

**ECONOMICS AND INDUSTRY
STANDING COMMITTEE**

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

**TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
MONDAY, 10 FEBRUARY 2014**

Members

**Mr I.C. Blayney(Chair)
Mr F.M. Logan (Deputy Chair)
Mr P.C. Tinley
Mr J. Norberger
Mr R.S. Love**

Hearing commenced at 10.46 am**Ms KARENE WALTON****Professionals Australia, examined:****Mr ERIK ALDER LOCKE****Professionals Australia, examined:**

The CHAIR: On behalf of the Economics and Industry Standing Committee I would like to thank you for your appearance here before us today. The purpose of this hearing is to assist this committee in gathering evidence for its inquiry into the economic implications of FLNG. You have been provided with a copy of the committee's specific terms of reference. At this stage I would like to introduce myself and the other members of the committee present today. Hon Fran Logan, Deputy Chair, Jan Norberger, Peter Tinley and Shane Love. The Economics and Industry Standing Committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect given to the proceedings in the house itself. Even though the committee is not asking witnesses to provide evidence on oath or affirmation, it is important that you understand that any deliberate misleading of the committee may be regarded as a contempt of Parliament. This is a public hearing and Hansard is making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it will assist Hansard if you provide the full title for the record.

Before we proceed to the inquiry's specific questions we have for you today, I need to ask you the following. Have you completed the details of witnesses form?

Mr Locke: Yes.

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

Mr Locke: Yes.

The CHAIR: Did you receive and read the information for witnesses sheet provided with the "Details of Witness" form today?

Mr Locke: Yes.

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

Mr Locke: No.

The CHAIR: Do you have a statement to make to the committee before we start?

Mr Locke: We welcome the work of this committee; we think it is very important. I should say at the outset I am Western Australian. This debate has gone on in public discourse in Western Australia about leveraging natural resources since my involvement in political life in the early 80s. There have been innumerable reports and studies about local content and getting engineering work for Western Australian firms from LNG projects, which would amount to potentially billions of work for local firms. Dr West in 2011 said of course that the government should focus on FEED or pre-FEED and try to secure these locally, and that WA firms were well placed to compete in that space. He also stated that we needed to focus on supply of engineers and allied professionals; that is, from the assessment of—I will hand that over rather than read it out—FEED at two to three per cent of project expenditure as a relatively small project cost but it is critical and can lead to other local work. Regardless, that is \$5 billion worth of work that we are missing out on in Western Australia with multipliers amounting to many more millions. We have had the local industry

participation framework, which put forward a full, fair and reasonable opportunity for local firms to access work on resource projects and local content reports. One of the local content reports in 2013 said the government should liaise with the federal government to become an international engineering and design hub. We could not agree more. This was a key recommendation of our report to government, which remains unresponded to to date, understanding, of course, there has been a state election in the meantime—sorry, a federal election in the meantime.

We have worked closely with the Western Australian government, in particular, the previous minister, Mr O'Brien, but the facts are that little has improved in Western Australia and I think FLNG is likely to make the situation worse for local content. The opportunity to maximise the benefit Western Australia gains from its natural resources is already and rapidly slipping. Figures released by the Department of Foreign Affairs and Trade show a near doubling in the importation of engineering services from \$1.2 billion to \$2.3 billion and a five-year growth trend of 42.5 per cent. At the same time there has been a collapse in demand for engineers and that is most acute in Western Australia. We have recommended some concrete measures that would result in more local work and a greater benefit for the Western Australian economy. What I would like to say, as a Western Australian with some parochialism, is that I would like to see high-skilled, high-wage jobs continue in this state for many years to come beyond the resources boom. Engineering is one of those professions that can be done here for work anywhere in the world. It is also a high-skilled, high-wage job that links to allied trades. If you are looking for a future for the state, I think engineering is a place that you could well focus for a long dividend for Western Australia.

Mr F.M. LOGAN: Thank you, Mr Locke, and thank you very much for appearing today. Erik, you referred to the 2013 Engineers Australia "Report to the Western Australian government on local engineering issues and policy". I believe that, effectively, Professionals Australia was encouraged to develop that report for government. Do you want to give a very short summary of the report?

Mr Locke: Are you saying that I am verbose?

Mr F.M. LOGAN: No, Erik. Can you give us a quick, short summary of what it found and what you want from that report? It was presented to the current Western Australian government. What do you want from the Western Australian government as a result of that report?

Mr Locke: I want some action. I will briefly go through the summary of recommendations. I think that is the quickest way to deal with this. The first recommendation is that at the point of state agreements with resource companies, they give commitments that the structure and size of contracts do not directly or indirectly preclude the involvement of local engineering firms. At the moment contracts are structured in such a way that are very large, and advantage multinational firms with huge capacities. Pre-FEED could be broken out; FEED could be broken out et cetera. I should say that I am not the author of this; I did have a hand in it. I am not an LNG engineer either, I am a public policy person but I will go through this. All major service contracts and state agreement acts must contain a requirement for workforce skills development plans. This is about a long-lasting high-skilled workforce in Western Australia. And that the Western Australian government works with the commonwealth government to make sure all the training offers are explained to resource companies at that stage so that you can have a national workforce. We have a national workforce development fund, for example, so it need not be a company commitment solely.

Registration of engineers: this is an important thing that has been on the agenda of the Western Australian government for some time as it goes to the built form. This is an important and very practical way to firewall engineering work in Western Australia. Require engineers to be registered. Queensland has a scheme. You should seriously examine it. It is practical; it can be low cost and because it is a scheme that is co-regulatory, it is not an extra layer of regulation for the government, you basically outsource the regulation to people who are assessment entities, which is what they do in Queensland. We advocated that the Western Australian Government works with industry and the Federal Government to provide financial assistance and tax breaks to help Western Australian based

engineering firms; the Western Australian government work with industry to simplify the regulatory and approval system through greater collaboration; the Western Australian government set up a streamlined approval process for engineering design work that has been completed in Western Australia by Western Australian registered engineers; and that there be a clear line of dialogue between the local engineering industry and the department of commerce with quarterly meetings to discuss what measures can be taken to assist local industry; if a proponent wishes to operate in Western Australia, locally based engineering design firms must not be excluded from preferred tender lists; and that the state and federal government work together to encourage innovation and the development of key skills required for future demand.

I suppose one of the key things is the development of an engineering centre of excellence in Western Australia. I think that is the key. The key thing here is basically trying to get proponents—using your natural resources to build another industry, essentially. This is what was done in Norway. This is what you can do here. It is not a flight of fancy; there are models for this around the world. We are at the very low end of the government regulation or mandating in Western Australia and Australia.

Mr R.S. LOVE: It sounds like you are looking for a mix of regulation and also investment or co-regulation, I suppose, of effort around this idea of the engineering centre of excellence. In terms of the registration you talk about in your submission, especially regarding health and safety of some of the equipment, how do you think that would work if you are required as Australian engineers to be registered, yet components are designed overseas? How would you ensure that that part of the project was actually compliant with what would be the expectation were it designed in Australia?

Mr Locke: Obviously, it all has to tie together, and no solution is perfect but having met in Queensland with the registrar of the Queensland scheme last week, Bechtel engineers are now becoming registered for work they are performing offshore, but arriving in Queensland. Basically, all engineering work has to be signed off by a registered Queensland engineer. That is how it works. Of course, in practice, it is patchy but it would be a vast improvement on what you have got. I would say that you set up a scheme, you set up acts, you consult with local firms and you find out what works best. That is an idea that came from local firms, so I encourage you to test the market, so to speak, with them.

Mr R.S. LOVE: How do you see the centre of excellence developing and what do you think is required to see that develop?

Mr Locke: You obviously have land available in Western Australia on your universities for such a centre to be established. I think you could probably realistically get capital from project proponents to do it because they have an acute interest in having highly specialised skills flowing through. The way to differential here is not really that big a factor and, certainly, if you have the higher skilled engineers, then your productivity will be better. If you have collaboration between proponents, local industry and the university working together, I think with this specialisation, in time you will begin to attract work here from international sources. There is a lot of lead time to these things but my advice would be to start now. You will see in Norway that it took a very long time to occur, but it occurred and they are world leaders.

Mr R.S. LOVE: The centre of excellence would therefore have participants who are capable of providing not just an education or a research capacity but also an applied capacity for industry?

[11.00 am]

Mr Locke: Exactly—an applied capacity for industry, a research capacity. You would be making sure that your supply of engineers matched the demand because industry would be involved. We see a lot of industry skills councils et cetera at universities with an uncapped demand system, basically. It does not mean that you are getting work-ready graduates any more. This is particularly the case with engineering where the demand is really for highly skilled or experienced professional

engineers. They do not come out of university because a lot of the work-based learning does not occur any more. Cadetships are gone. When many of you were going through universities there were big state works departments that offered cadetships. That does not happen anymore. I am not advocating that we should go back to that but there has to be some way to make sure our supply of engineers matches industry demand and that will give our young people the best opportunity for those highly specialised high-wage jobs.

Mr R.S. LOVE: How do you see that development being impacted by the potential predominance of offshore platforms being the preferred delivery method of gas production in the areas like our case?

Mr Locke: That is obviously very problematic. I do not have an answer to what you are going to do with FLNG. I should say that you should perhaps be working with the proponents to see if you can become a design centre for FLNG here. It is not that long ago that you were, or Western Australia was, world leaders in this sort of field—not world leaders but first class and destination of choice. You have to put in some work to get there but you need to try. This is not a criticism of this government. It is not a criticism of the previous government. It is a criticism of public policy in Western Australia: it is better for a short time term focus. You have one shot with these resources. Let us see some reinvestment. This was an argument that we all had in the 1980s, so we are having it again. As I say, I do not encourage mandating; I just think there are ways to get a long-term dividend from these resources. That is a start.

Mr P.C. TINLEY: I will just follow through, if you do not mind. You say, and everybody has said, you are no fan of mandating, yet you are saying a register of engineers is the requirement from which there will be an imposition on companies to use that register. Is that not mandating by stealth?

Mr Locke: It is fairly close, yes. But, I mean, other states have registration schemes.

Mr P.C. TINLEY: Let me put it to you this way: if we had a requirement for companies to use only those engineers on a register in the state of Western Australia—and there would be some geography. You cannot just line up all your French engineers and put them on the register just because they qualify. Is that not for an economic purpose?

Mr Locke: Yes, it is. I should explain how registration schemes work as well. There are schemes that operate around the world, so it goes to OH&S and competence et cetera, so that there is traffic of engineers under registration schemes.

Mr P.C. TINLEY: Sorry to interrupt you there. What is broken that requires it? What does not work? What has fallen over? What is substandard that requires us to have such a register?

Mr Locke: There have been innumerable cases of engineering catastrophe in Australia over many years: the West Gate Bridge collapse, the Lane Cove Tunnel—I could go on. I mean, a doctor kills one person at a time, and yet a bad engineer can kill a lot of people once. So that is the public philosophy argument writ large for a registration scheme for engineers.

Mr J. NORBERGER: You mentioned in the report that you summarised before that it has been said that engineers are well placed to compete globally.

Mr Locke: Yes.

Mr J. NORBERGER: You then followed it up probably 10 minutes after that in the regulation to the wage differential not being a huge factor.

Mr Locke: Yes.

Mr J. NORBERGER: I suppose, given that we are competitive and that the wage differential does not seem to be as huge a cost implication as it might be in some other areas, such as our fabrication manufacturing, why do you think at the moment that our engineers are not, through natural normal

market mechanics, getting the sort of work that you guys are hoping to get? Why are these proponents just simply choosing not to use engineering services?

Mr Locke: You have multinationals who have entrenched provider relationships. That is the primary reason. It is hard for local firms to compete in an environment where you have large multinationals who have a preferred provider which they have used for projects around the world. So it is hard to break in; that would be the primary reason, I would say. Also, they cannot compete on the large body of engineering work, which is why people are saying to concentrate on the two to three per cent, which is frankly in engineering design or pre-FEED, because that is where they are competitive; they are not competitive in maintenance—and blah blah—but at the start they are competitive, and that is also the bit, by the way, that requires the most smarts and gives you the longest dividend.

Mr P.C. TINLEY: We have heard as much as a 30 per cent differential between an engineer employed in London to one employed in Perth—some of the components.

Mr F.M. LOGAN: That is supported by what some of the proponents put to us.

Mr Locke: That is what the proponents might say. I think Dr Martin West's work is probably more reliable than my verbal work on this, and he found that we could compete on such matters. So, I think that is what the experts say.

Mr J. NORBERGER: Yes, sure. It just seems very interesting that if there are not these big barriers to us being more involved, that we are not being more involved. I think even at the smaller scale we have preferred suppliers. There could be a printing company that I prefer to use for the production of my stationery, and that is why they invite you to their corporate golf day—you know what I mean—because they try to keep that. And what you have just explained is just extrapolated to a global scene. But there is a part of that where I do not think you can write policy to avoid that completely. So I just find it very interesting that if we are competitive at a wage level but closer to where the action is, you would imagine it would be or should be an advantage.

Mr Locke: Yes.

Mr J. NORBERGER: And the calibre of engineers is not under question, I do not believe. I think you have raised some very interesting points with regard to where potentially some of our universities and whatnot could do things better—not just universities, but you mentioned cadetships and the like.

Mr Locke: Yes.

Mr J. NORBERGER: Despite that, we obviously still have good engineers. So it is interesting to see that we feel that there needs to be a substantial amount of policy injection to try to, if you like, almost force the outcome that we would like to get.

Mr Locke: Yes, I think that is right. I think the lesson is that the cajoling and the partnership and the working with has not worked.

Mr J. NORBERGER: No.

Mr Locke: We are not getting the outcome we want for Western Australia, are we?

Mr P.C. TINLEY: Can you just define the outcome? Is it 2 000 engineers working in Perth?

Mr Locke: No.

Mr P.C. TINLEY: Is there a defined outcome? I mean, we will always want more, but what is the minimum? Have you got any comment on that?

Mr Locke: No. Mr Tinley, I would not want to be boring!

Mr P.C. TINLEY: This is the point: everybody gets around and says we should have a centre of excellence, but —

Mr Locke: What I would say is that if there has been \$160 billion worth of LNG work in the pipeline, let us say, and if FEEDs were two to three per cent of that, then let us say that is about \$4 billion. If you got half of that in Western Australia, that would be an outcome. At the moment you are getting none—okay? So, I am not asking you to shoot to the stars, but a couple of billion dollars for this state is a big deal—I am sure we would all agree. So, if you looked at that as a target over —

Mr P.C. TINLEY: How many jobs are there in that?

Mr Locke: I really could not tell you. Call Clough; they will have a better idea about how many jobs are in it. But I would say we are talking hundreds.

Mr P.C. TINLEY: Of skilled jobs?

Mr Locke: Of skilled jobs. Aim for over a 10-year period to going from a very low output in FEED to getting half of the work in FEED and pre-FEED. I think that is a reasonable target. It is not unrealistic and it is not pie in the sky.

Mr J. NORBERGER: Everything good on that, Erik—we might seek your viewpoint—is that you mentioned a couple of times now that we really should be aiming for a pre-FEED and the like. When we spoke to companies such as Shell and Woodside, they all suggested that there will be opportunities for WA engineers, but what they have actually said is that they do not necessarily believe that that will be in the concept of FEED stages. Has Professionals Australia had any conversations with the major oil and gas companies around engineering local content for all phases of the project; and, if so, what can you tell us about these conversations?

Mr Locke: The CEO, Chris Walton, had a round table with Minister O'Brien and me at the large resource companies. I was not there, unfortunately. The paperwork produced suggests that the concentration on FEED and pre-FEED occurred after consultation with all such companies and also local firms. So, I would say that competing on the down-the-line work is very difficult, given that it is work that is commoditised et cetera, et cetera. The conceptual pre-FEED and FEED work is where we can compete, because that is a small amount of project cost, cost is not such a factor, this is what Martin West says, this is what we have been told by local firms, and we agree after wide consultations and working with Minister O'Brien. So, if they are telling you that there might be work later, I think what they are saying is that there will not be work.

Mr F.M. LOGAN: Erik, if you can put some figures around this, it would be great. You did make a comment about the collapse of the demand for engineers in Western Australia, and we have had that provided to us anecdotally as well by various sources. But can you just give us a snapshot of what is happening and what is the latest in engineering?

Mr Locke: Sure. It is very interesting. The figures I quoted at the outset about the Department of Foreign Affairs and Trade, after they released these, they changed the way they counted the figures. So I am just giving you that caveat, because I do not know if that is because they changed the definition of “engineering services” or they have sub-bracketed it. You can look at the latest figures for this but as at mid last year there was a collapse in demand for Western Australia of about 24 per cent. There was a plummet in vacancies for engineers around Australia of about 60 per cent. It appears that they are importing services at the expense of fostering local opportunities, so the DFAT figures, which I just gave you that caveat for, show a near doubling in the importation of engineering services from 2009 to 2011 from \$1.2 billion to \$2.3 billion. That figure came down in the most recent figures they released; however, the trend is still there: importation of engineering services is on the way up. That, I think, would make sense to all of you after all the evidence you have heard. So, this is worrying.

Mr J. NORBERGER: If we are importing these services, I suppose the flip side is: have we got a large number of unemployed Australian engineers?

Mr Locke: I think unemployment among engineers is low still. I do not have latest figures, but you will see there is a lag. It is not just Western Australia; there has been a downturn in infrastructure spending in many states—obviously New South Wales and Victoria. It is really South Australia, Western Australia and Queensland which are driving demand for engineers. So, a softening in demand here is probably still not going to lead to mass unemployment amongst engineers, but what I would say is in print terms it is worrying. What we have seen is a recalibration of the engineering market where people have been flowing out of Victoria, for example, into Western Australia.

Mr P.C. TINLEY: It is portable.

Mr Locke: Thus improving the IQs of both states! And what we will see over time, though, is if there is a softening for demand in Western Australia, the market will become broken and we will see engineers start to head overseas. This is a global workforce; they will go.

The CHAIR: But Engineers Australia have told us that that is okay; that is part of the nature of the beast.

Mr Locke: It is a part of the cycle of life. We do not share that view. We think that it is best to keep your engineers here locally, to keep your skilled technical professional capacity here. Australia produces only about a third of its engineering requirements each year itself domestically; it imports two-thirds. We do not think that is sustainable or good or clever or a good way of running a country. So, you know, that is a point of difference with them and that is what they believe. I do not agree.

Mr R.S. LOVE: Just going back to the centre of excellence mine that you were talking about before, what do you see as a role for the state government and/or the federal government in getting that off the ground?

[11.15 am]

Mr Locke: There is a proposal that was put together last year for the federal government when the previous federal government announced industry innovation precincts. I understand they are on the backburner, and such are the vagaries of life. However, a good deal of work went into that by the state government in terms of facilitation, so the state government can come to the party with assisting with land; they can come to the party with capital. They should work with the federal government. Obviously, there is a federal government higher education capital spend, I think, still, and there certainly is at a TAFE level. We should bear in mind as well that there are engineering associates, so there are VET-level qualifications in engineering. This can be a whole-of-sector institution, so the state government really is in a key role to facilitate and to also liaise with the federal government and find relevant pots of money, which I think are available. It will take time, but I am sure you can do it. I am glad you sound attracted to the idea as well.

Mr R.S. LOVE: I was just inquiring as to the best of your thoughts.

The CHAIR: When you talk about importing engineering services, are you talking about actually bringing engineers into Australia or just having all the engineering work done out of Australia?

Mr Locke: It is the importation of services. You would have to look at the figures to see how they are counted, but it would be the purchasing of services offshore.

The CHAIR: And sort of related to it a bit is that you were talking about the Norwegian model, which I think the government was quite involved with. It was quite prescriptive, was it not, and it had controls in there?

Mr Locke: Yes.

The CHAIR: Whereas we seem to have gone off down a path of very much open markets and deregulation.

Mr Locke: Yes.

The CHAIR: Do you see a conflict there between what we are thinking and —

Mr Locke: Yes. Certainly, you do not have a state-run oil and gas company, which is a marked difference, obviously.

The CHAIR: Nearly had one.

Mr Locke: Did you?

The CHAIR: In 1980; it was a commitment from Bill Hayden.

Mr Locke: Was it? Right. There you go.

Mr F.M. LOGAN: But Norway's one is here, and they are drilling offshore.

Mr Locke: Yes, that is right.

The CHAIR: That is how good they are.

Mr Locke: Hence the conflict. Lots of state-run automotive companies are doing quite well, and state-run airlines are doing quite well as well. Look, I think there has to be a line. I mean, Norway is at one end, but there are other examples around the world of people who actually just do mandate. But take a look at the agreements that Canada struck et cetera. These are civilised western democracies run by conservative governments. Take that as maybe an example to start working back from. Use some of the ideas in our report, but we are not in a position where we can sort of go back on years of conventional wisdom and not be a free trading country. Thank you very much for the opportunity today. We appreciate it greatly.

The CHAIR: I would like to thank you for your evidence before the committee today. A transcript of this hearing 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 is 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. If the committee does have some follow-up questions, is it okay if we contact you with those?

Mr Locke: Absolutely.

The CHAIR: Thank you very much for your time.

Hearing concluded at 11.19 am
