# TRANSPORT SAFETY & TECHNICAL NOTE

| Marine Safety & Tech Note # | 2021 - 06 | Date of Issue: | 02 June 2021 |
|---|---|---|---|
| | | Date of Expiry: | Till revoked |
| Title: | Mooring Line Tensioning at Prelude Terminal | | |
| | Applicable to: | For Information: | For Action: |
| PSV | ☐ | ☒ | ☐ |
| MPSV | ☐ | ☒ | ☐ |
| ISV | ☐ | ☒ | ☐ |
| Prelude Marine Team | ☒ | ☐ | ☐ |
| Offtake Tankers | ☒ | ☐ | ☒ |

Please find as below mooring tensioning process to be followed for LNG and LPG tankers at Prelude terminal.

- Prelude OCR to monitor mooring tensions and provide readings to LNGC TTL/Vessel Master should the Portable Pilotage Aid fail to display the same.
- Once vessel is confirmed in position, spring lines are tensioned with one winch forward and aft pulling in at a time to maximum winch capacity and then made fast. All remaining lines are run and made tight.
- Tensioning process to commence with vessel crew starting from inboard breast line working outboard (simultaneously forward and aft).
    1. Crew member standby forward and aft on one line only (allowing maximum winch power on that line). For example, inboard breast forward CB and inboard breast line aft OA.
    2. Full winch weight applied on forward & aft simultaneously (use count down 3, 2 etc.).
    3. When full tension achieved, mooring lines made fast. Brake tight and winch out of gear.
    4. Crew move on to the next line and repeat step 2 and 3.
    5. Carry out the same on all remaining lines working the way outboard.
    6. Ensure that tensions are matched on adjacent lines in same service on same hook. i.e.CA and CB to have similar tensions to have even load sharing on lines.
    7. Vessel finally all fast with all lines tensioned.

**Note** – Maximum tensions not to exceed 15% of the vessels Mooring Line Design Breaking Force (LDBF).

- On completion of mooring and vessel formally recorded as all fast / in residency vessel staff to continuously monitor tension and report back to Prelude OCR / Control Room. If signal is lost from PPU, check with Prelude control / OCR by radio.
- Prior to adjusting lines, LNGC TTL informs OCR / Prelude control that vessel needs to tighten / slack lines. Prelude CCR to monitor MLA position is within the working envelope.
- Vessel tightens/slack lines as per steps 2 and 3. i.e., even load sharing and one winch at a time.

Please note that it is the Master's responsibility to ensure that the vessel is safely moored at all times and this includes ensuring that the lines are tensioned as per process above throughout the vessels residency alongside the FLNG.

## Attachments

Nil

## Action required

- To be promulgated and discussed with offtake tankers prior to their call at Prelude.
- OPS_PRE_006818 Side by Side Mooring Procedure to include the same after sufficient experience is gained following 6 months of execution.