

FEQUENCY DOMAIN ANALYSIS FOR CYLINDRICAL FPSO IN BARENTS SEA

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Abstract

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- As proven oil reserves and areas expected to be buried are concentrated in deep sea and polar regions, the installation and maintenance of carious platforms should be considered.
- Since the information and experience are limited due to the restriction of accessibility, the comparison of heave motion with changing dimension of heave can provide appropriate guidelines for the design, installation and operation of platforms in the future.
- Design limits should be determined taking into account the consequences of all failure possibilities

Background

In order to reduce vertical motion of floating structure, external appendages are applied to the bottom of a circular structure such as TLP. SPAR or circular platform and this device changes its hydrodynamic properties by changing damping and added mass

Desired Design Variables

- Size of the heave plate
- Wave spectrum

Analysis

- SESAM

Desired Result

The trend of motion amplitude with different wave spectrum and size of the heave plate

Keywords: *cylindrical FPSO, Heave Plate*

References

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Biography

Graduated Korea Maritime and Ocean University at 2006

Over ten years of experience of working in Builder's organizations across many technical and commercial work disciplines in the shipbuilding industry including, jack up rig, wind turbine installation, drillship, container/crude oil/LNG carriers.

- Lead Project Coordinator who was responsible for acting as an assistant Project Manager to prepare construction

during the up-streaming stage of the Statoil Jack Up rigs and Seajacks and Wind Turbin