



U.S. Department of the Interior
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Accidental Disconnect of Marine Drilling Risers

Recently, an incident occurred on a drillship that had the potential for causing a serious well-control event. An employee was attempting to conduct a function test of the blind-shear rams. However, he inadvertently pushed the lower marine riser package (LMRP) button instead of the blind-shear ram button on the control panel. Since the LMRP button was not part of the primary or emergency disconnect sequence, the pod stabs did not retract and the blind-shear rams did not close. The disconnect allowed the release of drilling mud from the riser. Fortunately, the wellbore was cased, and a well-control event caused by a loss of riser hydrostatics did not occur.

As a result of the aforementioned incident, Notice to Lessees and Operators (NTL) No. 2000-G07 was issued regarding the accidental disconnecting of marine drilling risers. The NTL clarifies 30 CFR 250.107 (a) and 250.400 by prescribing the necessary measures to be taken to prevent the accidental disconnect of the lower marine drilling risers while conducting operations from floating drilling rigs.

Since the issuance of the NTL, a second incident occurred in which the LMRP was accidentally disconnected during an attempted implementation of the measures prescribed in the NTL. The accident occurred when an employee was attempting to install the lock-out device on the LMRP disconnect switch (button) while the rig was running a liner to set across an open hydrocarbon-bearing zone. Riser hydrostatic pressure was lost when mud escaped from the bottom of the riser. Surface control of the BOP stack was lost. Additionally, there was no remotely operated vehicle (ROV) or other intervention capability to close, at a minimum, the blind shear rams on the BOP stack.

Measures listed in the NTL or other actions that could impair the integrity of the marine riser or BOP system should not be taken when the well is vulnerable to flow. Therefore, a risk and consequence analysis should be performed prior to making the change. Further, when instituting these necessary changes, communication of current activities is critical in performing this operation safely. Time extensions for the implementation of the measures prescribed in the NTL may be granted on a case-by-case basis by the appropriate District Supervisor to allow for the safe implementation of the lock-out measures.

The MMS considers a backup BOP actuation system to be an essential component of a deepwater drilling system and, therefore, expects OCS operators to have reliable back-up systems for actuating the BOP in the event that the marine riser is damaged or accidentally disconnected. District Supervisors will be assessing current and future operations for back-up BOP actuation capabilities.

—GOMR—MMS—

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