

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



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OPTIMIZATION OF CARGO TRANSFER OPERATION IN LNG SHIP TO SHIP TRANSFER: LESSON LEARNED FROM FSRU LAMPUNG OPERATION AS THE WORLD'S FIRST FSRU WITH TOWER YOKE MOORING SYSTEM

In 2014, PT PGN LNG Indonesia (PLI) started to operate FSRU Lampung, the 1st newbuilt Floating Storage Regasification Unit (FSRU) in Indonesia using the Tower Yoke Mooring System (TYMS). The FSRU Lampung has 170,000 m³ of storage capacity and connected with 21-km of subsea gas pipeline to Onshore Receiving Facilities in Labuhan Maringgai, Lampung.

The TYMS mooring system is designed for 360-degree rotation to encounter the environmental challenges. As the world's first FSRU with TYMS, FSRU Lampung faces the unique challenge during LNG ship to ship transfer (STS). One of the challenges is to maintain the stability of the LNG Carrier and FSRU Lampung during the berthing process. During the first 5 STS processes, PLI needs 82 hours of average STS time.

After 8 years of operation, PLI has successfully managed to reduce the STS time from 143 hours to only 46 hours, as well as reduce 20% of the tugboat requirement. The analysis shows that the activity from the pilot on board to all fast is the one that can be reduced greatly.

The paper will show the progress of 42 STS that have been completed during 8 years of experience with lessons learned from each activity.

Keywords: LNG, FSRU, Tower Yoke Mooring System, Ship to Ship, Cargo Transfer

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>