

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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BACKGROUND AND MITIGATIONS ON ACOUSTIC INDUCED VIBRATION

In recent years the industry has been more engaged on Acoustic Induced Vibration (AIV) due to failures and risks associated with fatigue failure at discontinuities such as high stress concentration locations. The AIV phenomena is more crucial in recent years across LNG facilities due to increased plant outputs and higher energy piping. The higher flow rates require bigger diameter piping which increases the risks associated with fatigue failure due to high D/t ratios. AIV can potentially cause severe piping vibration (shell mode) and lead to a piping failure within few hours of operation.

This paper will present industry updates on the subject and to bring awareness on the background of AIV, discuss general acceptable mitigation measures to eliminate the risks associated with AIV during design phase and highlight latest innovation in this area.

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