

General Platform Alarm as a Result of Missed Blocks

Description of Incident (January 2, 2024)

On December 30, 2023, in preparation for regularly scheduled shutdown and maintenance on an offshore production facility, a protective system isolation certificate (PSIC) was developed for purging operations. The PSIC was required to ensure that purging activities would not result in an inadvertent general platform alarm (GPA) if detected by the fire and gas detection system. The blocks identified on the PSIC were applied and the PSIC was considered active for two shifts.

On January 2, 2024, purging operations commenced again with the same blocks applied as per the approved PSIC. At approximately 2:45 a.m. a GPA was activated, and the crew responded as per the Emergency Response Plan. Upon investigation it was identified that the purging activities had caused a gas detection system to go into alarm status resulting in a GPA.

Root Causes

In March 2023 it was determined that blocking six of six gas detectors was required to inhibit gas detection, when previously only four of six was required, and the safety system fault logic was updated accordingly.

The change in logic was not identified during the preparation of the PSIC in December 2023. The PSIC preparation was considered routine or standardized for this operation as it is done regularly and the cause and effects diagram was not referenced, although this is a required step as per the procedure.

Corrective Actions & Recommendations

When standardized isolations are used, they must be cross-referenced and verified in field, per the approved diagram and as per procedures. These checks are in place to confirm that changes have not occurred and that there are no other factors that may influence the effectiveness of the isolation.

Applicable Lifesaving Rule

IOGP's lifesaving rule related to [Bypassing Safety Controls](#) relates to this incident. Read [more](#) about IOGP's lifesaving rules.

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