# ECONOMICS AND INDUSTRY STANDING COMMITTEE

# INQUIRY INTO THE ECONOMIC IMPLICATIONS OF FLOATING LIQUEFIED NATURAL GAS OPERATIONS

**Please note:** this transcript of evidence has been made available by the Committee for the purpose of assisting those who might be in the process of preparing a submission in aid of the Committee's inquiry into the economic implications of floating liquefied natural gas operations.

TRANSCRIPT OF EVIDENCE TAKEN AT PERTH FRIDAY, 28 JUNE 2013

> SESSION ONE CLOSED SESSION

> > **Members**

Mr I.C. Blayney(Chair)
Mr F.M. Logan (Deputy Chair)
Mr P.C. Tinley
Mr J. Norberger
Mr V.A. Catania

## Hearing commenced at 9.12 am

NINKOV, MR NENAD Member, DomGas Alliance, examined:

SHAW, MR MICHAEL Member, DomGas Alliance, examined:

The CHAIR: On behalf of the Economics and Industry Standing Committee I thank you for your attendance this morning. The purpose of today's session is for the committee to receive a briefing in aid of its inquiry into the economic implications of floating liquefied natural gas operations from representatives of Domgas Alliance. I take this opportunity to introduce myself, Ian Blayney; I am the member for Geraldton and Chair of the committee. Other members of the committee today are Jan Norberger, who is the member for Joondalup, and Hon Fran Logan, who is member for Cockburn.

The Economics and Industry Standing Committee is a committee of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect given to proceedings in the house itself. This is a closed briefing and Hansard will be making a transcript of the proceedings. If you refer to any documents during your evidence, it would assist Hansard if you could provide the full title for the record. Before we begin I need to ask you a series of preliminary questions. Have you completed the "Details of Witness" form?

The Witnesses: Yes.

**The CHAIR**: Do you understand the notes at the bottom of the form about giving evidence to a parliamentary committee?

The Witnesses: Yes.

**The CHAIR**: Did you receive and read the information for witnesses briefing sheet provided in advance of today's hearing?

The Witnesses: Yes.

**The CHAIR:** Do you have any questions in relation to being a witness at today's hearing?

The Witnesses: No.

**The CHAIR**: I invite you to begin your briefing.

Mr Shaw: Thank you. I would just like to make a short statement. The Domgas Alliance represents gas users and infrastructure investors in Western Australia. Our members include Alcoa, Alinta, the Dampier to Bunbury pipeline, ERM Power, Goldfields, Horizon, NuGen Power, Synergy and Verve. The members of Domgas Alliance represent about 80 per cent of domestic gas used in Western Australia. The alliance was formed due to members' concerns about domestic gas supplies. We aim to promote security, affordability and diversity of gas supply to industry and households in Western Australia. The Domgas Alliance believes that a number of measures need to be taken to support these aims. Firstly, we believe that we need to ensure that there are sufficient reserves of gas resources set aside to meet the current and future needs of the community and local industry. Secondly, we believe that a stringent review of retention lease is necessary to ensure that producers do not warehouse gas fields that could be developed for the domestic market. Greater transparency is needed to promote opportunities and third party participation. Thirdly, we believe in eliminating anti-competitive joint selling arrangements, in which gas producers combined together to set price

and terms under which they contract gas for local users. Fourthly, we believe that we need to have incentives and/or ways at promoting new sources of gas, in particular unconventional gas. The Domgas Alliance believes that by 2020 we will need approximately 700 terajoules a day of new gas supplies to meet a modest growth of around two and a half per cent per annum, but also to replace the dwindling supplies of domestic gas from the north west shelf project. Despite a combination of gas reservation from new LNG developments and new domestically focused supplies, it is likely that we will not meet this target. The consequence will likely be a slowdown in state growth and the real likelihood that local industry and consumers will continue to pay some of the highest prices for gas in any exporting country in the world, and also the real possibility of supply shortfalls. Floating LNG, which effectively means that oil and gas companies could bypass the state-based reservation policy, means that supplies that might have otherwise been made available to the domestic market will no longer be available. As a result, the Alliance believes that floating LNG represents the greatest long-term threat to energy security and the economic wellbeing of the Western Australian economy, which is fundamentally being driven by the use of competitively priced gas supplies.

**The CHAIR**: Is it okay if I ask you what industries you are from? This is obviously not a full-time job for you.

**Mr Shaw**: No, that is right. I am the energy development manager for Alcoa Australia. We have three refineries and two bauxite mines.

**The CHAIR**: So you are actually the biggest domestic user, are you not?

**Mr Shaw**: We are. We use around about 25 per cent of the state's gas supply.

**Mr Ninkov**: I am the general manager at Alinta, and we use about 150, so we use about 15 per cent of the state's gas supply.

The CHAIR: Okay.

**Mr Ninkov**: So between us we are about 40 per cent of the market.

**Mr Shaw**: The right people to talk to!

**Mr Ninkov**: To be honest, we are most probably the ones with the longest history, too. No one, most probably, has been purchasing gas for as long as I have. My experience goes back to 1984 on the original north west shelf contracts and the reservation policy in those. Alcoa was one of the founding members of getting gas to WA. If you look at it, the state's wealth has basically proceeded down the state's energy infrastructure patterns. Without that gas, we would not be where we are today, and we would not be talking here today.

Mr F.M. LOGAN: Do you want to talk a little about the original contracts with Woodside and touch on the history of why we ended up with two dollar a gigajoule gas and why we are running out.

**The CHAIR**: You have come into talk as representatives of the Domgas Alliance, so if we ask you questions that refer back to your individual employment, if you like, and you are not comfortable with answering the question, of course that is entirely up to you. Certainly, I would assume that Alcoa would put a submission into our inquiry.

[9.20 am]

**Mr Ninkov**: To be honest I do not think our views are going to be that different privately. My own views, having been born in Western Australia and been here 55 years, have not changed really in 55 years, so I am not actually changing my views today in this meeting. In 1980 when the original north west shelf contract was signed, we were selling 70 terajoules a day in Western Australia. That was a total market, Alcoa was buying most of it, and then there were a couple of other customers who did the rest. We have grown from 70 terajoules a day, and 30 years later we are selling 1 000 terajoules a day, so you can see the size of the growth. At that time, and without getting into an

argument over the north west shelf contract and the take or pay clauses in there, clearly here what the government had decided at that time was, there was a major need for gas because there was going to be no development in Western Australia without gas, and gas from a number of points of view, from a reliability point of view, from a security point of view, or an affordability point of view, if you did not have those, the state was not going to grow, and we would have remained, in my view, an agricultural society based on the wheatbelt of Western Australia. What the state did at that stage was effectively did a reservation policy in the north west shelf project. Without going into great detail, and we can get the contracts and things like that, there were a number of priorities of gas that the state decided to do. There was the number one priority, which was the reservation for Western Australia, and at that time it was 414 terajoules per day. That had the first priority and we allocated a tranche of gas for Western Australia and said, "The overwhelming importance is that there is gas for Western Australia and for industrial development in Australia, because we will be hamstrung if we do not have a quantity of gas that takes priority over everything else going on". We then allocated a fair chunk of priority—at that stage, the north west shelf project was only six million tonnes of LNG a year; that was the plan at that stage—there was a priority two gas. So we said that after the state priority, there was the priority to export gas as LNG. Then we said there was a third priority, which was optional. I think it was 289 terajoules per day, and we said that that again would be prioritised for use in Western Australia ahead of anything else. And fourth, they could export what they wanted. Clearly, and you will see it in the state agreement now, they have laid out what the volumes of gas, but the importance is, and I think this is where people miss the point, the investors in the north west shelf clearly knew at the time there was gas going to be reserved for Western Australia; it was not unknown. They were able to bank the project knowing that there was gas going to be required to be reserved for Western Australia. There were no ifs and buts; the contract specified —

#### **The CHAIR**: That is what got it up?

**Mr Ninkov**: Correct, but not only did they know the 414, but they knew that there was priority one and priority three gas reserved for Western Australia, and there was always a question mark about whether we would ever use it. It is all okay for us to say now that it is 1 000 TJs per day and it is all going great and it is going to grow. At that time it was not so sure. Remember, we were 70 TJs, we had taken an obligation for 414, and we then said we wanted another 283 for Western Australia. We were saying that the market was going to grow from 70 to somewhere near 400, and that is what we are asking then, but they did not know and they were not sure when they were banking that project whether they would or would not be able to sell that gas, but they were able to make an investment decision based on that knowledge. My view is that reservation policy does not really affect them; they will make a decision either way, whether it is good or bad. You make it in the circumstances, whatever government sets the parameters for deciding that. What we have been able to do over a period of time over this last 30 years is, if you have the basic structure, Alcoa at that time did not use as much gas as it does now, but it took about 170, I think, originally, from north west shelf. They were able to grow and other industries were able to be attracted. That whole goldfields gas transmission line would not have happened without Varanus Island and all the gas that came off through the Varanus Island; let us ignore some of the issues around Varanus, but it then encouraged a whole industry and a whole series of industrial development. Even today, when you sit there and think about it, there are a whole series of people that should be using gas even today, and they do not for various reasons, but if liquid prices are at \$35 a gigajoule, why are they still using liquids? If gas was affordable, we should be converting a whole series of other people in Western Australia to using gas rather than importing great quantities of oil into Australia. So there is still vast amounts of market that have not been converted, and if you think long-term and strategic, why are our railroads the way they are? Should we not be thinking about electrification for the long-term? There are vast opportunities if gas were available at the right price to convert still even more industry in Western Australia and make us even more efficient and competitive at the end of the day. I will stop.

Mr F.M. LOGAN: Mike, can you explain to the committee the issue of pricing—I am not asking about your contracts—but about the issue of pricing of gas in Western Australia compared, say, with the eastern states or compared with what is now happening in the United States? Can you give us an indication of gas pricing and supply going forward, say, to 2020 here in Western Australia?

Mr Shaw: Sure, I can talk to that. In terms of gas pricing, it is fair to say that there is no global gas price as such; it is still very much regionally based as to where pricing is, so circumstances in Western Australia will dictate to some degree pricing in Western Australia and the same applies on the east coast. I think the fundamental thing that is changing is that typically what we have had is long-term contracts. Those contracts are rolling off. That is happening both here and it is also happening on the east coast. It is all happening at a time where there is large amounts of development in terms of export LNG and so producers now have a choice: they can either put it into the export LNG project, or they can put it into the domestic market, and that has created tension around price, given the ability to command higher prices, and so certainly prices here in Western Australia have risen significantly for new contracts.

#### Mr F.M. LOGAN: Do you want to just give us some —

**Mr Shaw**: Certainly in terms of the parliamentary inquiry that was done 18 months or so ago around pricing, I think the price ranges that they came up with were probably pretty accurate and pretty representative of where prices are heading.

## **Mr F.M. LOGAN**: And supply?

**Mr Shaw**: Supply, I guess, again, we are concerned. Certainly between now and 2020 there is significant roll-off from the north west shelf project, despite the fact that there has been, and it is encouraging that we have had new domestic gas come into the market; that probably really will not keep up with the amount of decline that is occurring on the north west shelf, so without projects like Wheatstone and Gorgon which, through the reservation policy, will contribute gas, we would be in real strife as a state. A lot of the state's energy future or natural gas future is highly dependent on those projects so things relating to delays in those projects or cost blowouts or whatever might make them less competitive, should be of concern for us, and I think people underestimate how reliant the state's becoming on those projects actually going ahead.

Mr Ninkov: Just to add to what Mike said, if I were sitting in the government's shoes, I would be concerned about two issues. One is a short-term issue and the other is a long-term issue. The shortterm issue is that we are in a crossover point. As we move through the balance of the decade, the biggest single variable will be whether the North West Shelf will sell any gas in Western Australia. I suspect that as you go along, you will find that is the most serious question in the short term. If you think about it in broad terms, if we are using 1 000 terajoules a day, 600 terajoules is coming from the North West Shelf, which is 60 per cent. If they decide to do nothing, you will need to find 600 terajoules a day, in broad terms. Some of my numbers might be wrong, but they will not be too far wrong. The first question is: what will you do if the North West Shelf decides to produce nothing? The second question is: even though you have fields like Macedon, Devil's Creek and Gorgon, the longer term policy issue—in my view this is the more serious one for the state—is post-2020. The question the state is going to have to ask itself is: where is the gas going to come from post-2020? It is okay to draw a graph of processing capacity—I saw, for example, that the Grattan Institute released a report last week—but if you do not have the gas, it does not matter a cracker how much processing capacity you have. You can have as much processing capacity as you like, but if there is no gas in Western Australia, it does not matter how much processing capacity you have. The state needs to focus on who is going to supply 1 000 terajoules a day from 2020, if that is what you think. As Mike said, if we say conservatively that there is two and a half per cent growth a year if you can attract people, who will supply the gas if we take out the 600 terajoules? Where does it come from? I think the big questions for the state are: Who replaces North West Shelf; what happens post-2020; where will the gas come from; who is committed post-2020?

[9.30 am]

Mr J. NORBERGER: The oil and gas markets are a bit new to me and a lot of new terms are being used, including TCF; million tonnes per annum is sometimes used, and you are using terajoules. You said that we would need 1 000 terajoules. I know that the potential of the Canning Basin is slightly off the topic of FLNG, but it has been spoken about in relation to the domestic gas supply. They are talking about 288 TCF, potentially. That is how much there is. It just comes down to how easy it is to extract. If you look at that, how big an operation would it be to supply 1 000 terajoules a day? If the North West Shelf is able to produce 600 and we were trying to replicate it—for example, do you know how much Gorgon and Wheatstone anticipate supplying in comparison?

**Mr Shaw**: The expectation is that the Gorgon project will happen in two tranches of 150 terajoules a day each, so that is 300 from Gorgon, and the Wheatstone project is approximately 200 terajoules a day.

**Mr J. NORBERGER**: So we are still short?

Mr Shaw: Yes.

Mr F.M. LOGAN: And they are big projects. They could easily supply a lot more.

Mr Shaw: Absolutely.

Mr Ninkov: Gorgon has committed around 13.5 million tonnes of LNG and Wheatstone is about

seven million tonnes of LNG.

Mr J. NORBERGER: For domestic gas?

**Mr Ninkov**: No, that is all for export. Then you also have Pluto, which I think is about four million tonnes, and all that is LNG. All that gas is going offshore at the present time. I think I have these numbers about right. We use about 1 000 terajoules of domestic gas a day. The North West Shelf produces about 600 terajoules of that but it produces about 2 500 terajoules a day for LNG. That is the proportions you are dealing with. We are probably 20 per cent of their production even now.

**Mr J. NORBERGER**: From a layman's perspective, if we are not able to supply our own domestic gas, obviously our only option would be to import it, which would be a pretty sad state of affairs. If you have one of these massive LNG tankers rock up and offload, how much is in one of them? How many terajoules?

Mr Ninkov: Let me just say something. If we do not have gas in WA, multiple issues arise, one of which is our industrial development. Another is that if you believe in environmental things—some people do and some people do not—my guess is that there will be a lot of fuel switching and we will go back to where we were in the 1970s; we will use a lot more oil and a lot more coal because there will be no other alternative. That is where we will go. The industries that can remain competitive and want to remain here will have no choice but to switch fuels. LNG is not that easy at the end of the day. You have to liquefy it, compress it and cool it down and you also need receiving facilities. LNG is not necessarily the ideal option for us. It would require major changes in the way we think about infrastructure in this state to go down the LNG path. It is not a simple matter to switch to LNG.

**Mr J. NORBERGER**: I appreciate that. Because I am new to understanding the measurements, I am trying to get something I can use as a measuring stick. If you had an entire shipload of LNG and you regasified it, how much would that equate to?

Mr Shaw: I do not know.

Mr J. NORBERGER: I am not suggesting that is a viable option; I am just trying to formulate a picture. If we do not get this right, do we want one of these ships rocking up every day, every week or every month, depending on what the answer is, which is a silly option anyway, as you said,

because it seems silly that we are exporting it and then buying it back. For me, it was just a matter of trying to get my head around what 1 000 terajoules looks like.

Mr Ninkov: Let me take one minute of your time.

Mr J. NORBERGER: Please.

**Mr Ninkov**: One thousand terajoules a day is equivalent to 1 million gigajoules a day. The average person's house uses 16 gigajoules a year, and we are buying 1 million a day.

Mr J. NORBERGER: And you used to represent 40 per cent of that.

Mr Ninkov: Correct.

**The CHAIR**: For the companies that are sitting down doing their figures on projects, how attractive in relative terms is FLNG? Does its attractiveness go up a bit purely because it gets them out of the domestic reservation policy?

Mr Shaw: I would have thought that the decision-making process they would go through would be fairly complex. There would be a number of factors. I would have thought that the reservation policy, to be perfectly honest, would be fairly low on that list. At the end of the day, we are not asking producers to put gas into the domestic market at a loss. We would still have an expectation that they would earn a reasonable rate of return. From that perspective, it should not put them off putting it into the domestic market. There are probably other factors. One factor that they have cited themselves is the high cost of building the onshore facilities. That is probably one of the bigger factors.

**Mr Ninkov**: Let me put in my two tuppence worth. My former minister will most probably tell you that I always put in my two tuppence worth!

Mr F.M. LOGAN: It is worth it though!

Mr Ninkov: One of the other things I think the committee needs to think about broadly is that in the old days there was only basically the North West Shelf, and there is quite a lot of processing capacity in the North West Shelf. Let us assume that goes to zero because they do not have reserves. As part of the reservation policy, it has not been just a reservation policy for gas; the companies have also built processing facilities. Now we have 200 terajoules of processing at Macedon and Devil's Creek, and we have 360 terajoules a day of processing capacity at Varanus. One of the things I think the committee most probably needs to think about is whether companies need to put more money into processing capacity or whether they can be more optimised. Is it very expensive if the processing facilities are already there and they can be optimised? Okay, you might have to build a pipeline from Prelude to the North West Shelf, but if the North West Shelf does not want to use its domestic gas processing facilities, is there a way of optimising the use of those facilities so that they do not go to waste, but they are there and available and they can be available for other people? It is a critical piece of state infrastructure. Yes, I know it is owned by the North West Shelf and that it belongs to them, but it is also an equally important piece of infrastructure for the state, which in a lot of ways paid for it through the underwriting of the North West Shelf agreements. Can we make better use of all that processing capacity to get a better outcome for the state?

**The CHAIR**: This has been going on for a while. I think Woodside is out looking for more gas for the North West Shelf.

**Mr Ninkov**: Do not forget that the North West Shelf and Woodside are synonymous but are actually two different entities. The North West Shelf is made up of six parties, depending on whether you are talking about the domestic or LNG project. Pluto, for example, is 90 per cent owned by Woodside with some other parties. Obviously what they want to do is a consortium decision. That is where you get the international players like Shell, BP and BHP, who have to jointly decide what they want to do in the best interests of all their companies.

**The CHAIR**: What is the economic life of the original North West Shelf?

**Mr Ninkov**: The first gas was brought to shore in 1984 and they are still producing domestic gas. The major contracts are still going out to 2020. LNG obviously goes out for a long time after that. They have contracts well after then. All of the contracts, bar a couple that I know of, are finishing around 2020. The two longest contracts are out to 2020.

**Mr F.M. LOGAN**: Those contracts are critical, particularly for Alcoa.

[9.40 am]

Mr Shaw: Absolutely. Today we do not have any contracts for gas beyond 2020. Putting my Alcoa hat on, that is why we have looked at how we can secure gas ourselves for our operations. It is not just us; it is other members of the alliance. ERM is also out there. Pleasingly, I guess, just recently I opened the new facility at Gingin, but that represents only three per cent of Alcoa's requirements. That will finish before 2020. There are things that we can do, but they will not solve all the problems.

**Mr F.M. LOGAN**: What you have just described to the committee shows just how dire and critical the supply of domestic gas is for Alcoa. The very reason Alcoa switched to gas in the first place was on the cost basis, and that still remains. That placed Alcoa Western Australia in a highly competitive position internationally; is that correct?

Mr Shaw: It did. It also fostered the continued growth of the business. If you look at the original facility that was built in the 1960s—our Kwinana refinery—it is the oldest of our facilities and was opened using fuel oil. Then we had the oil price shock of the 70s and obviously gas was found in the North West Shelf and that was made available in the 80s. At that time, we switched the Kwinana refinery and the early phases of the Pinjarra refineries to gas. Since then, Pinjarra has grown and Wagerup has also come along. All of that has been on the back of new gas supplies, whether it be from the North West Shelf or Varanus Island.

**The CHAIR**: I assume that you have been keeping an eye on what is happening in the Canning Basin. Are you optimistic enough to bring any of that into your projections yet?

Mr Shaw: No. I think it would be fair to say that if you look at the experience of shale gas in the US, it has taken around 20 years for that to happen. A lot of that has been technology driven, but it is also about infrastructure. They have access to so much more infrastructure. For example, drill rigs. At any one time they have something like 1 700 drill rigs operating, or at least available, in the US. I think Australia has fewer than 10 and Western Australia has two. Once the gas is found, it can be readily reticulated into a gas transmission network because they have very large transmission networks relatively close to where the gas is found, so they can monetise the gas very quickly. Canning Basin in WA has probably a couple of drill rigs and it is between 800 and 1 000 kilometres away from the nearest infrastructure, so there are going to be some challenges. Unconventional gas associated with fracture stimulation is certainly sensitive in the community and it depends also on how the industry manages that. It can be managed, but there is quite a lot of risk with the Canning Basin and all new unconventional gas sources, but you have to start somewhere. WA is in a position to potentially have access to that gas, but it will not happen overnight; it is a long process.

**The CHAIR**: So, if you were putting that into your assumptions, we would be talking more like 2030 rather than 2020; would that be right?

**Mr Shaw**: We would hope it is part of the mix by 2020. That is probably the optimistic scenario, but it is likely in the 2020 to 2030 time frame. Having said that, Buru obviously did their recent state agreement and they certainly will be working very hard to try to have a commitment by, I think, the end of 2015. They are very optimistic as well, and they are closer to it than we are. If that is the time line they think they can work towards, we hope they are right.

**Mr F.M. LOGAN**: Mike has just outlined the critical nature of the supply of gas—not even touching on the issue of cost—going forward beyond 2020 for Alcoa. What is it like for the rest of your customers in the growth in the state?

**Mr Ninkov**: We have nothing past 2020 either, so we are in the same position as Mike. We have got nothing committed past 2020 at this stage.

Mr F.M. LOGAN: So, come 2020, it is —

**Mr Ninkov**: At the moment that is where we are at.

**Mr F.M. LOGAN**: And if nothing happens between now and 2020—let us just take a worst-case scenario—there is no more gas.

Mr Ninkov: To be honest, we do not want to get to that situation. I am sure that Mike would say the same thing. We talk to all the gas producers, whether it be Santos, Apache, North West Shelf, Gorgon or Wheatstone. There is only a discrete number to talk to. That is the other issue. We also know who the major buyers are. We talk to each other basically daily. You have them on speed dial on your phone. There is no need to screen the number at the end of the day, which is part of the issue that Mike talked about right at the start. It is so discrete, but the issue is finding people who have gas post-2020. It is not that easy. It is most probably just as important to us. You want to make sure you get the best deal for the people of WA. You do not want to just do a lousy deal; you want to make sure you get the best deal for the people of WA. No-one wants to go around with the increases that have been had over the last few years. It is not a great thing to do.

Mr F.M. LOGAN: The picture that has just been painted is fairly bleak. Even with the optimism that you are showing, it is still fairly bleak. If you look at the scenario that we are facing, Wheatstone and Gorgon are the only two onshore LNG facilities under construction at the moment, and likely to be under construction between now and 2020. Every other upstream gas project that has been announced is all FLNG, including the recent indication from Woodside about Browse. FLNG has made it very clear that they are not providing any domestic gas. That makes it even more dire for the state. What issues do you believe we, as a committee, should raise with the upstream providers, particularly those considering FLNG, about the economy of WA and industrial users going forward?

Mr Shaw: I think that, fundamentally, gas in the main is probably held under retention leases. One of the conditions of a retention lease is that it needs at some point to be demonstrated that it is commercially viable. What is commercially viable to me and what is commercially viable to you might be two quite different things, but it should not necessarily mean that it has to be the option that provides the maximum profit. There should be a commercial viability threshold. My sense is that when you look at the economics that people have put out there as to Browse coming onshore versus floating LNG, even Browse onshore, to some investors, could still be quite attractive and meet their commercial viability thresholds. It is just that floating LNG gives potentially an even better rate of return. Alcoa is a big company; we will always chase the opportunities where we can maximise profits. We understand that, but absent some form of threshold, I guess that is an argument. So the question I think I would be posing to the producers is: could you still make money basically out of doing James Price Point? I think the answer probably is yes.

**The CHAIR**: It is 11 per cent versus 13 per cent.

**Mr Shaw**: Yes, and two per cent is probably a lot of money to some people, but to some people 11 per cent is still quite an acceptable rate of return on a project.

**The CHAIR**: Have you any idea about the federal government's attitude towards retention, because obviously a lot of those new leases are in federal waters; they are not in state waters?

[9.50 am]

Mr Shaw: To be honest, I think it would be fair to say that what has perhaps happened over time is that the federal government has recognised that there perhaps is an issue around companies potentially using retention leases to warehouse gas. So what they have done is put pressure on producers to develop. Unfortunately, that has probably had an unintended consequence, which is to develop LNG a lot quicker and not necessarily provide any domestic gas. I guess that is why we think having the reservation policy is so important, because the two working in tandem could provide beneficial outcomes. But, as you have seen in Queensland, obviously with very large amounts of LNG development over there but absent a reservation policy, none of that new capacity is likely to go into the domestic market. WA has demonstrated with the reservation policy that we can secure additional gas, and perhaps some of those projects that Wheatstone and Gorgon have developed in the time frame they have developed them is because they have been concerned about their retention leases. On the east coast, it is a different picture. With over there being absent a reservation, none of that gas is going to find its way into the domestic market.

**Mr Ninkov**: Can I just mention a matter of amusement? I do not know whether you know—you most probably do not; it probably just shows how old I am—that the first gas discovered on the North West Shelf in 1971 was at Scott Reef. Forty years later, these guys have still got it and have done nothing with it.

The CHAIR: Is that so?

**Mr Ninkov**: The original biggest gas discovery was at Scott Reef in the Browse project in 1971. I do not know how long you think is reasonable that these guys have it. I assume 40 years, but maybe they will get to 50 years and then they will decide what they are going to do with it! I know there are a number of fields in Browse, but the original Scott Reef was found in 1971, so they have been sitting on it for 40 years. I sit down now, being so old, and look at this and go, "So they don't think 11 per cent is good enough 40 years later." How long do you let them have it?

**The CHAIR**: It is a bit like using tariffs to develop infant industries. We had some infant industries and tariffs at Federation and 100 years later they still had their tariffs.

Mr Ninkov: Yes. The industry still had not grown up 100 years later.

**The CHAIR**: They are the oldest infants in the world.

**Mr Ninkov**: Correct. Mike and I talk about it. I agree with Mike; when you sit down there, you think, "What is reasonable and what is unreasonable here?"

**The CHAIR:** Scott Reef would be a state one, would it not?

Mr Ninkov: Part of it is, but I think somewhere around 15 per cent of Browse is in state waters.

**The CHAIR**: That is the figure we have been told.

**Mr Ninkov**: I only know from the Department of Mines and Petroleum.

**The CHAIR**: Does that give the state the ace, if you like? Does that give us effective power over that gas deposit?

**Mr Shaw**: The retention leases in a situation like that, as I understand it, are jointly administered between the state and federal governments. I do not know what that means from a practical perspective, but certainly it gives the state a seat at the table in that discussion. It is just a question of how strongly the state believes it can enforce its rights around perhaps letting another company have a look at that opportunity.

**Mr F.M. LOGAN**: I think it raises the issue of directional drilling.

Can I raise a bit of a controversial issue with you? It will not be so controversial for you, Nenad, because you have experienced this once before and are now in a different light. All around the world where there are major gas deposits and oil, there are only five countries in the world that have a similar access arrangement to Australia—that is effectively an open market where you do have

things like retention leases and companies can bid and effectively own the gas after it comes out of the wellhead whilst paying the royalty for the gas; they own the gas and it becomes the property of the upstream company. Every other country in the world does not allow that, apart from another four similar to Australia. Given the problems we have with retention leases, and possibly we do not see eye to eye with the federal government, regardless of which party it is, on the issue of reservation policies and what we do with retention leases, would you see an opportunity for a state-based gas company that gains access to offshore oil? The reason I refer to you, Nenad, is that you have already worked for one.

Mr Shaw: For me, it is just about risk profile, to be honest. I recognise that oil and gas exploration is expensive. It does have a different risk profile attached to it. There is probably some merit around economies of scale. Certainly, smaller developments are difficult to get off the ground. You often need the economies of scale to get the projects, and that is why certainly the DomGas Alliance is not anti-LNG; in fact, we see LNG as being fundamental in a lot of cases to unlocking certain sources of supply that then have the critical mass that allows domestic gas to sit off the back of these very large projects. To the extent that you could aggregate a large amount of demand that could underwrite a new project, there is probably some merit in that. Whether the government has a role in that, I am not sure. I think historically the biggest barrier to doing that is that, whilst it is okay to have joint marketing of gas as we understand it, it is difficult from an ACCC perspective for the buyers to all come together and jointly purchase gas. That would have to be an issue that would need to be dealt with in order to make that happen, and perhaps that is where government could have a role.

**Mr Ninkov**: Hypothetically, Mike and I could go out and put out a contract and tender for 400 TJs a day, which would underwrite a field, but I would suspect we would have ACCC issues as soon as Mike and I put out a tender. If we did that, they would suddenly be going, "What's this?"

Mr F.M. LOGAN: They do not seem to have the same problem for the people who are selling it.

**Mr Ninkov**: That is right; Gorgon and the North West Shelf have got their authorisations into, I think, 2015. I do not know what will happen at that stage.

**Mr F.M. LOGAN**: You may or may not be able to answer this question. Technically, do you believe it is possible for an FLNG carrier to be able to supply gas into a domestic market, because, remember, it is built for LNG, not for domestic gas?

**Mr Shaw**: I do not know. I would have thought maybe a more practical way to get around that would be to have a concept of reserve swapping—so, having an established domestic gas facility that could make that gas available domestically while at the same time swapping LNG cargoes as a replacement. That might be a more practical way to deal with that. I do not know enough about FLNG technology, to be perfectly honest, to say whether it would or would not, but just intuitively, I think maybe that would be a better way to do it than to build the infrastructure.

**The CHAIR**: The economics of it compared with a pipeline would be madness.

We will draw to a close now. I would like to thank you for your attendance before the committee today. The transcript of this briefing will be forwarded to you for correction of minor errors. Any such corrections must be made and the transcript returned within 10 days from the date of the letter attached to the transcript. If the transcript is not returned within this period, it will be deemed to be correct. New material cannot be added via these corrections, and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence. Thanks a lot.

#### Hearing concluded at 9.59 am