Connector and Bolt Failures

Overview: BSEE is aware of a recurring problem of connector and bolt failures in various components used in risers and subsea blowout preventers used in offshore operations. These failures are of great concern to BSEE due to their frequency and the potential for a catastrophic event. A previous occurrence of bolt failures in December 2012 prompted a global recall of the bolts associated and a temporary cessation of drilling activities. The fact that these failures involved equipment from the three primary manufacturers suggests that this may be a systemic industry problem that requires immediate attention.

Recommendations: At a minimum, operators should work with the original equipment manufacturer (OEM) to:

- Verify that there is complete documentation that demonstrates that all components that are currently in service satisfy the metallurgical properties specified by the OEM and the latest industry standards.
- Verify that all installation and maintenance procedures (including torque processes and values) satisfy OEM requirements and ensure that these practices are effectively implemented.
- Report any failures to OEMs and appropriate industry organizations in a timely manner to ensure the prompt transmission of relevant data to the industry.

BSEE is continuing to work with various organizations to evaluate these failures and determine if additional long-term action is needed to prevent additional failures. Additional information will be provided as it becomes available on bsee.gov/bolts.

A Safety Alert is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding an accident or a near miss. It also contains recommendations that should help prevent the recurrence of such an incident on the Outer Continental Shelf.