ECONOMICS AND INDUSTRY STANDING COMMITTEE

INQUIRY INTO DOMESTIC GAS PRICES

TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
MONDAY, 22 NOVEMBER 2010

SESSION TWO

Members

Dr M.D. Nahan (Chairman)
Mr W.J. Johnston (Deputy Chairman)
Mr M.P. Murray
Mrs L.M. Harvey
Mr J.E. McGrath

Hearing commenced at 1.45 pm

WOOD, MR BRUCE JAMES
Managing Director, AWE Ltd, examined:

The CHAIRMAN: Thanks for your attendance today. This committee hearing is a proceeding of Parliament and warrants the same respect that proceedings in the house itself demand. Even though you are not required to give evidence on oath, any deliberate misleading of the committee may be regarded as a contempt of Parliament. Before we go into a few questions, have you completed the "Details of Witness" form?

Mr Wood: I have.

The CHAIRMAN: Do you understand the notes at the bottom of the form?

Mr Wood: I do.

The CHAIRMAN: Did you receive and read the information for witnesses briefing sheet regarding giving evidence before parliamentary committees?

Mr Wood: I did.

The CHAIRMAN: Do you have any questions about giving evidence?

Mr Wood: No, not at all.

The CHAIRMAN: Thank you for your appearance today. Do you wish to make an opening statement before we ask questions? I note that you have a handout.

Mr Wood: Yes. I brought along some briefing information on shale gas that I thought I might take a few themes from and then, of course, it might stimulate the conversation. Unfortunately, the first page is turned around. I did want to make the point that elsewhere in the industry, and principally in North America, the industry has been through a cycle that has included conventional resources onshore, ultimately offshore, deep water and so forth. Then there has been a cycle of unconventional resources. That started in coal bed methane, coal seam methane, and moved into shale gas. We all know what has happened in Australia in the conventional industry and how successful Western Australia in particular has been. Then North America led the way in coal seam methane, and eastern Australia in particular has been very successful in coal seam methane. North America has now led the way again in shale gas. It is AWE's view that the advances that North America has made in shale gas could well be applicable to certain parts of Australia. We have made progress ourselves in identifying where that could be and how those technologies could be brought into Australia and how they could be applied. I must underline that everything I have said faces geological risk. The resources may not be good enough, the resources may not work, but we believe at this stage that we have enough incentive to go forward.

My first slide, which is upside down—I apologise—really says that AWE has taken a small position in North America. One of the great advantages of that is that we are learning American technology. We are seeking to pick up this new American technology and see how we can apply it in Australia. On the next page, the simple technology of shale gas is to drill horizontal wells. You will drill down to depths of typically 10 000 feet in North America, or 3 500 metres, and there you will turn and drill horizontally and you will drill horizontally for 1 500 hundred metres and, in the United States at the moment, out as far as 3 000 metres and further. Then they stage frac to stimulate those wells. They go along the well with their particular technologies and they select a piece of that horizontal well bore and they pump very high pressure water into it and break the rock. That is called one stage of a fracture stimulation. In a typical horizontal well, they will do five, 10 or 15 stages of

fraccing and they will break up the rock. All of that is new applications of technology that have been very successful in North America. With all that in mind, we thought that we needed to look further in Australia. For us, Perth basin shone up as an obvious candidate. It had so many of the attributes of the successful shales of North America—I will not bore you with them; there are a few details there—in terms of depth, thickness, organic content, shale content, fracability and so forth. We liked what we looked at. Shale gas techniques are higher cost techniques than typical onshore techniques and consequently require a premium gas market. We were particularly attracted to Western Australia. It is a large, vibrant gas market. It is split across electricity, aluminium, industry, mining, and domestic. It is split across a number of major players. There is the opportunity to sell significant quantities of gas into that market as we go forward into the next decade. I am sure that many people in this room understand better than I do what that supply demand gap is, but for us at the moment it is just enough to say that there is a forthcoming supply demand gap and we would like to try to supply into it.

Where are we in the Perth basin? We have a large amount of existing infrastructure and, in particular, we have access to the Parmelia pipeline. It is very important. If we get small quantities of gas to start with growing into large quantities, we can put that gas through and around our existing production infrastructure, and we can put it into the Parmelia pipeline so that infrastructure is in place that allows rapid commercialisation. We believe we have a large resource. There are three things I would like you to think about when you think of shale gas. We need to identify that there is a gas resource in place. We made a statement recently about the amount of gas in place, and it means no more than that. It means that we have identified rock that contains gas. Whether or not we can get that gas out is the big question. But "gas in place" simply means that there is gas there. We have identified a large resource already, and we believe we can get a larger resource.

[1.51 pm]

So the first test is: do you have gas in place? The second test: can you make that gas mobile? Can you find a way of moving that gas in the rock? That is the next stage we are up to; trying to find ways to get fracture stimulation so that that gas will begin to move. The third is the economics test: can we get it to flow fast enough and cheap enough to make it economic? So we really have got those three fundamental steps: do we have gas in place; is it mobile; and can it be economic? We are just moving from stage 1 and planning stage 2. In stage 1 we have already identified 13 to 20 TCF gas in place, a large number, and now we have got to take it through step 2 and step 3 to see if we can bring that into the market.

I think what I really wanted to open and say is that in Western Australia, we have chosen the Perth basin because we like the geology. We have started on step 1. We have already identified a large resource. We are working out ways to bring in North American experience and technology to allow us to exploit the resource, the infrastructure and the market opportunity. We remain very confident that we will be able to take our project through those stages, but I have got to underline that we are people who are used to dealing with geological risk, and the Earth's crust is a very hard master and we might be wrong, but we have had some initial indications so far to keep us moving along the track.

The CHAIRMAN: Thank you very much. This committee is aware of the shale; in fact, the deputy chair and I attended a major conference in Dallas, Texas.

Mr Wood: Excellent, and you landed in Dallas airport, and it itself is a gas field.

The CHAIRMAN: Yes, that is right; in fact, we visited the gas fields all around the airport and saw some of them in the city itself. It is a very interesting phenomenon. We are aware also how it has changed—not only the North American but indeed the world gas market, and the bureau of mines and petroleum indicated in their evidence that this was an important potential. The real risk is that the US knew a lot more about those shales than I think we do here.

Mr Wood: In general, that is true across the country.

The CHAIRMAN: They drill a lot of holes. We were told that when they were looking for oil they often look first at the shale, so they knew a lot about it.

Mr Wood: They knew a lot about it, yes.

The CHAIRMAN: And secondly, they have a lot of resources to throw at things—fraccing and drilling and all those sorts of things.

Mr Wood: Exactly.

The CHAIRMAN: We have heard evidence that we have adequate rigs that will do the job and two fraccing instruments, so we have been told that there are a lot of risks associated in Western Australia—knowledge of geology to infrastructure, and right now the price looks good but getting it to the market can sometimes be difficult.

Mr Wood: I would say that I would list these things differently. We have geological risk; that is always the case. North Perth basin is quite a mature oil and gas province. As part of our work, we studied up to 60 existing boreholes in the north Perth basin that we and others had drilled there, so we had logs, we had cuttings and we had extensive seismic, so the actual positioning and the understanding of the shale trends we are quite advanced in. We have a large amount of pre-existing information. We have cored only two new wells. We have actually got cores now in two, and that is where certainly we have a lack of information but we are moving forward. But just as the North American industry has sought to understand their shales, as to where oil can be found in sandstones, we have done exactly the same thing in the north Perth Basin. We have got a million acres up there and, as I said, we have 50 existing well bores in it. So we field that one—what we call understanding the gross rock volume, understanding where the shale is and how thick it is—the gross rock volume. We feel we have a very good tie of that. Understanding the nature of the shale, yes, we are running a catch-up battle, where what we have got to do now is core and specifically look at the shale, which we did not do in the traditional industry before. So we have a catch-up there.

I would say that the lack of immediate drilling rigs and lack of fracture stimulation equipment is not a large problem we face. That is a scale problem, which is fixable. I think the bigger problem we face is getting the money and the certainty to go forth and to do the exploration and the appraisal. I bring the committee's attention to Queensland's coal seam methane industry. If I look back over the last 10 years, the story of the Queensland coal seam methane industry was that when it started—do not hold me to the exactness of the number—but it probably cost twice as much to drill a coal seam methane well in Queensland as it did in North America. They had tens of rigs working; they had large activities. The Queensland coal seam industry was in its very first stages and the costs were high. When you are not mobilised, when you do not have a lot of activity, your costs will be higher than the North American standard. If you roll forward 10 years, Queensland now has established a coal seam methane industry and will know what British Gas have done and the commitment to LNG plant, and the whole thing is working. The average cost in the Bowen Basin today—I am making a supposition without data—is probably very little different to the average cost of North America. So, you see, as the industry develops, you asymptotically approach the North American costs. I think we can say that will occur if we can get an active industry working here, and between where we are now and having an active industry, the two things we have got to get across—we have got to get investment and commitment to appraisal, and we have got to get that done, and then we have also got to have the right taxation and market conditions for it to happen. Yes, when we are doing the appraisal and exploration it will cost us considerably more then if we did that in the United States—probably twice as high. But if we then say, "We have now established a resource and we want to develop it", the rigs and the frac spreads will come, the people will come, and it is all quite organisable. Now, in Australia in general it is getting harder and harder. We all know about labour rates. But the difference which applies today is a difference driven by lack of activity. If we

get the success, the activity will come and the rest will follow, as it did in Queensland. So if you asked me to say, "What is the one risk you face?" the biggest risk we face is geological; that what we are hoping for in the rock quality is not right.

[2.00 pm]

The CHAIRMAN: Right now you have a lot of old wells; that is mainly for the old Woodada field.

Mr Wood: A number including Woodada field, but it was in the Woodada field that we deepened one. I think we have seven or eight wells in the Woodada field, and we deepened one of those into the shale.

The CHAIRMAN: Did you drill another one by itself into the shale outside Woodada?

Mr Wood: No, we have not. But in a joint venture operated by Origin, where we are 50 per cent partner, we were drilling another well for a conventional target and we cored the Kockatea shale in that well. Our next step will be to start drilling purpose shale wells for drilling and fracture stimulation.

The CHAIRMAN: So you go out and you step-down drill the horizontal section?

Mr Wood: There is a technical debate at the moment as to whether we need a vertical first, but, yes, drill and fracture stimulators will be the next logical part on our path to commercialisation.

The CHAIRMAN: You are close to the Gatton pipeline infrastructure, so if you get small off takes you can —

Mr Wood: We can process and put that very easily into the Parmelia pipeline, in particular.

The CHAIRMAN: Up there, you do not have the landholder problems they have in Texas and places in the US, and in Queensland of course.

Mr Wood: No, the AWE, through ARC, has been established in the North Perth basin for long time. Firstly, Texas, of course, is individual mineral rights. Here, I do not need to explain what it is. That makes a big difference. Secondly, the land holdings are generally extensive holdings; and, thirdly, we have been operating in that area for 20 years. We have a permanent contractor in relationships and in building relationships with community up there. I have personally been there, I think, three times to address community groups on various issues they have had. So between fishermen, which we deal with in the offshore waters through to landholders, we believe we have good relationships and they work both ways.

The CHAIRMAN: One of the issues is, what price you think you need to hit to make this thing go or to raise the money.

Mr Wood: To paint a bit of background first; obviously what we are doing is trying to estimate chance of success and costs going forward and pitch that against where the market is. What I can say is that the current American practice in US dollars, we will call it, gigajoule—almost a gigajoule—the American cost base is in that $3 to $5 a gigajoule for their cost base. It is actually between even a slightly broader range than that. But within that range the American industry can operate and then, of course, their sale price requires cost of money and so forth on top of that. It would be our goal, if we were successful, to drive our costs into the lower end of that American range. We think those costs are doable. These are costs, not taking account cost of money but simply the cost of development, and with those sorts of costs I note that the American industry expands when the price is in the $5 to $7 range. Obviously, there has to be a gap between costs and price to account for cost of money and so forth. The particular issue in the United States at the moment is that there is expanding activity and a falling gas price. I think most industry observers would say that a lot of the shale gas in the United States is being sold below cost of production, and that is associated with their unique land ownership arrangements. They have something called drill-or-drop. If you do not drill your lease within a certain number of years, then you lose the rights to it;

and if you do drill the well and find gas, then you sell that gas for whatever you can get for it. Certainly, North American gas prices do seem to be pushing down over the past 12 months, and a lot of observers that I read suggest that is being pushed down under the long-run cost of production. But that is a very long story to say that my observation in the United States is that shale gas works as an ongoing long-term industry in that $5 to $7 or $5 to $9 range.

The CHAIRMAN: Chesapeake is reported as being one of the largest.

Mr Wood: Chesapeake is one of the very large holders, and they have some very good properties.

The CHAIRMAN: At this conference, they said they were going to shift from Barnett shale to a wetter area.

Mr Wood: Yes, high condensate.

The CHAIRMAN: Are your areas wet?

Mr Wood: In the United States our properties are in Eagle Ford, which is a very wet area—high condensate and high oil rates, and that just helps your economics in these times of low prices.

The CHAIRMAN: What about up north in the Perth basin?

Mr Wood: Perth basin is dry. That is certainly very dry, from the shale we have been looking at at the moment.

Mr W.J. JOHNSTON: As I understand it, again, like the Chairman, I attended that conference at which they explained the interest in shales boomed when the price of the Henry hub got to $12 or $14; now it is down as you said.

Mr Wood: Four dollars to $5.

Mr W.J. JOHNSTON: Do you need high a gas price to make your project in the Perth basin work?

Mr Wood: All indications are based on what is happening in North America. Against the current background, we see the shale gas industry should be profitable in that $6 to $9 range—I think I have opened up a little bit. In that $6 to $9 range, world shale gas industries tend to be profitable —

Mr W.J. JOHNSTON: You are saying supply prices at $6 to $9?

Mr Wood: — supplied into the market at that. I am simply basing it on what has happened in North America. I guess I take weight from the fact that the coal seam methane industry has done a similar thing.

The CHAIRMAN: I have couple of things—one is, what do you think about the policy of reservation on the large offshore projects?

Mr Wood: I think it has a few effects. The first one is it is a volume reservation at a price to be set by the market. Those prices have to be negotiated between a buyer and a seller, and consequently I wonder about the difference between having and not having that reservation. That is because if the buyers are prepared to pay the value of gas, then the gas will be supplied. I think it is a clear policy. It is not a policy that affects my company. We do not have offshore Western Australian production. Our focus for our project is the domestic Western Australian market. I do not know how it is going to apply being only a volume reservation. Secondly, it adds a degree of uncertainty to other suppliers. We ourselves wonder what will happen if a large reservation of gas is forced into the market when the market cannot take it. Will that affect the rest of our chances of selling our gas? I think there is that follow on that we worry about. But, at the end of the day, we deal with risks, and the biggest risk we face at the moment is geological, and we think that those volumes of gas coming from the offshore in order to be economic will require prices that are more likely to be above our threshold than below.

The CHAIRMAN: What is your timing as to when you know? Given your current plan, when do you think you will have a good grasp of the geology and fracability?

Mr Wood: We have been working two years on it so far; the next 12 months will be very important. I think the answer to your question as to when we would know how long would it take us to be in a position to be confident of being able to produce significant quantities of gas commercially, I would say within that two to three years. Unconventional is a long process.

The CHAIRMAN: Where do you get your money from?

Mr Wood: We are using our shareholders' funds. At the moment, shareholders and joint venture partners' funds. Certainly, as we go forward from here, be looking at bringing in other partners into the project.

The CHAIRMAN: What is your investment? What risk capital are you outlaying for your Perth basin investment?

Mr Wood: I think at the moment we spent, last year, around—I am trying to add it up quickly in my mind—I will say $5 million to $7 million last year, and that was an estimate. Our gross costs will now start to rise from here forward. We would expect that to get to the stage of being confident of being able to produce commercially significant volumes of gas and using North American experience, we would think a total exposure in that $75 million to $150 million gross to get to that stage.

[2.10 pm]

Mr W.J. JOHNSTON: Talking of the North American experience, not so much in Texas, but, as we heard, in other parts in America, there is a lot of controversy regarding fraccing fluids.

Mr Wood: There is.

Mr W.J. JOHNSTON: Do you have any comment to make?

Mr Wood: I think there has been a lot of controversy. Firstly, fraccing in general is a rather intrusive activity to have in highly developed areas. While it is happening there is noise, equipment; you put 20 000, 40 000, 50 000 horsepower of equipment on site, large engines and so forth. Water use has become a very significant issue in a lot of areas: the amount of water being used to pump into the ground. The additives to that water have been causing some people concern. Clearly, the North American experience has been that people are concerned about it.

I think we, in the Perth Basin, have a number of saving graces on our side. One is that we are in a largely rural, grazing and farming area. We can do it in ways that are less disruptive to large populations. As an aside, might I say that I have seen the plans in Texas where people are drilling in cities, right in the Dallas – Fort Worth Airport and so forth. I think our depths help us. I think one of the problems that people have been worried about is the contamination of near-surface aquifers. Our depths—we are now looking at going to 2 500 and 3 000 metres. That is well below anywhere that people are using those aquifers commercially. The industry has learnt an awful lot about contamination from introduced chemicals. I think the industry is getting better and better at understanding that. The last one I might say is that Perth Basin is one of the few shale gas opportunities in the world where access to seawater is possible. Seawater has never been used as a fraccing fluid but it might be technically possible to even source our seawater for use and hence reduce our water usage on the local aquifers. I think it is an issue that requires close management. It is an issue the industry is getting an awful lot better about. I believe it is an industry where we, in the north Perth Basin, have some natural advantages.

The CHAIRMAN: You say you have proven up —

Mr Wood: Thirteen TCF of gas contained in the shale.

The CHAIRMAN: You will have to dig quite a few holes. I mean, one of the things with this shale gas is that you have to drill a lot of holes.

Mr Wood: You have to drill a lot of holes and you have to drill them on an ongoing basis. You do not just drill and then go into production. You have an ongoing program of drilling and fraccing, because you have very high decline rates.

The CHAIRMAN: As with the coal seam methane, the property right technicalities are a bit different because you have to drill a lot of holes and they have to be interconnected with small feeder pipelines, arterials and what not. You intrude on the current land users. In Western Australia, at least in your area, do you have to have policy changes to facilitate this?

Mr Wood: We have surface wells at the moment and flow lines and flow line arrangements with landowners. A few comments about it: one is that at the end of the day, the operators have to deal with the landowners. You have to get relationships working and deal with them. We do that at the moment and we would expect to continue to do that. There are things you can do to limit the activities you have on the landowners by drilling on pads. Instead of having a whole series of single wells, you put the wells on one pad and then deviate the wells out from them. That is a well-known technique that we use all the time. Those pad developments do significantly limit the activity of the industry. I mean, I have worked as an engineer in my early days on pad developments in Holland. We have been doing those things for years. Pad developments certainly cut down the intrusive nature, but I think the current system is working and it is working well. The best way to make the systems work is close relationships between the landowners and the operators. If you can get those relationships working properly, and we believe we have, then they work into the longer term.

The CHAIRMAN: One of the things that we have heard is that in Texas the landowners share in some of the loot.

Mr Wood: Share? They certainly do. Generally speaking, they hold royalties which equate to something like 25 per vent of revenue.

The CHAIRMAN: Revenue, wow.

Mr Wood: It is wellhead value and wellhead value is not very different from revenue. More than 20 per cent of revenue—not absolutely the landholder but the royalty holder. There are cases where the landowner has sold off the royalty, but yes, they have made some very, very rich people.

The CHAIRMAN: Are you going to try to do the same thing here?

Mr Wood: Our system of resource ownership is crown and, as you all know, there has been a great debate occurring politically about the introduction of PRRT onshore. This project, if we are successful, we will now come under the new mining tax.

The CHAIRMAN: The new mining tax has imposed the offshore regime on onshore.

Mr Wood: Onshore. The offshore regime will basically be coming onshore.

The CHAIRMAN: How do you like that?

Mr Wood: Any time there is a taxation or royalty increase, it has to work into the economics. The negative is that there has been an additional cost imposed on us and that additional cost, obviously, at the end of the day has to come out of the consumer.

The CHAIRMAN: It is a profit base so you get all your tax —

Mr Wood: That is my second point. The second point about this particular tax is that before you pay it, you have already achieved a threshold rate of return. It is where that threshold rate of return is ultimately pitched that will be the very important thing.

The CHAIRMAN: Under the offshore regime, you have some chance to offset exploration on other sites.

Mr Wood: You do.

The CHAIRMAN: In fact, I think that some of it is transferable or saleable to other parties.

Mr Wood: It is within that capture area. It is within a project capture, effectively. There are certain ring-fencing rules that ring-fence your expenditure within a capture area.

The CHAIRMAN: Is it the area, not the firm?

Mr Wood: Yes, it is project-based and then you deduct that. Once your return on capital gets above certain levels, you then pay the PRRT.

Mr W.J. JOHNSTON: I imagine you have consultants and other people who make sure you are across the top of all those issues.

Mr Wood: Once that legislation on the new tax is in place, we will understand it, we will pull that apart to make sure we understand the mechanisms and then we will run that in all our economic runs to make sure we are taking it into account. The previous rules in Western Australia were a wellhead royalty. For this type of activity we had the expectation for a half royalty, but now that gets credited back to us and we get charged the other one on top.

The CHAIRMAN: I think the state did reduce the royalty rate or proposed it, at least. I am not sure where the bill is.

Mr Wood: That is right. That was coming through. From 10 to five, I believe, but now we have the new tax that comes in over and above a rate of return to be fixed, effectively.

Mr W.J. JOHNSTON: A five per cent royalty compared to the people in the Barnett Shale paying 25 percent royalty to the landowner.

Mr Wood: That is obviously a major advantage.

Mr W.J. JOHNSTON: Plus they also pay—what do they call it—a severance tax to the state.

Mr Wood: They pay severance tax to the state.

Mr W.J. JOHNSTON: Which is seven per cent or something in Texas.

Mr Wood: Then they pay their company income tax.

Mr W.J. JOHNSTON: It is a much more generous regime —

[2.20 pm]

Mr Wood: Certainly it was much more generous, and that was one of the things that we were seeking to offset—the additional costs we were going to face.

The CHAIRMAN: But the challenge there, at least the 25 per cent royalty for the landowner encourages the landowner to help; to be a partner on the project.

Mr Wood: It certainly has, yes.

The CHAIRMAN: That is how you have wells located next to houses and parks and everything.

Mr Wood: Yes. The only other thing I would add is that it currently is around 25 per cent. At the end of the day it is a negotiation and they vary between, I think, as low as five per cent, 10 per cent, and as high as 28 per cent. I just picked 25 per cent as being around about where it sits.

Mr W.J. JOHNSTON: In terms of the gas that comes off the shale, does it have to be processed to get it into the pipeline?

Mr Wood: Look, basically it is a high methane gas that requires small processing. Clearly, there would be some forms of processing that we are used to doing, but it is not a complex system.

The CHAIRMAN: What about the Canning basin; did you look at that?

Mr Wood: We have looked all around. We do not hold acreage in the Canning basin, although we do have a small shareholding in a company that does. But, no, we focused on Perth in particular because we liked it geologically a lot more; it is better located to the matter and has better infrastructure, but at the end of the day we like the geology most.

The CHAIRMAN: Is there any shale prospect south of Perth?

Mr Wood: We have currently identified the north Perth basin as being the one, and it has also, obviously, been the area that has generated the traditional industry, so that is a starting point to tell you something.

The CHAIRMAN: There are a lot more holes up there.

Mr Wood: A lot more holes, but that is where the oil and gas has been generated so the shales are actually generating in that area. That is a good thing to start with.

The CHAIRMAN: Has AWE benefited directly from the pre-competitive seismic data provided by the Department of Mines and Petroleum as part of the department's exploration incentive program?

Mr Wood: In the last number of years we have not had extensive exploration holdings in WA—offshore is where I am thinking. We are a partner in some north Perth basin offshore leases. I do not believe that is applied in those areas. My summary of that is that I do not believe so.

The CHAIRMAN: What other areas is AWE involved?

Mr Wood: New Zealand and Australia are the prime areas of focus; we have an offshore production vessel in New Zealand that has been a core asset of ours that we operate. We have investments in production operated by Origin and Santos in the Bass basin and in Otway basin in Victoria and Tasmania, and we have our onshore and offshore Perth basin activities. In addition to that, we are seeking to explore more broadly and we seek to explore areas in Western Australia from our office here in Perth, and we have exploration holdings in Indonesia and Yemen.

The CHAIRMAN: What in Indonesia?

Mr Wood: We have, I believe, five offshore exploration permits in east Java, we are primarily focused on the east Java gas market—offshore gas development for east Java.

The CHAIRMAN: Is that next to the large ExxonMobil?

Mr Wood: The big ExxonMobil one is on shore—Cepu. Cepu is an onshore field, but it is the same basin.

The CHAIRMAN: That has gone nowhere for years.

Mr Wood: It is not going fast, though I do read that there are agreed plans now.

The CHAIRMAN: I will read the closing statement, but just before I do, thanks—we all wish you luck with your investments.

Mr Wood: Thank you very much.

The CHAIRMAN: Thanks for your evidence today; a transcript of this hearing will be forwarded to you for correction of minor errors. Please make these corrections and return the transcript within 10 workings days of the date of cover letter. If the transcript is not returned then I it will assumed to be correct. No new material can be added via these corrections. If you want to add any additional information just provide a supplementary submission. Thanks very much.

Hearing concluded at 2.25 pm