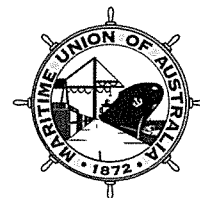


The Maritime Union Of Australia National Office



Paddy Crumlin - National Secretary | Mick Doleman - Deputy National Secretary
Ian Bray and Warren Smith - Assistant National Secretaries

Ref: 13/10/25/4365

28 October 2013

Mr Graham Peachey
CEO
Australian Maritime Safety Authority
GPO Box 2181
CANBERRA ACT 2601



Dear Mr Peachey

Re: IMO regulation of Floating Liquefied Natural Gas (FLG) vessels

I am writing to request that the Australian Maritime Safety Authority (AMSA), as the lead agency representing the Australian Government in the forums of the International Maritime Organisation (IMO), make representations to the IMO proposing that it either commence, or expedite, work on the application of appropriate standards emanating from the various IMO Conventions, for Floating Liquefied Natural Gas (FLNG) vessels.

In my view it would be legitimate and sensible for Australia to take a lead position in the IMO on those issues given that an FLNG vessel is being constructed in Korea for Shell, the project operator of the Prelude LNG project in WA. This will be the first FLNG in the world when it goes into production some time in the next few years.

Although these vessels may in the main be non self-propelled, in all other respects they mimic a vessel. Due to their size, stated capability in relation to withstanding weather conditions and the nature of the operation on board, I believe they pose a new level of risk to the workforce. Some of these risk factors have a different character to those associated with other offshore vessels such as FPSOs which are designed to navigate and return to dock for maintenance and reclassification. The risk factors to which I refer revolve around:

- Structural design;
- The gas processing and LNG production design;
- Cargo handling; and
- Transfer systems.

Some of the particular hazards which may require review for FLNG vessels are:

- Additional load from topside and mooring equipment.
- Fatigue design life.
- Sloshing in cargo tanks.
- Venting of cargo tanks.
- Access for inspection and repair during operation.
- Additional fire and explosion loads.
- Additional LNG leakage sites.
- Presence of high pressure LNG and high pressure gas.
- Proximity of arriving shuttle tanker.
- Complex integrated Control System.

- Design of loading system.
- Levels of ESD, Process Isolation
- High Power Generation & Distribution
- Accidental Loads (Collision, Fire, Explosion, Cryogenic)
- Motions on Processing Equipment
- Relief & Blow Down (Vents, Flare)
- Combination Cargo Storage System
- LNG Offloading/Transfer Systems

All these factors pose additional risks to the workforce on board these vessels. Furthermore, the concept of FLNG has emerged due the need to extract gas from fields further from shore which raises additional questions about emergency workforce isolation in the event of an incident, and emergency evacuation. I believe this also needs review.

One particular issue that requires review is the application of the Standards of Training, Certification and Watchkeeping (STCW) Convention to these vessels, and in particular how the Convention is to be applied to the workforce that operates the ship specific characteristics of the structure.

I note of course that the exposure draft Bill of March 2013 that was designed to resolve the unintended consequences of the dis-application of the *Navigation Act 2012* to vessels while under the jurisdiction of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGGS Act) was not introduced into Parliament by the previous Government. I trust that it will be introduced by the Coalition Government and that the Infrastructure and Regional Development portfolio (AMSA and or Department) has made such representations to Minister Truss so he can take the matter up with Industry Minister MacFarlane.

In the absence of such an amending Act, no IMO Conventions apply to vessels such as the new FLNG vessel planned for the Prelude project while it is considered a facility under the OPGGS Act. This is surely unacceptable to AMSA and NOPSEMA as the appropriate regulators.

We note that evidence being submitted to the Inquiry into FLNG being conducted by the Economics and Industry Standing Committee of the WA Parliament by companies like Chevron that there remain unanswered questions over the use of floating liquefied natural gas technology to develop remote gas fields. The concerns being raised by the industry itself along with the issues I have raised I believe warrant a reference to the IMO and should be a trigger for an amending Bill to deal with the dis-application issue.

I look forward to your response to the issues I raise and to your advice on any current and future developments on this issue within the IMO.

Yours sincerely



Paddy Crumlin
National Secretary