Design Issues in GTL Process and Production for FPSO

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Roughly half of global natural gas reserves are stranded gas field considered as uneconomic to develop due to remote location from markets, lack of economic transportation and infrastructure. An alternative approach in stranded gas field, to convert the natural gas into premium grade liquid products through Gas-To-Liquids (GTL) technologies for ease of transport could play a role in meeting the world energy demand.
GTL technologies have not been installed in offshore locations before, however, utilizing GTL facilities offshore that is both capable of being safely and economic installed on a floating substructure has long been developed by several players.
Conceptual engineering package of GTL Process has recently been developed for FPSO (Floating Production Storage and Offloading) application. Compared to land-based onshore application, several technical design issues need to be considered and addressed for offshore application. In this presentation, these design issues in GTL process development for FPSO will be described and some of them will be illustrated with 3D Images.