Floating LNG: New Rule Note for the Classification of LNG FPSO
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Abstract
Offshore LNG terminals are today broadly considered by the industry to respond to the world thirst of energy in a rapid and efficient manner. In order to match these technical developments, Bureau Veritas has completed, in May 2009, the first phase of a rule development project for the classification of floating offshore gas terminals.
Combining BV’s experience with the classification of liquefied gas carriers and FPSOs, this resulting guidance note provides requirements for structural safety and cargo containment system assessment. These requirements are applicable for offshore units including LNG FPSOs, FSRUs, gas production units or FSOs. In September 2010, BV has completed this guidance note with specific requirements for stability, electrical installations, safety and offloading of offshore LNG terminals.
The paper will describe the work and conclusions of this guidance note and focus on the 2 main challenges faced during the work:
On one hand culture differences between shipping, gas and offshore industries. Although modern design techniques are largely using sophisticated numerical calculation tools for both ships and offshore units, there is still a notable cultural difference between the shipping and the offshore industries in the fact that the design of offshore platforms has historically been inclined to be quite based on first principles and direct risk analyses as opposed to ships, the design of which integrates, to a large extent, the return of experience in service in a more empirical way.
On the other hand, the difficulty to built standards for a new technology. Despite the long experience in gas transportation at sea and in offshore units, LNG FPSO projects need to identify the risk induced by transferring new technologies from shipping or from onshore industry to offshore floating gas project.
The difficulties encountered will be illustrated with practical examples.

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