



OTC 19854

Operational Experience with Ship to Ship Transfer

Patrick Englebort / Exmar Marine nv

Copyright 2009, Offshore Technology Conference

This paper was prepared for presentation at the 2009 Offshore Technology Conference held in Houston, Texas, USA, 4–7 May 2009.

This paper was selected for presentation by an OTC program committee following review of information contained in an abstract submitted by the author(s). Contents of the paper have not been reviewed by the Offshore Technology Conference and are subject to correction by the author(s). The material does not necessarily reflect any position of the Offshore Technology Conference, its officers, or members. Electronic reproduction, distribution, or storage of any part of this paper without the written consent of the Offshore Technology Conference is prohibited. Permission to reproduce in print is restricted to an abstract of not more than 300 words; illustrations may not be copied. The abstract must contain conspicuous acknowledgment of OTC copyright.

Abstract

The paper describes the design, installation and operation of a Ship to Ship (STS) transfer system for LNG. It addresses the qualification of the cryogenic hoses and the emergency-disconnect couplings as well as the operational procedures for the berthing and transfer operation offshore.

The system uses 'standard' components, adapted only where needed for its new function. The operational procedures for berthing offshore have a long and proven track record in the oil lightering industry. The net result is a simple and cost effective solution for offshore transfer of LNG, developed in a fast and efficient manner and already proven with more than 10 commercial operations.

Abbreviations

BOG	Boil-Off Gas
BV	Bureau Veritas (France)
ERC	Emergency Release Coupler
ESD	Emergency Shut Down
FLNG	Floating Liquefaction of Natural Gas
FSRU	Floating Storage and Regasification Unit
GTT	Gas Transport & Technigaz (France)
IGC	IMO Gas Code
LNGC	Liquid Natural Gas Carrier
LNGRV	Liquid Natural Gas Regasification Vessel
LPG	Liquid Petroleum Gas
LR	Lloyds Register of Shipping (UK)
SIGTTO	Society of International Gas Tanker and Terminal Operators
SSL	Ship Shore Link
STS	Ship To Ship transfer