



**GAS IMPORT JETTY AND PIPELINE PROJECT  
ENVIRONMENT EFFECTS STATEMENT  
INQUIRY AND ADVISORY COMMITTEE**

**TECHNICAL NOTE**

**TECHNICAL NOTE NUMBER:** TN 049

**DATE:** 2 November 2020

**LOCATION:** Gas Import Jetty Works and Pipeline Works

**EES/MAP BOOK REFERENCE:** Technical Report K

**SUBJECT:** Response to RFI 109 – Section 12.4 Risk criteria used in quantitative risk assessment

**SUMMARY:** Response relates to subsection 12.4: Risk criteria used in quantitative risk assessment

**REQUEST:** Provide further details on the hazards identified as high and moderate, and those deemed low that have not been included in the hazard identification process.

**NOTE:**

**Gas Import Jetty Works**

1. The HAZID conducted for the QRA focuses on process risks that may potentially lead to a major incident. Those risks are then carried forward for likelihood and consequence modelling in the QRA. The risks identified in the QRA are incidents that result in significant hydrocarbon loss of containment at various locations on the FSRU, jetty infrastructure and onshore facilities. Any risks that are identified in the QRA HAZID, but not included in the QRA, are still captured and anything identified that may eliminate or reduce a risk identified as an action for close out.
2. Separate HAZID workshops focus on assessing a greater range of risks and hazards, which might include major and minor hydrocarbon releases, hazards for operational personnel, and hazards to the environment. When identifying the risks and hazards, the HAZID workshops also identify and document any actions that may eliminate or reduce the risk for further assessment by the project team.
3. The HAZID has been provided to the IAC with Confidential Technical Note 50, and the QRA has been tabled as Document 128.

**Pipeline Works**

4. The hazard identification for the Pipeline Works is incorporated into the SMS for the pipeline (Document 96 – provided in confidence to the IAC). No hazards were excluded from this hazard identification or the QRA (Document 129) on the basis that they were deemed low likelihood.

**CORRESPONDENCE:** N/A

**ATTACHMENTS:** N/A