

# WEBINAR TALK ON “Lesson Learnt from HPHT Pipeline Lateral Movement and Subsequent Project Improvement”

BEM Approved CPD/PDP Hours: 2 Hours

Ref No: IEM20/HQ/266/T(w)

**27 November 2020 | 3.00 pm – 5.00 pm**

## **SYNOPSIS**

Lateral buckling of pipelines due to high pressure and high temperature (HPHT) may occur if the pipeline is exposed on the seabed, and upheaval buckling may occur if it is buried or constrained in a trench. Lateral buckling is not a limit state. However, associated failure modes as the result of buckle formation can cause excessive plastic deformation, which could lead to localized buckling, collapse or cyclic fatigue failure during operation, if it is not properly managed. Therefore, early design consideration is required to ensure a safe operation of the pipeline. However, due to unclear classification of a HPHT pipeline, there is tendency that lateral buckling design is not taking into consideration during the design phase if the design pressure lower than 100bar and design temperature is lower than 100degC. The recent development and understanding of the lateral buckling behavior highlighted that lateral buckling issue not solely depend on pressure and temperature of the pipeline. This topic will detail out PETRONAS experience in identifying and accessing an unplanned lateral buckling occurring at an export pipeline. Furthermore, the presentation also will cover the lesson learnt that have been considered in subsequent pipeline projects.

## **SPEAKERS BIODATA**

**Ir. Hayati Hussien** has 30 years of offshore and onshore pipeline engineering. She have involved in international project including Malaysia, Brunei, Qatar, North Sea, Africa, USA, Australia, Singapore, Thailand and Vietnam. She has been with Petronas since 2013. She is currently taking the role as Principal Offshore Pipeline Engineer with GTS Pipeline Engineering focusing mostly on project related engineering and some repair related design work. Previously she had been a Principal Pipeline Engineer with other major pipeline operator and lead pipeline engineer as well as project manager with oil and gas consultant company. She has vast knowledge in offshore pipeline design, installation, pre-commissioning and commissioning, integrity management and pipeline repair-rehab.

**Mr. Md Anuar Desa** is a Senior Pipeline Engineer from PETRONAS Group Technical Solutions. He has been working with several Engineering Design Consultants before joining PETRONAS in 2019. With 13 years of experience in pipeline design and integrity, he had involved in technical consultation for various pipeline design and integrity related issue. He has expertise in structural analysis via Finite Element Analysis (FEA) which widely use to solve various issue for onshore and offshore pipelines.

### REGISTRATION FEES

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