

**ECONOMICS AND INDUSTRY
STANDING COMMITTEE**

**INQUIRY INTO SAFETY-RELATED MATTERS
RELATING TO FLNG PROJECTS IN AUSTRALIAN WATERS
OFF THE WESTERN AUSTRALIAN COAST**

**TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
FRIDAY, 7 NOVEMBER 2014**

SESSION FOUR

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 2.00 pm**Mr WILLIAM TOWNSEND****General Manager, External Affairs and Joint Venture, Inpex, examined:****Mr RICHARD NIGEL WILSON****Senior Industry Adviser, Inpex, examined:**

The CHAIR: Good afternoon, and thanks for coming. On behalf of the Economics and Industry Standing Committee, I would like to thank you for your appearance before us today. The purpose of this hearing is to assist the committee in gathering evidence for its inquiry into safety-related matters concerning FLNG projects in Australian waters off the Western Australian coast. 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. I am the Chair, Ian Blayney. With me is Hon Fran Logan, who is the Deputy Chair, and Peter Tinley. 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 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 the 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 would assist Hansard if you would provide the full title for the record. Before we proceed to the inquiry-specific questions we have for you today, I need to ask you the following: 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 sheet provided with the "Details of Witness" form today?

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: Do you have a statement?

Mr Townsend: I do. Good afternoon, everyone. Thank you very much for having us before you here on this Friday afternoon. It is nice to be with you. I do have a brief statement prepared, and then Nigel and I will be pleased to answer any questions that you may have and look forward to that. Some matters that the committee members may wish to raise involve some of our commercial activities and we would appreciate those being discussed in camera if that is possible.

The CHAIR: Okay. We will close the hearing.

[The committee took evidence in closed session]

[2.05 pm]

The CHAIR: I just wanted that made clear, because in camera evidence is something that we hardly ever do.

Mr Townsend: If it is not of use to you, no.

Thank you very much. At the committee's request, Inpex provided a written submission to this inquiry in August. Inpex, as you may know, is Japan's flagship oil and gas exploration and production company. We are a publicly listed company on the Tokyo Stock Exchange and are involved in more than 70 projects across nearly 30 countries. Inpex has been a proud participant in the Australian oil and gas industry since 1986, and we are the largest Japanese investor in Australia and, in this context, the biggest Japanese investor in Western Australia. Today we are developing one of the world's biggest energy projects as operator, the Ichthys LNG project, from our Australian headquarters here in Perth. With more than 1 000 Inpex personnel working for us here, Perth is now our largest office globally. Inpex has as a core value what we call "Anzen Dai Ichi", which translates to safety number one, and nothing is of greater importance to Inpex than safety.

From the outset, I would like to emphasise that Inpex is not the operator of floating LNG facilities in Australia. We are a 17.5 per cent equity participant in the Prelude floating LNG project currently being developed, but we would ask that any questions that you may have that relate to that specific project be directed to the operator, Shell. Our submission is made largely in the context of the Ichthys LNG project, recognising that floating LNG is an evolution of the offshore oil and gas industry more generally. Our submission has been designed to supplement the submission that was made by our industry peak body, APPEA, which has our full support. At Inpex, our approach to safety is, to the extent possible, to avoid incidents altogether. This means designing and engineering our facilities to be intrinsically safe. The Ichthys central processing facility is a good example of how we are applying this approach in practice. The facilities have been designed and engineered to withstand a one-in-10 000 year event and, on a voluntary basis, we launched an early engagement process with the then NOPSA—now NOPSEMA—in 2011 to review the design safety case for the central processing facility. This was the first time that such an early engagement process was undertaken by the regulator, and the process identified no showstoppers, and the feedback we received from the regulator has been incorporated into the detailed engineering for the central processing facility. We seek to be self-sufficient to the fullest extent possible. Both the Ichthys CPF and FPSO will have comprehensive medical facilities on board staffed by specialists. We also have an agreement with CareFlight to provide aeromedical support for the Ichthys project. This provides for dedicated aeromedical fixed-wing and rotary aircraft, as well as dedicated aeromedical doctor and nurse teams in Broome, Truscott and Darwin. The project has also invested in upgrades to helicopter facilities at Djarindjin Lombadina near Broome, and in Darwin. We consider that today's Australian offshore safety and environment regulatory regime is robust and ranks amongst the best in the world. With that, Mr Chairman, I am pleased to take any questions the committee may have.

The CHAIR: Thank you very much.

Mr F.M. LOGAN: I have a fairly general question, Bill. The committee understands there are a number of unique features inherent to the Ichthys project. Can you just outline some of those unique features?

Mr Townsend: The Ichthys project itself is what we consider a conventional LNG project. So its offshore facilities tie back to an onshore plant—in this case, from the Browse Basin to Darwin. The unique features of the Ichthys project are not so much in any technological sense; it is more just in the scale. We are using proven technology in a conventional way to develop the LNG plant, the unique aspect being the scale of the offshore central processing facility in the first instance, which is the first semi-submersible production platform to operate in Australian waters, which was another reason why we approached NOPSA at the time with that early engagement so they could get comfortable with that. This will be the world's largest semi-submersible platform. It is a scale issue. It is not by any stretch of the imagination the first; it is just the largest. Similarly, we have an infield floating production, storage and offloading vessel—FPSO. It is also amongst the largest in the world. So it is more a scale issue rather than anything particularly unique.

Mr F.M. LOGAN: On the semi-submersible CPU, that is obviously then anchored, so what is the scale of the anchorage?

Mr Townsend: Yes, in that sense, again the scale comes into it. Both the main offshore facilities—that being the central processing facility, which is the semi-submersible platform, and the floating production, storage and offloading vessel—are permanently moored infield, so they will be anchored infield for the project life. To do so, we have been manufacturing 40 000 tonnes of anchor chain—25 000 tonnes of anchor chain for the central processing facility and 15 000 for the FPSO.

Mr F.M. LOGAN: Does the FPSO have the ability to disconnect, though, at any stage?

Mr Townsend: It is not disconnectable. It is permanently moored.

Mr F.M. LOGAN: It is permanently moored with those anchor chains?

Mr Townsend: Yes.

Mr Wilson: Weather vanes, obviously.

Mr Townsend: So it is a system with weather vanes, yes.

Mr F.M. LOGAN: But it does not disconnect?

Mr Townsend: It is not disconnectable. There are some FPSOs that do, of course.

The CHAIR: If you have got a big cyclone bearing down on you, do you de-man?

Mr Townsend: In the event of a cyclone, our plan is to reduce manning levels but to remain manned, and our facilities are designed to remain manned during cyclones.

Mr P.C. TINLEY: You stop production, though, do you not, or is production a ramped thing?

Mr Townsend: I would expect production to continue. In fact, that is common practice; even sometimes with de-manned facilities, they will leave the production running unless something trips.

Mr P.C. TINLEY: Is that right?

Mr Townsend: I believe in the North West Shelf —

Mr Wilson: The North West Shelf operates remotely even when it is de-manned.

Mr Townsend: But the answer is that our facilities are designed to withstand, again, the one-in-10 000 year event. Specifically, of course, looking at cyclones, the size of the facilities being as big as they are means that they are pretty robust against the weather conditions.

The CHAIR: So where is that central processing unit up to now? It is being built in Korea, is it not?

Mr Townsend: That is right; yes. Maybe it would be helpful to run down all the major pieces. The CPF is the semi-submersible platform. It is being constructed by Samsung Heavy Industries in South Korea. In June we celebrated the 50 per cent completion of the overall project, and the offshore facilities were at around 50 per cent halfway through this year. For the CPF itself, we have largely completed the hull or, for the most part, have completed the hull structure. The topside section is being manufactured. We expect to have float-off of the CPF in late 2015 and delivery to the field in early 2016. The FPSO is similarly being built in South Korea at DSME, Daewoo Shipbuilding and Marine Engineering. The hull for the FPSO is also largely completed and the topside is being constructed. Its schedule is slightly ahead of the CPF in terms of when float-off is and then delivery to the field late in 2015. We have a 42-inch pipeline that is currently being laid. We are at the shallow end of it at the moment, with the *Semac 1* from Siapem. Over 200 kilometres have been laid so far since late June. We will switch to *Saipem Castorone*, which is a deep-lay, latest state-of-the-art pipe-lay vessel later in the year—in December in fact—to start the deep water section, which is up to 250 metres. That will continue into next year and be completed, sort of, in the third quarter of 2015. And then onshore, the facilities in Darwin have, again, passed the

50 per cent mark: the LNG tanks, the construction of the concrete structure is finished, the first of the roofs is about to go on, the jetty is taking shape, and some of the main modules have arrived. We are on track for a late 2016 first production.

[2.15 pm]

Mr F.M. LOGAN: You have told us the capacity of the FPSO, but what is the actual size of it?

Mr Townsend: The storage capacity is slightly under 1.2 million barrels; the length is something like 336 metres, and 45 metres maybe in breadth.

Mr Wilson: It is a standard-design FPSO, so it is just a —

Mr F.M. LOGAN: Yes, I know, but it is one of the biggest in the world.

Mr Townsend: It is one of the largest, yes.

Mr P.C. TINLEY: In your submission you talked about the lost time incident rate and the difference between onshore and offshore. The figure for offshore is 23.8 million man hours, and for onshore it is 32.7. Can you give us some context on how we can interpret those figures? I am more interested in the variation.

Mr Wilson: The only real thing to say is that, as you know, we are trying desperately—the whole industry is—to reduce the number of lost time injuries. Our contractors onshore are working to achieve that for us, but we have this whole program that Bill has been involved with on getting our contractors to accept *anzen dai ichi* and to be actively involved in reducing incident rates among their employees. So this goes through from our contractor onshore or at the shipyards in Korea —

Mr P.C. TINLEY: The whole process.

Mr Wilson: Yes, the whole process.

Mr P.C. TINLEY: The whole 50 million hours —

Mr Wilson: I think, Mr Tinley, we calculated the number of man-hours we were going to require on the basis of that, and the yards we were going to end up with four people dead; that was not acceptable to us. So that is why we have made a very, very determined effort to get our contractors to adopt it.

Mr Townsend: Following up on that, it is worth noting that the way we manage our contractors in the HSE space is that we have teams of our own HSE people at every location where construction activity is happening. In some instances we have control over what is happening—sort of primary control; in other instances, in the case of, say, subcontractors, we may not have the primary control over it, but we certainly can stop jobs if we see them not going well.

Mr P.C. TINLEY: Would you characterise it then, based on what you are saying, that it is potentially—it does not really matter, it is just more an understanding of the context—a cultural variation between the proponent and the subcontractors?

Mr Townsend: Yes, I think it is fair to say that different jurisdictions and different locations and different cultures have a different maturity of the HSE systems and how they operate and how safely. Our job, really, as the operator is to insist on the highest standards and —

Mr P.C. TINLEY: Of the 50 million hours—you would have to guess, I suppose—the majority of that would be offshore, would it not, in the construction space?

Mr Wilson: You are building ships.

Mr P.C. TINLEY: Yes.

Mr Townsend: There is a lot of that, but that said, we have something like more than 4 000 workers on site in Darwin on any given day, so it is a significant undertaking here as well.

Mr P.C. TINLEY: By way of supplementary information, do you think you could give us a breakdown of the Australian side —

Mr Wilson: Yes, we can.

Mr P.C. TINLEY: — in terms of LTI and that sort of thing? It would just be interesting.

Mr Townsend: Interestingly, Australia has not historically fared well in comparison with some other locations as a country —

Mr P.C. TINLEY: Is that right?

Mr Townsend: — in safety and in statistical performance.

Mr P.C. TINLEY: That is interesting.

Mr Townsend: There are different theories around that. On the one hand, some argue that in Australia, being an honest and open society, reporting is more accurate here than in some other places. That is an argument I have heard made, and it probably has some credibility. Another argument that is made is that part of the Australian psyche is “she’ll be right”, kind of, and less rule following—a “tall poppy” kind of thing. Whether it is cultural or not, I do not know. In any event, I suppose we can hypothesise about that, but at the end of the day I think we as a company and oil and gas as an industry is committed to improving that. I think we have seen some improvement there, and we will continue to look for ways to —

Mr P.C. TINLEY: The point is valuable in terms of understanding the nature of it; the causes and all that consequential stuff is pretty mechanical, but that cultural point is really interesting.

The CHAIR: How many people will be out on the CPF?

Mr Townsend: In operations phase?

The CHAIR: Yes.

Mr Townsend: Both the CPF and FPSO are designed to house 200 personnel on board.

The CHAIR: Each of them has 200 people?

Mr Townsend: Four hundred in total—200 each. In a steady state operation I would anticipate 150 on each, but at any given time there may be maintenance work or some sort of activity that requires additional personnel. We do have capacity for up to 200 people.

The CHAIR: How far physically are they apart?

Mr Townsend: Roughly five kilometres apart.

The CHAIR: That far?

Mr Townsend: Yes.

The CHAIR: So you could not, sort of, swim between the two?

Mr Townsend: Well, there is the Rottneet swim; some people do that and it is a little bit farther.

Mr Wilson: No, you would frighten the whales, I am afraid!

Mr Townsend: I would not recommend it. It is not our intention, and nor would I think it is in line with our HSE values, probably!

Mr F.M. LOGAN: Whales would be the last thing I would worry about—there are crocodiles up there!

Your maximum capacity on the CPF and FPSO is 200: that would be during a campaign shutdown or campaign maintenance?

Mr Townsend: Yes, we anticipate so. Again, for a steady set operation there are around 150 personnel, and then for maintenance and brownfield expansion or whatever it may be, we have

room for more. I am aware that in other operations I would expect we will be no different in that regard; sometimes even more than that increment is required. Are you familiar with flotels?

Mr F.M. LOGAN: Yes.

Mr Townsend: We might be able to bring in a flotel; that would be the industry practice, as I understand it.

Mr F.M. LOGAN: Just on the situation of maintenance and when you have maxed out the number of beds that are occupied, I noticed that in your opening submission you talked about the medical facilities that will be on board both the FPSO and the CPF facility, and you referred to specialists. Obviously, during points of maintenance is the highest risk point of something going wrong because of the number of people you have on board and what they are doing?

Mr Townsend: And the nature of the work; right.

Mr F.M. LOGAN: That is the highest point of a risk curve. Who will be staffing those medical facilities at that point in time? For example, will you have a qualified nurse there? I am not suggesting you have a doctor there—you may have a doctor, I do not know—but who would be there at that those points of time?

Mr Townsend: At this point in time I cannot answer that definitively, not because I do not want to but because we are still working out how we will manage these things, and that decision has not yet been finalised. At present we are manning up our operations team and we are developing all the procedures and protocols. There are some ideas, I think, certainly in place, but those have not been formalised yet. What I can say is that we have the facilities on board and there would be some specialists; what qualification that person has, has not yet been finalised, as I understand it. We have entered into aeromedical evacuation arrangements with CareFlight; I think I mentioned in my opening statement the fact that we have a doctor and a nurse on stand-by in three locations—in Broome, at Truscott and in Darwin—who would be able to fly with the helicopter offshore if there were a need to do so to evacuate personnel. With CareFlight we have developed a new system called I-CARE, which is an innovative stretcher system that enables the patient to be transferred, basically, onto the helicopter, and then onto fixed-wing aircraft without having to move the stretcher and attached vital equipment that is required. This is an award-winning system, and the latest state-of-the-art.

Mr P.C. TINLEY: How many of those have you got?

Mr Townsend: We have 13 stretcher units, and 10 highly specialised, kind of, medical support wings.

Mr P.C. TINLEY: In your risk matrix, I suppose to put it in that sense—we all know all this works on the spectrum of risk management—what do you expect? What is considered plausible, statistically supportable et cetera? In an extremist event, what is the worst-case scenario that you have resourced?

Mr Wilson: That is a very interesting question. Basically, as we say, we have designed this thing for a 10 000-year weather event. We have also designed it so that the production areas are separated from the administration, sleeping areas, à la all the platforms that are around. That says we have designed this thing to actually be safe in the event of a fire. I cannot envisage a situation where we have not actually looked at getting people off if there was a catastrophic explosion. There are the appropriate levels of lifeboats, which are covered in the safety case and which are accepted at —

Mr Townsend: Just following on, I think it is fair to say that we plan actually for the worst case you could possibly imagine. We try to anticipate, even as remote as the possibility is, catastrophic events, and we plan for those and train for those.

Mr P.C. TINLEY: In a catastrophic event almost the default position is that if you cannot contain the issue within a very prescribed set of circumstances, then it is evacuate the facility. Is that a fair —

Mr Wilson: Yes; that is the way you would do it everywhere.

Mr Townsend: It is fair to say. For us we call it “anzen dai ichi”. It is across the industry, but certainly for us the human life and operating safely is paramount, and we think there is any risk at all to —

[2.30 pm]

Mr P.C. TINLEY: What I am trying to get at is, you have in a scenario-based planning—so an effects-based, planning model—gone, “That is the worst thing that could happen.” Even further down the spectrum of the worst thing that could happen, pretty much, it is, “We’re getting off this facility and we’re doing a mass evacuation”, if you want to call it that.

Mr Townsend: I can think of worse situations, but where we actually have an event —

Mr P.C. TINLEY: We are talking about in the credible range.

Mr Townsend: You are talking about ahead of any event happening, but even if you did have a situation where the event happens on board, how do get people off?

Mr Wilson: One of the things that mainly the CPF, because that is where we would imagine the highest operational risk would be—there is an area in the accommodation that is actually, basically, a safe place, and that is where you would actually put people in as you actually worked it back. This is what was, I think, learnt certainly from *Piper Alpha*, that it needed to be done that way. The whole of the industry has actually evolved with the idea of making sure that in the event of a catastrophe there is a place of sanctuary space and so that is factored in, and from that, which I think is to your point, what is the scenario?

Mr P.C. TINLEY: Yes, but inside those scenarios, and there are variations on catastrophes, I am sure, and how from little things big things grow—that is typically my experience from reading some of the stuff. A lot of what happens is a small series of things and away you go. Along the pathway there will be people who are injured. Like you have said, the original projections said you could potentially have four deaths in this whole project.

Mr Townsend: That is a construction scenario, which is a different thing.

Mr P.C. TINLEY: But certainly as you go through into this operational phase, and we are going many years down the track, you would envisage it potentially there. What I am trying to work out, and I do not want to overdo this, do you feel that you are resourced to deal now with the credible catastrophic scenario? What I mean by that is, not that they have got safe spaces—that is fine; that is the design piece—but how many injuries are going to need extreme extraction?

Mr Wilson: We have a situation where we are taking people to the nearest category 3 hospital onshore —

Mr P.C. TINLEY: Broome?

Mr Wilson: No, it happens to be Darwin; Broome is category 2. Our planning is to put in place systems to get them there; that is why this CareFlight thing is there. As you might imagine, we are a long way offshore. That is the real test. The planning is about how you actually overcome the distance from your nearest available tier 3 hospital. So that is why we got CareFlight involved.

Mr F.M. LOGAN: Speaking of CareFlight, what is the flight time from Broome to the CPF and from Darwin to the CPF?

Mr Townsend: From Broome to the CPF is approximately two hours or so by helicopter.

Mr Wilson: And you would not do it from Darwin; there is not the range.

Mr Townsend: Darwin is about 800 kilometres. In our scenarios, say, with CareFlight the arrangement would be for a helicopter to fly from the offshore facility to Djarindjin–Lombadina, Broome or Truscott depending on the nature of the situation—Derby could be in there as well.

Mr P.C. TINLEY: My interest in this is as you project for 10 or 20 years further down the track there are going to be potentially, if we listen to the mail, up to 10 FLNG facilities offshore, plus FPSO, plus and plus. So, there is a not insignificant amount of activity going on off our coast. I am trying to understand, probably from a user's perspective, what the state can do better. For example, we have to make sure that there is enough infrastructure support—James Price Point was good example of not being ready, in my view, for investment. Do we need to turn Broome into a level 3 hospital, and/or others? What are the infrastructure support issues that would be of assistance to industry to make sure the place is safer?

Mr Townsend: In our view, the short answer would be no to the question of Broome. The way it is structured at the moment I think is quite effective to serve the purposes of the broader community, really, which is probably how we think about state resources. Nigel and I and others internally were discussing ahead of today's meeting philosophically almost that very question. The point we got to was to say that the way we think about it is it is less about bringing the facilities to the patient as it is the patient to the facilities, and there is the fact of the nature of the facilities in Perth, which are world-class, or Darwin facilities. A place like Perth can sustainably maintain world-class facilities might be different way of saying it, whereas Broome will have difficulty both maintaining and justifying the expense for what is, hopefully, a very rare event. Therefore, it is really for us about how we get a patient, in this case, from our facilities or an offshore location as quickly as possible to the specialist care, whether that be in Perth, Darwin or Broome.

Mr P.C. TINLEY: Whatever triage says is required.

Mr Wilson: Mr Tinley, you would recall that when the North West Shelf was built, it also included a hospital, which was Nickol Bay Hospital. I understand that has now actually been handed to the state government to manage because one, there was no value in having it there, and two, it is now a drain, if I might say so, on the state's medical expenditure because it is not capable of handling anything —

Mr P.C. TINLEY: Corrective would be needed.

Mr Wilson: Yes. The medical policy in this state is to bring the patients to specialists in Perth and that is how the system operates.

Mr P.C. TINLEY: But as we know, and you have done this, the longer the distance is—I know this from my military background—the greater the distance you have to move the patient to the facility, the better your forward deployed stabilisation assets need to be.

Mr Wilson: That is why we have CareFlight.

Mr Townsend: If we fundamentally think about this, we see that as our responsibility in a sense rather than a state responsibility, both as a company and more broadly as an industry. We as a company, as I said, have invested in a CareFlight program, but we also have at our disposal seven helicopters, platform support vessels and anchor handling vessels, so some resources that can actually be brought to bear in these instances. We as an industry have agreements in place with our industry peers. In our case we will have *Prelude* next door with Shell, so in the event that additional resources are required of the nature that offshore oil and gas has, we would seek from assistance from Shell, for example. That is the nature of that.

Mr P.C. TINLEY: Is that moving through a more formal process with them?

Mr Wilson: I think we can safely say that even though the actual use of this will not be for some time, we are discussing a formal agreement with Shell. Committee members may know that Shell,

the industry and ourselves are involved in the search and rescue helicopter, which is an indication of the type of collaboration in the industry.

Mr Townsend: There are sort of two things here. One is to say there is a general agreement in the industry about mutual aid and coming to assistance, and then there is the specific collaboration that might just be framed to where we are talking specifically with our neighbouring project about sharing resources and collaborating, particularly in areas around logistics and offshore search and rescue, and things like that.

Mr F.M. LOGAN: Just taking the issue about bring the patient to the facilities, say, for example, there is an incident on either of the facilities you have offshore where four people have trauma, that would require probably two helicopters rather than one, maybe one; I do not know how you have configured your helicopters. If they are then choppered back into Broome, we are unclear as to whether Broome hospital has the capacity to deal with trauma.

Mr Wilson: No, because you would bring them back to Perth. The reason you would go to Broome —

Mr Townsend: The system is such with CareFlight where they have multiple aircrafts, so they have fixed-wing, a Beechjet 400 AXL from memory —

Mr P.C. TINLEY: You know too much!

Mr Townsend: A jet aircraft is at their disposal. I think they have a King Air twin-engine prop for smaller fields—a number of fixed-wing aircraft that could meet the helicopter and transfer. This ICAD system they have is able to be done without having to physically move the patient off the stretcher.

Mr F.M. LOGAN: I suppose it comes down to the extent of the trauma we are talking about. If a patient is to survive what would be six hours, including transfer, from the platform to Perth and live, that is one thing. It is whether there is the medical assessment that that is not the best solution. It is whether Broome has the facilities to cope with it. Remember, we are not just talking about Inpex; we are talking about the possibility of significant numbers of operations in the Browse area, which will involve hundreds of people moving backwards and forwards from the facilities to the platforms and back again. One of the reasons why we are having this inquiry is to look at the capacity for the state to deal with significant issues. We were shown with Montara that the Northern Territory had no capacity to deal with it—Australia had no capacity to deal with an incident like that. It is a question of whether we still have the capacity in the north west, and these facilities that you have described—some of the biggest ever put into production; yours and *Prelude*—are being installed without the state having a very clear understanding of its capacities to service.

Mr Wilson: Perhaps I might answer this in a different way.

Mr F.M. LOGAN: Just bear with me. The point I am making to you is if you believe as a company that there are facilities that are not there at the moment and that should be there, let us know. That is the thing. Many of the other companies have taken that on board and acknowledge quite clearly what we are asking them and are going to get back to us with that information.

Mr Wilson: I think the answer is this way: we actually understand how the Western Australian medical system is set up, so we have actually set up our emergency and health and flights and everything like that to accommodate that. So, when you ask the question: do we actually think there should be more of this or that? No, we do not, because we have actually set up our systems to accommodate the fact that it is the view of the medical system in Western Australia that the best way of treating accidents, incidents or what have you is to get the patient to the specialist and not the other way around.

Mr F.M. LOGAN: We will discuss that with the Department of Health, Nigel, but that is ConocoPhillips' view about its own operations. What is in the state's interest is obviously what we will put to Parliament. We will discuss that with the Department of Health.

Mr Townsend: I appreciate the point and it is something that I think we will take on board around any specific equipment, in particular whether there is anything —

Mr F.M. LOGAN: The other thing I will come to is search and rescue. In the first instance, we are aware that in search and rescue the responsibility is with the WA Police. I am not too sure whether the WA Police have the capacity to do search and rescue 400 kilometres off the tip of the Dampier Peninsula. I am pretty sure they do not. You had indicated, and we have heard from other members of industry, that you are investing in a search and rescue helicopter. It is a question of whether other support facilities are available to back that up as well, because it is not simply just about a helicopter. It is a question of whether Inpex has any other views of what needs to be done in that area. Without even asking the WA Police force, we understand they just do not have the capacity to be able to respond. We will be talking to the WA Police force but we know, as you know, they do not have the capacity to do that.

[2.45 pm]

Mr Townsend: It is a very remote location. The land is remote and the water is even more remote, I suppose, in that sense.

Mr F.M. LOGAN: Exactly.

The CHAIR: Could I go onto another matter? You are a member of the subsea first response toolkit, which comprises specialised equipment located in Fremantle for immediate mobilisation at the onset of a subsea well event. How much time is needed to deploy that equipment if it is located in Fremantle? What sort of a time period are you talking about to get it on location?

Mr Townsend: The subsea first response toolkit was developed following the Macondo incident and Montara under the leadership of the then minister, Martin Ferguson, who was championing that we have a response here in Australia, or an ability to respond. That looked at what type of equipment we should have available on stand-by in the event of a similar situation off the Australian coast, which led to this SFRT being developed and then funded through the industry. The timing for that, even if you look at the situation in the Gulf of Mexico, is days and not hours but days and not weeks as well. There is a time element there. When there are events offshore, as we have seen, unfortunately, they can last for quite a while. Even a few days is a pretty quick response in terms of getting that specialised equipment.

The CHAIR: Would it be better to have it further north?

Mr Wilson: You have to keep it maintained and serviced—that is the problem—to have the capability to keep it going. As it stands at the moment, as I understand it, this kit is about 18 truck trailer loads. If you put it on the road, you would probably take four days and then you would have to put it back onto a ship in Broome, as I understand it. What is now being considered is that you would air freight it from Perth to Broome in a large freighter, which would cut down the number of days but you would still need to put it on a supply vessel to get out there. You cannot just take the kit and drop it offshore. You would remember, I think, that on Montara, the initial discharge was about 400 barrels a day. When you have a well failure, that is what you would be thinking would happen. It is not huge in that sense. It is not advisable to lose any of it. The simple fact is that the bore of the well constrains the amount of material that gets out.

Mr F.M. LOGAN: Pressure comes into it.

Mr Townsend: In those types of events, timing is less critical, not in the sense that it does not get you the result but in terms of the human safety side of it. It is a different element.

Mr F.M. LOGAN: Bill, how many vessels do you have on stand-by?

Mr Townsend: In field we will have a platform supply vessel and an anchor handling vessel.

Mr F.M. LOGAN: And they will be on 24-hour stand-by?

Mr Townsend: That is right. They will rotate.

Mr F.M. LOGAN: The functions of your offloading—is it behind the FPSO vessel?

Mr Townsend: It is behind. It is a buoy. The docking is astern.

Mr F.M. LOGAN: On the basis of two things, one is evacuation and the other is a catastrophic incident such as a fire, do both those vessels have the equipment to take on a fire or at least not be able to control a catastrophic fire but at least maintain —

Mr Townsend: Yes. In fact, you would be very pleased to know that the fire suppressant system for the CPF was designed, engineered and constructed in Canning Vale by an organisation called Semco Maritime. On Monday of this week I had the pleasure to go see them test the equipment. For what it is, it is a high-tech solution.

Mr F.M. LOGAN: Obviously, they all would have, including the FLNGs, fire suppression systems, as all offshore systems do.

Mr Townsend: Yes.

Mr F.M. LOGAN: And firefighting —

Mr Townsend: And firefighting as well.

Mr F.M. LOGAN: An evacuation, particularly from the CPF, are the lifeboats situated below the CPF or at the —

Mr Townsend: They are on the —

Mr F.M. LOGAN: I have not seen a picture.

Mr Wilson: We could have brought you a model, if you would like.

Mr Townsend: They are on the edges of the top sides. They are designed —

Mr F.M. LOGAN: —to be lowered into the water.

Mr Townsend: Well, actually, nowadays they more or less are launched into it and they are designed to freefall into the water at an angle. They are all enclosed.

Mr F.M. LOGAN: And the total lifeboat capacity is for 200, maximum?

Mr Townsend: I could not tell you the specific number.

Mr Wilson: My understanding is that we have more than enough for the people who are ever going to be on board.

Mr F.M. LOGAN: I was going to say that I think that by law you have to have as many seats as there are people.

Mr Townsend: I am not an expert in it.

Mr Wilson: Whatever it is, the requirement we have met is the one which is actually applied by NOPSEMA on the basis of whatever the practice is where these semi-subcs are operating. That is in the Gulf of Mexico essentially. It is fit for purpose because it is designed to do what it is but it actually incorporates whatever the standards are for semi-subcs, which are both in Britain and in the United States.

Mr F.M. LOGAN: Or whatever the international law requires.

Can you get back to the committee on two things? The committee will be continuing on, shortly. Can you get back to us on the issue of whatever Inpex desires for the medical staffing of the

facilities onboard—to what level? The other is, of course, just the number of seats on the lifeboat vessels for the number of people on board. I am sure it equates to it.

Mr Townsend: We will be more than happy to do that.

Mr Wilson: I do not think we have a *Titanic* on our hands.

The CHAIR: In your submission, you make note that Western Australia has not accepted NOPSEMA authority over its state waters and that as a result this state continues to govern its own waters. Are you able to provide insight into whether and to what extent the regulation of state waters is different from the regulation in commonwealth waters?

Mr Wilson: The one example that I think everybody knows about is offshore hulls, where NOPSEMA has taken responsibility from the old designated authority for the regulation of offshore hulls. That would be one difference that I know of. The answer to your question is because we are offshore, these days we come under NOPSEMA so I do not know whether the Western Australian regulations are different from those. I think the point we were making about NOPSEMA and the idea of a one-stop shop for an international investor is quite important. You do not need to have duplication. Mr Tinley would understand; it increases the risk factor. You might have conflicting measures.

Mr F.M. LOGAN: Can I add some other questions I asked other industry players as well about weather advice from BOM and various other sources that Inpex will use. Is Inpex happy with the system as it currently stands or does it believe there should be improvements to the advice it may receive, particularly on timing over weather patterns in that area, particularly approaching cyclones?

Mr Wilson: My understanding is we have tied into the cyclone warning centre and we get four reports a day. I have heard nothing from our people suggesting they want anything higher than that.

Mr Townsend: I think this is another one that we could take back to our organisation. On the one hand, I agree with Nigel, that at the moment we have not heard any complaints about it; in fact, our discussions around this have been in a positive sense—four reports a day, and we are comfortable that we are getting information. That said, I think if we asked the question internally, could it be improved; and, if so, how, maybe that could shake the tree a little bit and see if we can come up with something.

Mr F.M. LOGAN: Obviously, the timing of the weather pattern events is directly related to helicopter movements, your shipping movements and the possibilities if there was a major incident where you get hit directly by the cyclone—the timing for abandonment.

Mr Townsend: You raise a good point. One of the challenges of the Timor Sea as opposed to, say, North West Shelf is that cyclones tend to form closer to that area and we have less time to respond. That is the negative. The positive is that because they are still forming, they tend not to be as strong. There is a bit of a balance there.

Mr Wilson: From what Bill says, we are very conscious of the need to have the best possible weather information we can get. One of the things that you might think about is will this facility contribute to the knowledge about the weather patterns in the north west because it will have data collection too?

The CHAIR: I will have to call it quits there. I would like to thank you for your evidence before the committee today. A transcript of this hearing will be forwarded to you for the 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 by 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. Thank you very much.

Hearing concluded at 2.59 pm
