be amending the commonwealth legislation as well?

Mr W.J. JOHNSTON: I am not in the commonwealth Parliament, minister; I cannot answer for what happens in the commonwealth Parliament and I cannot answer for what happens here either, because I do not have the numbers!

Proposed section 69E(1) states that if the minister is satisfied with the provisions in proposed section 69E(1)(b), "the minister must, by instrument in writing, declare", and then the bill lists the obligations. As long as the minister is satisfied, he must declare that he does not have any discretion if he is satisfied. Proposed section 69F is a refusal because it states that the minister is not required under proposed section 69E to make a declaration. Therefore, the only time he cannot make a declaration is when he is not satisfied. That is right, so if the minister is satisfied then he must by instrument in writing declare.

Mr W.R. Marmion: Yes.

Mr W.J. JOHNSTON: We can see that the applicant is actually in a very strong position, particularly if there is a minister who is very keen to give approval to a project for political reasons. This is the sort of provision that I am sure the industry has argued very strongly in favour of.

Mr W.R. Marmion: By interjection, Madam Acting Speaker.

Mr W.J. JOHNSTON: The minister has 30 seconds and he will be able to be on his feet. I will sit down.

Mr W.R. MARMION: The fundamental risk is whether the formation is confined. That is probably the fundamental thing that would be looked for for approval, and there will be a massive amount of data around that, getting down to the very basics of an application. That would be the thing that we would really be most concerned about. If someone was not convinced that that had been done, they would be quite nervous. However, the process of how a proponent would be injecting is a well-known science and practice now, and we would obviously want world's best practice. It would be assumed that that is what proponents should be doing, and if there was a concern that they were not, proposed section 69C could be used to ask for more information—is it world's best practice and how can that be verified? We would have experts in the Department of Mines and

Petroleum and I would end up getting advice from them about whether I would have to use proposed section 69F to approve or refuse the declaration. I am very comfortable with the way the legislation has been worded.

Mr W.J. JOHNSTON: Sadly, this is a very long clause so I will now ask a question about proposed section 69JA on page 90 of the bill, which defines when a serious situation exists. The reason that we define this is that elsewhere in the legislation the minister has been given extensive powers when a serious situation exists to intervene on the operation to ensure that the interests of the state are protected. For example, if something goes wrong, we obviously want the minister to have those powers. They are defined elsewhere and we do not have to worry about them; we are only worrying about when a serious situation exists. If the proponents inject CO_2 and they actually miss the formation they are looking for, is that a serious situation? I raised this in passing earlier, because that is not defined here. Leaks are referred to in proposed paragraphs (a) and (b) and proposed paragraph (c) refers to a gas behaving differently from what was modelled. Proposed paragraph (d) refers to adverse impacts, and we will talk about proposed paragraph (e) in a second. What happens if the proponents miss the formation they are intending to inject in? Is that a serious situation?

Mr W.R. MARMION: It would be but that could not happen because the department would not have approved the drilling.

Mr W.J. JOHNSTON: Everybody misses occasionally. It is just a fact of life.

Mr W.R. Marmion: How do you miss?

Mr W.J. JOHNSTON: The minister should just ask BP or PPP or whatever it was up in the Timor Sea. Sometimes they intended to go 5 123 metres down and they went 5 083 metres down and missed by 50 metres. Is that a serious situation?

Mr W.R. Marmion: They are drilling?

Mr W.J. JOHNSTON: They drill down to inject and they miss the formation by 50 metres.

Mr W.R. Marmion: You drill first—right?

Mr W.J. JOHNSTON: Yes, and then they inject.

Mr W.R. Marmion: If they have not reached the right spot, they will not be able to inject, will they?

Mr W.J. JOHNSTON: How does the minister know?

Mr W.R. Marmion: You can do directional drilling to within about that much.

Mr W.J. JOHNSTON: But stuff happens. They missed. If they are injecting into the wrong spot, is that a serious situation? If it is, where is it defined? I would have thought it was pretty serious.

Mr W.R. Marmion: Do you want the act to define every single possible serious situation?

Mr W.J. JOHNSTON: No; I just want to know whether it is a serious situation. Proposed section 69JA states —

> For the purposes of this Subdivision, a serious situation exists in relation to an identified GHG storage formation if —

There is a list of things there.

Mr W.R. Marmion: I am just confirming my knowledge of drilling. If you are going to inject, you have already drilled, so you have not injected.

Mr W.J. JOHNSTON: No, but now they are ready to inject.

Mr W.R. Marmion: If you have drilled, you know when you've done the drill that where you are going to inject is in the formation.

Mr W.J. JOHNSTON: What happens if they miss?

Mr W.R. Marmion: They are not going to inject —

Mr W.J. JOHNSTON: They would have got their drilling wrong. Does the minister see what I mean?

Mr W.R. Marmion: You are just being a smart arse.

Mr W.J. JOHNSTON: I am not being a smart arse at all; I am asking a serious question.

Mrs M.H. Roberts: That's not very parliamentary of you. The minister should withdraw that insult.

Mr W.R. Marmion: I withdraw.

They have drilled a hole. They are not injecting. You do not inject until you have the drill hole in place and approved by the department to the work plan put in place. Everything done in mining has a program of works and detail of everything done. This is a two-step process so they can't be injecting in something in the wrong spot because they would not be able to inject because they haven't got the drill in the right spot.

Mr W.J. JOHNSTON: That is right—because they have drilled wrong. I understand why it would happen.

Mr W.R. Marmion: It would not be a serious situation if they just drilled a hole. If they tried to inject into a spot where it was not meant to go, it obviously would be a serious situation.

Mr W.J. JOHNSTON: That is fair enough. It will not happen because it will not happen.

Mr C.J. TALLENTIRE: I refer to proposed section 69H, "Revocation of declaration". I note the circumstances for that revocation. I understand that revocation of a declaration would apply if it was found that a GHG storage formation was not a suitable formation; that is, it was not an eligible GHG storage formation according to the proposed section. Do I have that right? Could the revocation apply only if it was not found to be an eligible storage location?

Mr W.R. Marmion: Yes.

Mr C.J. TALLENTIRE: Does this mean that revocation could not occur for other reasons? For example, I am thinking of the sorts of situations that the member for Murray–Wellington might have in mind such as if there was to be some sort of subdivision of land—that is, extensive urbanisation of the land above the formation. Although the GHG formation is perfectly suitable for the purpose of sequestering the carbon, it might be unpalatable to those people who might want to buy into this new subdivision. There might be a view in government that that declaration should be the subject of a revocation. Does the minister have the power to do that? Can he remove that right for reasons other than the unsuitability of the storage formation?

Mr W.R. MARMION: We are talking about the geological formation. Proposed section 69H is all about the geology. There is a public policy that would be outside the scope of this legislation, which would involve the Minister for Planning or someone else. If we were going to do that, there might be consequences. I am just thinking off the top of my head, but if someone had invested hundreds of millions of dollars and they had a declaration that there is a suitable storage formation and then, using the member's example, the government of the day decided that it did not want it to be used as a storage formation, that would be outside my role as Minister for Mines and Petroleum, and there may be consequences. But proposed section 69H is about revoking the declaration using a set of fundamental suitability determinants that, from a geological point of view, it is an unsuitable formation.

Mr C.J. TALLENTIRE: I thank the minister for that response but it seems odd to me that on the one hand, yes, the minister has the power to issue the title, but on the other hand he cannot revoke it once he has issued it, even though the reasons might be other than technical reasons. They might be similar to the example that I referred to before. Why would it be the case that the minister could not revoke the title for other reasons, given that the minister is the person who has issued it in the first place?

Mr W.R. MARMION: We are not talking about the title; we are talking about just the formation itself. In this case we would have determined that it is a formation, and then for geological reasons, because of new information perhaps, we decided that, no, it is not a suitable formation. That proposed section is simply talking about the formation in force.

Mr M.J. COWPER: I want to go back to the response that the minister gave me about the authority by which the current South West Hub is conducting certain works. The minister commented that the authority lies with the Mining Act. If I were to make an application under the freedom of information process, would I be able to find an application that has been suitably approved for this project or is it just relying on the authority?

Mr W.R. MARMION: The Mining Act allows the collection of geological and geophysical data for anything people want to do. There is a letter from the Geological Survey section of the Department of Mines and Petroleum to allow the collection of geological and geophysical data for the South West Hub.

Mr M.J. COWPER: Just to clarify, there been no application under the Mining Act—is that correct?

Mr W.R. MARMION: The authority is there; it is not an application. Therefore, the authority is in force for the collection of both geological and geophysical data under the Mining Act.

Mr M.J. COWPER: Could the minister please explain to me the difference between mining and the extraction of petroleum and geothermal energy? How is it that the government is applying to graft this legislation to the Petroleum and Geothermal Energy Resources Act, yet it is already using authority under the Mining Act? That being the case, what is the purpose of this bill, if the government already has the authority to do so?

Mr W.R. MARMION: As I said, under the Mining Act we can collect data for seismic surveys.

Mr M.J. COWPER: For the purpose of mining?

Mr W.R. MARMION: No, we can use the Mining Act to gather data. Any geological data is useful for mining. When any drilling is done in Western Australia the data is collected by the Geological Survey of Western Australia. It is of great value to Western Australia. In that particular project, which could turn into a geosequestration project, but it may not, the data being collected is of immense value to Western Australia. Under the Mining Act people who are drilling are required to furnish their drilling logs and cores so that information is available to anyone in Western Australia who may want to invest or take the risk of exploring for minerals. The Mining Act provides the authority for anyone to do exploration, and that is what is happening.

Mr M.J. COWPER: I do not follow the minister in that respect, but we will move on because I have it on the record.

Potentially, this legislation could be used to pump water into the ground. Given the minister was previously Minister for Water, the number one greenhouse gas on the planet is water vapour. Potentially water vapour could be compressed into a liquid and pumped into the ground under this legislation. Yes, or no?

Mr W.R. MARMION: Is the member talking about the Mining Act?

Mr M.J. Cowper: No; this bill.

Mr W.R. MARMION: This bill is about CO_2

Mr M.J. Cowper: No it is about greenhouse gas.

Mr W.R. MARMION: Yes, greenhouse gas.

Mr M.J. Cowper: If we google greenhouse gas, the number one greenhouse gas is water vapour.

Mr W.R. MARMION: The definition of greenhouse gas for the purpose of this bill, is predominantly CO_2 That is what we are talking about here.

Mr M.J. COWPER: Potentially, given water is a greenhouse gas, it could not be pumped into the ground, nor could nitrous oxide, CFCs or whatever the other greenhouse gases are.

Mr W.R. MARMION: The answer is no. The definition on page 6 reads —

> ***Greenhouse gas substance or GHG means*** —
>
> (a) carbon dioxide, whether in a gaseous or liquid state; or
>
> (b) a prescribed greenhouse gas, whether in a gaseous or liquid state; or
>
> (c) a mixture of any or all of the following substances —
>
> (i) carbon dioxide, whether in a gaseous or liquid state;
>
> (ii) one or more prescribed greenhouse gases, whether in a gaseous or liquid state;

Mr M.J. COWPER: I am not sure that that has clarified it; I think the minister has confirmed it.

Mr W.J. JOHNSTON: I probably have a couple more questions on 69JA, but I might skip to proposed section 69JE "Requirements for application" at line 11 on page 96. I refer first to paragraph (1)(b), which reads in part —

> must be accompanied by a written report that sets out —
>
> (i) the applicant's modelling of the behaviour of the greenhouse gas substance injected into the identified GHG storage formation;

Given that the minister only requires the applicant to provide information will they have to provide testing of the model to make sure there is some third party examination of the modelling or will the minister accept their modelling of the behaviour of the GHG?

Mr W.R. MARMION: The detail on what is required for the modelling will be specified in the regulations.

Mr W.J. JOHNSTON: Will that be the case for the issues that are raised in proposed section 69JE(1)(c)? In answering that could the minister advise whether they will have to specify any potential problems they believe exist in the behaviour of the GHG once injected? Will the minister specify what they have to report on? I would be relaxed about the idea there will be additional requirements specified in regulations, as the minister advised with proposed section 69JE(2)(b). That would be very helpful. If that is the case will the minister ask them what they expect to be the likely problems with their expectations for the behaviour of the GHG when injected?

Mr W.R. MARMION: Yes, they will have to provide a full risk assessment of the project, including any risk areas.

Mr W.J. Johnston: Will that be in the regulations?

Mr W.R. MARMION: Yes, and proposed subsection (1)(c) covers some of that.

Mr W.J. JOHNSTON: I refer to proposed section 69JJ, "Content of pre-certificate notice". Proposed subsection (1)(b) reads —

> set out an estimate of the total costs and expenses of carrying out the programme; and

That is the program that is set out in (1)(a). Proposed subsection (2) states —

> The amount of the security is to equal the estimate referred to in subsection (1)(b).

That is the security they have to provide to the government. Proposed section 69JQ(3) states —

> The total of the costs and expenses recoverable subsection (2) must not exceed estimate set out in the pre-certificate notice.

The applicant sets out the maximum liability under the act, so it appears that the state's recovery of cost is limited to the estimate set down in the pre-certificate notice, and the amount of the security which is provided at proposed section 69JJ(2) is equal to the estimate, and the estimate is provided by the applicant. It seems a strange arrangement that the applicant gets to choose the maximum liability under the arrangement.

Mr W.R. Marmion: Hang on, no; you have to make sure you're not talking at cross-purposes here.

Mr W.J. JOHNSTON: If I am talking at cross-purposes, please correct me—I had a light bulb moment earlier on.

Mr W.R. Marmion: We are jumping so many clauses.

Mr W.J. JOHNSTON: Yes, I know. Yes, we are, minister, but that is because that is the way the bill has been presented to us. The minister cannot complain about that because I did not write the bill, I am only trying to read it. So, if the minister can show me where I might be at cross-purposes; the minister has done it already once tonight. The minister pointed out to me that I had missed the fact that one provision was about land and one was a provision about the sea. If I am wrong again, please tell me. Because it does appear that the applicant gets to choose the amount of the maximum liability. I am not going to go on right now, but during the third reading debate we will talk about this issue. Am I right? If I am not right —

Mr W.R. MARMION: I am actually seeing that proposed section 69JJ is about setting out the estimated total costs of carrying out the program of monitoring, and I am seeing that the member has jumped way up to proposed section 69JQ, which refers to the recovery of the state's costs and expenses. I am just trying to relate the two different things, one being an estimate of the total cost of expenses of carrying out the monitoring of it after the pre-certificate notice, and this proposed section 69JQ—the member has jumped way ahead—is all about recovery of the state's costs and expenses. I am just trying to see how the member is relating the two.

Mr W.J. Johnston: Remember, minister, that we are actually talking about the one clause because we are talking about the clause of the bill. We are proposing a new section 69JQ.

Mr W.R. MARMION: Yes, but this is the whole operation of it.

Mr W.J. Johnston: Yes, I know. Proposed 69JQ(3) reads —

> The total of the costs and expenses recoverable under subsection (2) —

Mr W.R. MARMION: Of proposed section 69JQ.

Mr W.J. Johnston: Yes —

> must not exceed the estimate set out in the pre-certificate notice.

Proposed section 69JJ sets out the content of the pre-certificate notice. So, if proposed section 69JQ refers to a pre-certificate notice, the contents of which are specified by proposed section 69JJ, and proposed section 69JJ reads that the estimate of the total cost of carrying out the program is at paragraph (b), and the amount of the security is not to exceed that —

Mr W.R. MARMION: Let us say, for instance, that that could be $10 million.

Mr W.J. Johnston: Yes.

Mr W.R. MARMION: So, if proposed section 69JJ(b) comes up with a figure of $10 million —

Mr W.J. Johnston: And proposed subsection (2) reads —

> The amount of the security is to equal the estimate referred to in subsection (1)(b).

Mr W.R. MARMION: Yes.

Mr W.J. Johnston: And then proposed section 69JQ(3) reads —

> The total of the costs and expenses recoverable under subsection (2) must not exceed the estimate set out in the pre-certificate notice.

Mr W.R. MARMION: Well, if the total is $10 million —

Mr W.J. Johnston: Yes, but it could be a pittance.

Mr W.R. MARMION: No, that is the total cost and expenses of carrying out the monitoring program; verifying that there is monitoring of the formation. The $10 million is the total cost of doing the whole project, and if something goes wrong why would more than the total cost of doing the project be needed?

Mr W.J. Johnston: Who knows, because something went wrong? It could need $50 million; it could need $500 million.

Mr W.R. MARMION: The explanation is that in order to, I guess, minimise the risk, an estimate must be provided. They will have to be pretty careful in terms of coming up with the estimate in that, as the member says, because of proposed section 69JQ that cannot be exceeded. So in terms of coming up with an estimate, they have to make sure they have, sort of, a good estimate. Why would that be done? It might be done that so that the proponent has some indication of the quantum of the risk in case the estimate is $1 000 million instead of $10 million.

Mr W.J. JOHNSTON: It does seem odd, but I will not labour the point. I know that my colleague has some further questions. There are always questions about "permanent".

I refer to proposed section 69JR, "Closure assurance period". What is the minister's understanding of the term "significant risk"? Proposed paragraph (c) specifies —

> on a day (the ***decision day***) that is at least 15 years after the issue of the site closing certificate, the Minister is satisfied that —

It then lists the five conditions. It goes on to state —

> the Minister may, by instrument in writing, declare that the period —
>
> (d) beginning at the end of the cessation day; and
>
> (e) ending at the end of the decision day,
>
> is the closure assurance period in relation to the formation for the purposes of this Act.

The term "significant risk" has been used three times in this proposed section in proposed subparagraphs (ii), (iii) and (iv). What does the minister envisage by the use of the term "significant risk"? I know that this is the sort of issue that the member for Murray–Wellington and the member for Bunbury have raised. What does the minister foresee as a significant risk?

Mr W.R. MARMION: It is sort of defined. I know the member will probably come back on this, but proposed subparagraph (ii) states —

> there is no significant risk that a greenhouse gas substance injected into the formation will have a significant adverse impact on the geotechnical integrity of the whole or a part of a geological formation or geological structure; …

The term "significant risk" is as defined—that is, that the greenhouse gas substance injected into the formation will not have any significant adverse impact on the geotechnical integrity of the whole or a part of that formation. That is the definition of "significant risk" in proposed subparagraph (ii). Proposed subparagraph (iii) states —

> there is no significant risk that a greenhouse gas substance injected into the formation will have a significant adverse impact on the environment; …

That is a pretty broad statement. The next one is a fairly important one. Proposed subparagraph (iv) states —

> there is no significant risk that a greenhouse gas substance injected into the formation will have a significant adverse impact on human health or safety; …

The bill guides the reader through the meaning of the term "significant risk" in each of those situations.

Mr W.J. JOHNSTON: The problem I have is not with what the significant risk relates to, which is clearly outlined in the words after that term. What is the threshold for a significant risk as opposed to any other type of risk? That is really the question I am asking. I am happy to hear an answer to that question. What makes it a

significant risk as opposed to any risk? It is like the difference between beyond a reasonable doubt and on the balance of probabilities. Is that what we are saying? Is the position being put that on the balance of probabilities the risk is not there or is it that there is a risk but it is not a huge risk?

Mr W.R. MARMION: The position being put gets back to the 99.9 per cent over 1 000 years risk, which is international standards. That is the risk they are looking at. I point out that this is similar wording to the commonwealth legislation.

Mr C.J. TALLENTIRE: I refer to proposed section 69JR, "Closure assurance period", and the use of the site closing certificate. This will flow into proposed section 69JS as well. I understand that a site closing certificate could be called a pending certificate because it means that the site is not yet closed. During that time, we are determining what the level of liability is. I assume that is based on the value of the tonnage of carbon sequestered; am I right in that?

Mr W.R. MARMION: I do not follow the question. Can I get further clarification on what liability the member is talking about?

Mr C.J. TALLENTIRE: The way I read this is that the site closing certificate is issued on the basis that works need to take place to ensure that carbon being sequestered in this geological formation is solid and will not leak out. It is open to the minister to determine how long that can be, but the minister can take at least 15 years to determine that the geological formation is solid. During that time there is the possibility of a leakage. There is potential that someone will have to pick up the cost of that leakage. I understand that cost would be the tonnes of CO_2 stored multiplied by the value of a tonne of carbon when that leakage might happen.

Mr W.R. MARMION: The liability is what damage it would cause. If there is an issue and it causes a detrimental effect to a property or whatever, a liability is incurred. It could be anything, depending on the damage. The liability could not be defined until it was known what it was. The liability has nothing to do with how much gas is stored in the formation.

Mr C.J. TALLENTIRE: We need to be really clear about this. The damage that would be caused from a leak would be the damage to Australia's greenhouse gas emission commitments. I think it will be a tough job, but let us hope we can calculate the extent of the leakage. Let us say it is 100 million tonnes. Those are the sorts of amounts we are talking about—100 million tonnes. We would have to look on the world market at the time of the leakage to find out what the value per tonne is—and there we would have our liability figure. I am struggling to understand how the minister would be able to anticipate that liability when in all likelihood the value would be determined by a floating market price. I wonder if included in this legislation should be some reference to futures markets that already exist, but a futures market that would enable someone—it could be the state or it could be the proponent—to hedge against fluctuations in the market price of carbon should a leakage occur.

Mr W.R. MARMION: Any liability, however the member wants to define it, is still the responsibility of the proponent. The proponent has whatever liability judged. Indeed, if it obtains a significant financial benefit out of sequestering CO_2 into the formation and some of that CO_2 escapes, it has to rectify that situation. It is up to the proponents. Otherwise they will not get a closure certificate.

Mr M.J. COWPER: Minister, is any work being done around the cost of capturing carbon, say, from Griffin Coal, compressing it, transmitting it and injecting?

The SPEAKER: Member, what section are you referring to?

Mr M.J. COWPER: I am referring to this very one about the indemnity against the liability if it escapes. What I am getting at is the cost of the CO_2 is such that there will be some sort of liability cost. We really need the real cost of the CO_2 inasmuch as to capture it, compress it, make it into a liquid form, transmit it, store it, pump it and retain it underground will be a cost. There will also be energy use to do that. I am keen to know whether any modelling has been done on the potential cost of doing such a thing and pumping it in a pipeline some 100 kilometres or so.

Mr W.R. MARMION: There very well could be. This bill is not about capturing CO_2. This bill is just about setting up a framework. As I have said before, this is about a formation under the ground suitable for storing CO_2. All the financial liability around that will be up to the proponent and the market of the day will determine whether it is viable or not. It has nothing to do with determining the cost of capturing it. That is up to the proponent, whoever it is.

Mr M.J. COWPER: I think the minister may have missed where I am going. There has to be a cost of putting it underground. There has to be a figure put around it. It is not just done for 3c a tonne. There would be real costs to put it underground. If there is a liability to rectify that situation, there would also be a cost. How does the minister arrive at what the liability cost would be? This is referring to this particular section of this clause.

Mr W.R. MARMION: The member has mixed up two things. Obviously, everything has a cost. This has nothing to do with the state government. It is the proponent. If the proponent wants to store CO_2 in a formation, they will do the economic sums and if it does not work out—indeed, if it is only a $3 saving per tonne—they will not do it. My understanding is it has to be around $80 a tonne for it to be worthwhile.

Mr M.J. Cowper: That is what I am trying to get at.

Mr W.R. MARMION: That has nothing to do with this bill. This is only about putting up a framework. If the private sector so chooses—we will not be dictating—someone might want to do it for $3. A benevolent person may want to do it because they do not like CO_2 and they might just want to put it in the ground. That is their choice. It would be a very costly exercise. This bill is not about the economics of it. It is about having the framework in place so that if someone wants to put CO_2 in the ground, they put it in safely and it will not escape and cause damage to the environment. This is what this bill is about. After this bill goes through, very detailed regulations will be put in place and anyone who puts up a project will have to have it assessed by the Environmental Protection Authority to ensure there will be no damage to the environment. We do not want all the risks that could possibly happen. We do not want any aquifers to be destroyed. We do not want pristine agricultural land to be destroyed. If there was a risk of that, the EPA would not approve it and my department probably would not approve it either. All these risk mitigation measures need to be in place, including the fact that the formation is totally confined so that there is 99.9 per cent chance that over 1 000 years there will not be any leaks.

Clause put and passed.

Debate adjourned, on motion by **Mr J.H.D. Day (Leader of the House)**.

House adjourned at 10.45 pm