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15 December 2014

Mr Ian Blayney MLA
Chairman
Legislative Assembly Economics and Industry Standing Committee
Parliament of Western Australia
Parliament House
PERTH WA 6000

Dear Mr Blayney,

**RE: Inquiry into safety-related matters relating to FLNG projects: Request for Information**

I refer to your letter dated 14 November 2014 outlining the additional information requested of APPEA during our public appearance before the Committee on 7 November 2014. APPEA's response to each question is provided below.

***In relation to the discussion of Australia's safety performance, particularly in relation to the OGP level, please provide the current LTI rate and LTI trend information for Western Australia and/or Australia for the past decade. Please also provide the equivalent OGP information for the same period. It would be useful if this data could be separated into onshore and offshore LTIs, if possible. Please refer to page 5 of the hearing transcript.***

Figure 1 below shows the lost time injury frequency rate per million hours work for reporting APPEA member companies and reporting OGP member companies for the past decade. Figure 2 below breaks out the APPEA data into offshore, onshore and Coal Seam Gas activities. We are unable to separate the data for Western Australia only.

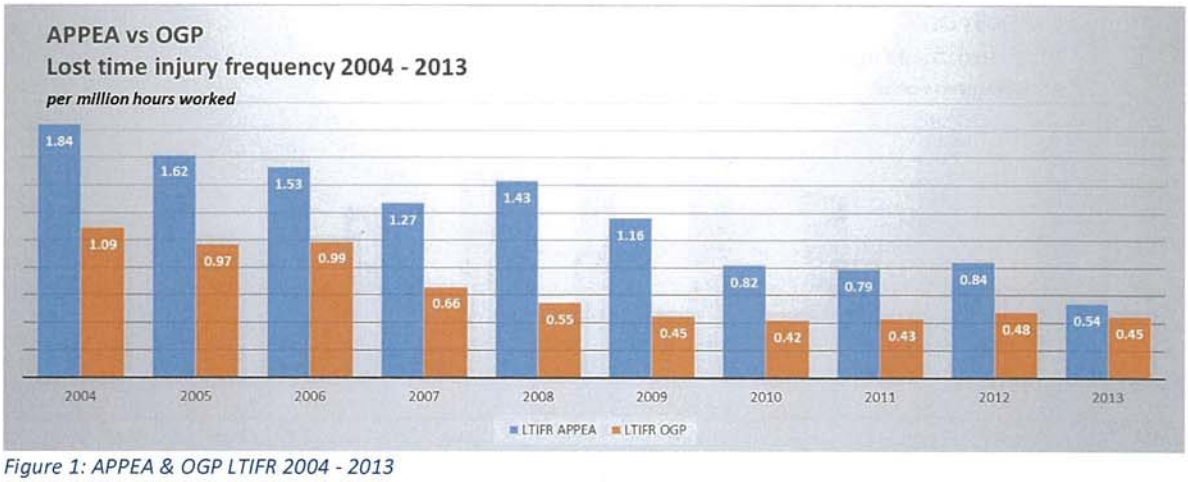


*Figure 1: APPEA & OGP LTIFR 2004 - 2013*

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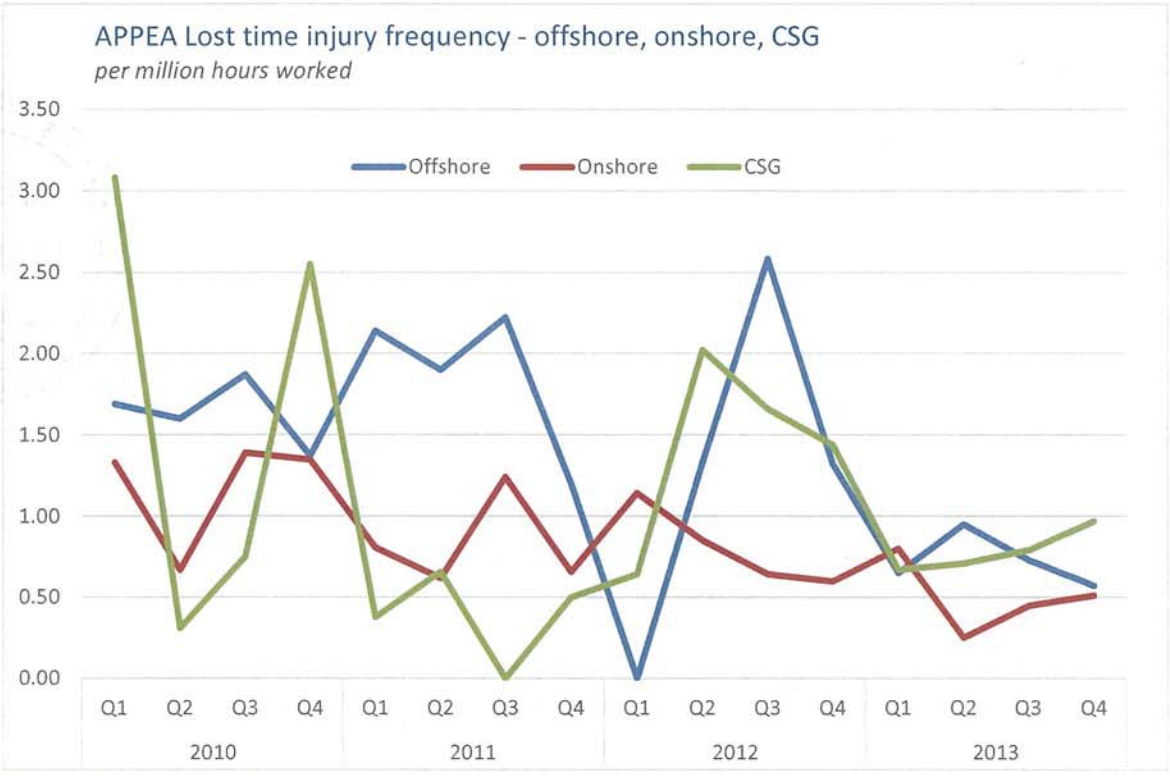


*Figure 2: APPEA LTIFR - Offshore, onshore & CSG*

Similarly, figure 3 below shows the total recordable injury frequency rate per million hours work for reporting APPEA member companies and reporting OGP member companies for the past decade. Figure 4 below breaks out the APPEA data into offshore, onshore and Coal Seam Gas activities. We are unable to separate the data for Western Australia only.

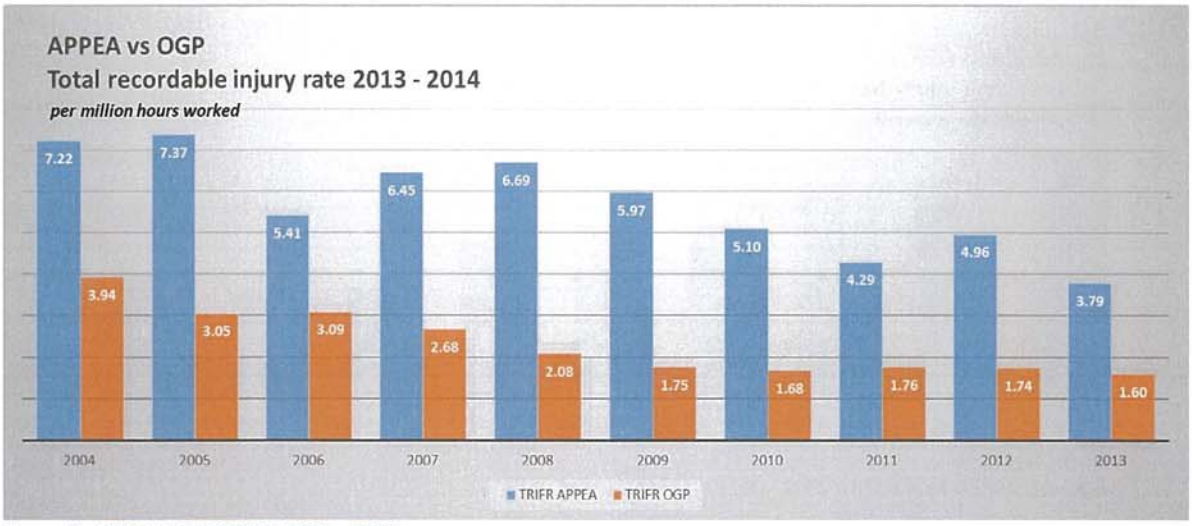


*Figure 3: APPEA & OGP TRIFR 2004 - 2013*

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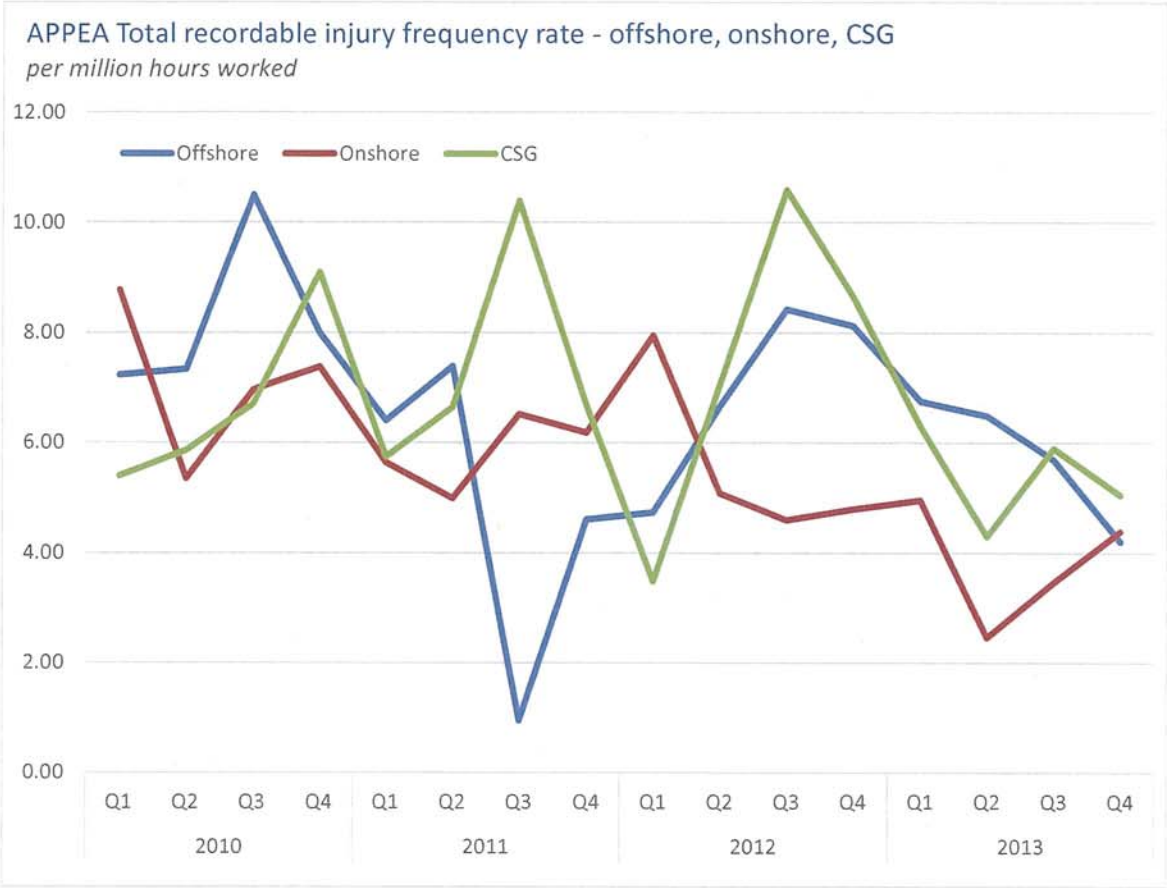


*Figure 4: APPEA TRIFR - Offshore, onshore & CSG*

Injury rates in the Australian petroleum industry have declined despite a significant increase in industry activity and hours worked over recent years. However, as noted in Figures 1 and 3, Australia still lags international benchmarks. Closing this gap has been a priority of APPEA over recent years, through initiatives such as the Common Safety Training Program, Safe Supervisor Competence Program and Stand Together for Safety. Details of these initiatives are available on the APPEA website.

***In relation to Western Australia's emergency response capability, during the hearing there was discussion on the provision of medical facilities, the importance of exercising responses and the need to consider smaller logistical items in developing response capability. The Committee would like APPEA to provide information on what other gaps it sees in the state's ability to respond to offshore incidents. As agreed during the hearing, this information can be provided once APPEA has had an opportunity to review the transcripts from Committee hearings with government agencies. Please refer to pages 8 and 9 of the hearing transcript for the context to this discussion.***

APPEA has reviewed the transcripts from government agencies and consulted further with our members. Our view remains that the frameworks and facilities in place to manage emergency response are sufficient for both the current level of activities, and flexible enough to meet the growth of the industry over the coming years.

***The issue of industry views on whether or not the information received on weather alerts was adequate and what areas there are for improvement, particularly in relation to cyclone events, was also discussed. Industry sharing of information was also raised. The Committee would appreciate receiving further information from APPEA in relation to this matter. Further context to this discussion can be found in the hearing transcript at pages 10 and 11.***

APPEA's members are satisfied with the current adequacy of weather alerts from the Bureau of Meteorology (BoM). Industry regularly engages with the BoM, particularly in the lead up to "cyclone season". As with any risk mitigating activity, continuous improvement is paramount as new technology and innovations in forecasting methods become available.

***Discussion was also had on the Subsea Well Response Project, the Subsea First Response Toolkit and the involvement of the Australian Marine Oil Spill Centre (AMOSC). Could APPEA please provide an overview of the response project and toolkit, and the mechanisms in place that allow member companies to access resources from organisations such as AMOSC. Please refer to page 12 of the hearing transcript.***

As noted in APPEA's submission to the Committee[1], each titleholder in Commonwealth waters is required to develop an Oil Pollution Emergency Plan (OPEP) or alternatively as operator in WA State waters an Oil Spill Contingency Plan (OSCP), and this forms a required component of their Environment Plan approved by NOPSEMA or WADMP.

Where the OPEP/OSCP includes the deployment of resources held by AMOSC, access is primarily via membership arrangements (see links below). Specifically for the Subsea First Response Toolkit (SFRT), an additional membership is required that sets out the ongoing management arrangements for the SFRT project, the rights, entitlements and obligations of SFRT project members and a pre-agreed contract for access to the SFRT when required. Further details are outline in the attached brochure.

Importantly, and while not wishing to speak on behalf of AMOSC, APPEA understands that there are no immediate barriers for non-member companies to access the SFRT resources held by AMOSC should the need arise. This is similar to the "Other Company Access" arrangements for oil spill incidents highlighted below.

[1] See page 24

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AMOSC Membership

The Australian Marine Oil Spill Centre (AMOSC) has two levels of membership – Participating Company and Associated Company.

Detailed information on these two levels of membership can be found at:
http://www.amosc.com.au/howto.php

For a list of current AMOSC Participating and Associated Companies please see:
http://www.amosc.com.au/subscribers.php

AMOSC also coordinates the oil industry participation in the National Plan for Maritime Environmental Emergencies. Equipment and services are accessible for non-AMOSC member companies in the event of oil spills. See "Other Company Access" at
http://www.amosc.com.au/howto.php

Subsea First Response Toolkit

The Subsea First Response Toolkit is an Australian joint industry initiative. In the event of any loss of well containment incident, one of the first steps involved in any response is to survey the well site, attempt intervention on the existing well integrity systems, and if necessary, prepare the site for the possible deployment of a capping stack.

As noted above, AMOSC manages the Subsea First Response Toolkit (SFRT), which is located in Henderson, Western Australia, and keeps it in a state of operational readiness at all times.

Please see page 26 of APPEA's submission to the Committee for introductory information on the SFRT. A short brochure on the SFRT, including membership structure, the list of SFRT foundational members, and an overview of the equipment specifications is attached for further information.

Subsea Well Response Project

The Subsea Well Response Project (SWRP) is an international joint industry project. The project itself is led by Shell, though the equipment (as it comes online) is managed through Oil Spill Response Limited's (OSRL's) Subsea Well Intervention Service (SWIS). For introductory information please see pages 25 and 26 in APPEA's submission to the Committee.

The SWRP has four major components:

- Capping Stack Systems – including a stack located in Singapore (For further information see http://subseawellresponse.com/intervention-system/capping-stack-toolboxes/) ;
- Containment Toolkit (for further information see http://subseawellresponse.com/intervention-system/containment-2/);

- Subsea Dispersant Hardware (for further information see http://subseawellresponse.com/intervention-system/subsea-dispersant-hardware/);
- Offset Installation (for further information see http://subseawellresponse.com/intervention-system/offset-installation/)

Access to the SWRP components is via membership of OSRL and then an additional subscription to the Subsea Well Intervention Service (SWIS) provided by OSRL. For more information on the SWIS please see http://www.swis-oilspillresponse.com/index.php/node/10000

With regards to non-member access to OSRL resources, there are mutual aid arrangements in place internationally. OSRL is better placed to speak on those detailed arrangements.

***The Committee has received considerable evidence on the safety case regime in place for the Australian oil and gas industry, and on the efforts made to prevent and contain incidents. Evidence was presented that while companies invested considerable resources into preventing and mitigating major accidents and events, there is significantly less invested into managing situations on - board after the event. The Maritime Union of Australia (MUA) advised of a situation where it took 12 days to arrange a discussion around counselling post an event on the Stena Clyde and of a failure to properly clean the blood in a cabin on the Karratha Spirit following an accident and prior to a new staff member taking up his position. Please refer to the transcript of evidence from the MUA hearing of 7 November 2014. While not asking APPEA to comment specifically on these two incidents, the Committee seeks your advice as to whether, and to what extent, post - event health and safety issues are considered in a safety case.***

Safety cases are required to describe the safety management system that provides for all activities that will, or are likely, to take place at, or in connection with the facility. Safety management systems describe a proponent's approach to post-event recovery, incident investigation and continuous improvement. Attention is drawn to Section 5.1.5 of NOPSEMA's guidance on required safety case detail, which specifically notes the requirement to include non-major accident events in safety cases[2].

Safety cases provide significant detail on recognised major accident events and describe systematically other identified risks. The regulations place a significant focus on stakeholder engagement, testing and exercising to ensure continuous improvement[3].

[2] See: www.nopsema.gov.au/assets/Guidance-notes/N-04300-GN0106-Safety-Case-Content-and-Level-of-Detail-Rev-7-June.pdf

[3] Refer to Section 5.1.10 in the NOPSEMA Guidance Note GN0106.

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Should the data presented on post event concerns be a consistent weakness in the industry, APPEA would expect that NOPSEMA would raise it with the individual proponents concerned and with the industry in general, typically via topic based inspections. These are published in a variety of ways, including in the annual offshore performance reports that can be accessed here: http://www.nopsema.gov.au/resources/data-reports-and-statistics/.

Thank you for the opportunity to further assist the Committee in the conduct of this inquiry. Should the Committee require any further details, please contact Mr Adam Welch, Senior Policy Adviser

Regards,

**Stedman Ellis**
Chief Operating Officer – Western Region

Encl

# AUSTRALIA'S SUBSEA FIRST RESPONSE TOOLKIT

The Australian offshore oil and gas industry has established a Sub-sea First Response Toolkit (SFRT) of specialised equipment, located in Fremantle WA, for immediate mobilisation at the onset of a subsea well control event. The SFRT contains equipment needed to clean the area around the wellhead, enable intervention and prepare for relief well drilling and safe installation of a well capping or containment device.

This Toolkit is part of an initiative by the Australian and international offshore petroleum exploration and production industry to create a capability for fast and effective response to uncontrolled hydrocarbons releases.

**The Companies**

Thirteen companies

*Apache, BHP Billiton, BP, Chevron, ConocoPhillips, ENI, ExxonMobil, Hess, INPEX, PTTEP Au, Santos, Shell & Woodside*

have financed this initiative through the Australian Marine Oil Spill Centre (AMOSC).

**The Equipment**

Built by Oceaneering in Stavanger in 2013, the SFRT equipment is now stored at the Oceaneering yard in Fremantle.

The equipment is owned by AMOSC, stored & maintained by Oceaneering and available for use by members of the AMOSC SFRT project.

## SFRT MEMBERSHIP

There are 2 types of membership available under the SFRT - Foundation Members and Associate Members.

The Foundation Members have contributed equally to the cost of the SFRT equipment and generally have substantial petroleum exploration and development activities offshore Australia. Associate Membership is available to companies with limited offshore exploration activities – up to 2 wells across all Australian titles with membership for a maximum of two years.

Membership is maintained through a Participants Agreement with AMOSC which sets out the ongoing management arrangements for the SFRT project, the rights, entitlements and obligations of SFRT project members and a pre-agreed contract for access to the SFRT when required.

Companies applying for SFRT membership must first be a member of AMOSC.

Apache bhpbilliton bp Chevron ConocoPhillips ExxonMobil HESS INPEX PTTEP Australasia Santos woodside

AMOSC
Australian Marine Oil Spill Centre Pty Ltd

## Specifications

The SFRT equipment consists of the following units

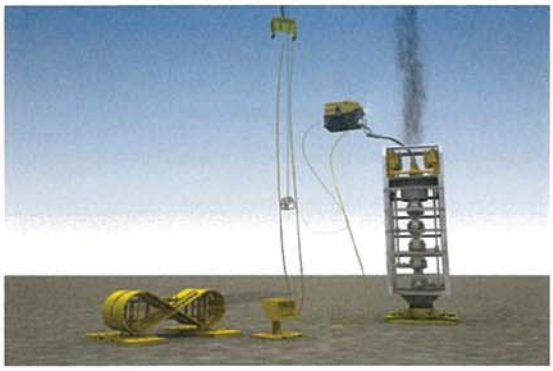
- Remote Control Units
- Stanley Impact wrench's; 3400 Nm
- Hydraulic Stud removal tools
- ROV operational kits
- Flying lead orientation tools
- Torque Tools Class 4
- 6" Dredge pumps
- Manipulator Inspection Cameras
- 2D multi beam echo sounders
- 3D multi beam echo sounders
- Linear valve override tools
- Multi-purpose cleaning tools
- Tooling test HPU 3kpsi
- 30"/40"/50" dispersant wands
- Pipe grapple tool
- Rock grappler
- 22" chop saws
- 60" chop saws
- Large grinders 14" discs
- Stanley grinders 7"
- Diamond wire cutters to 450mm
- Hydraulic cutters
- ROV knives
- Chemical Jumpers & racks
- Coil Tubing Termination head

The equipment is supplied in 7 offshore rated containers with a subsea BOP accumulator and deployment racks for the flying leads

AMOSC is a not-for-profit oil spill response organization established by the petroleum industry to support industry based oil spill response. AMOSC has offices in Geelong and Fremantle with equipment stockpiles in Victoria and Western Australia

**Debris Clearance kit**

In the diagram, there are 2 x ROV systems with manipulator arms working around the Blow Out Preventer (BOP)



**Subsea Dispersant system**

The coil tubing termination head supplies the subsea dispersant manifold sitting alongside the chemical jumpers. Sitting directly above the BOP, is the ROV with a dispersant wand injecting dispersant into the oil.