

Notifiable incident

Incident ID [6432](#)

Duty holder: Shell Australia Pty Ltd
Facility/Activity: Prelude FLNG
Facility type: Floating liquefied natural gas facility

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	17/03/2020 02:30 PM (WST)
Notification date	17/03/2020 09:14 PM (WST)
NOPSEMA response date	17/03/2020 09:20 PM (WST)
Received by	[REDACTED]
Nearest state	WA
Initial category type <i>(based on notification)</i>	Dangerous Occurrence
Initial category <i>(based on notification)</i>	Damage to safety-critical equipment
3 Day report received	20/03/2020
Final report received	20/03/2020
All required data received	20/03/2020
Final category type <i>(based on final report)</i>	Dangerous Occurrence
Final category <i>(based on final report)</i>	Damage to safety-critical equipment
Brief description	OHS-DSCE - Two pilot operated relief valves had the exhaust ports plugged.
Location	Process deck
Subtype/s	Facility integrity, Other, Valve failure
Summary <i>(at notification)</i>	<p>The OIM informed the topside of the facility is shutdown and depressurised with no hydrocarbon on the facility. The facility is powered through the Diesel generator.</p> <p>This afternoon as part of routine inspection work, a work party identified 2 pilot operated relief valves on the NGL Separation Feed Separator had the pilot exhaust ports plugged. This means that both relief valves would not have functioned in service if required. The unit was offline given the current facility status (shut and depressurised). The last time the Separator was online was 3/02/2020.</p> <p>The facility have 110 similar design pilot relief valves installed on other equipment and given the issue relised from inspection, all the 110 valves are currently being inspected as part of return to safe operation state.</p> <p>Note: If any anomalies are identified on inservice equipment, they will be rectified with spare valves.</p>

Details <i>(from final report)</i>	<p>The OIM informed the topside of the facility is shutdown and depressurised with no hydrocarbon on the facility. The facility is powered through the Diesel generator.</p> <p>This afternoon as part of routine inspection work, a work party identified 2 pilot operated relief valves on the NGL Separation Feed Separator had the pilot exhaust ports plugged. This means that both relief valves would not have functioned in service if required. The unit was offline given the current facility status (shut and depressurised). The last time the Separator was online was 3/02/2020. The facility have 110 similar design pilot relief valves installed on other equipment and given the issue relised from inspection, all the 110 valves are currently being inspected as part of return to safe operation state.</p> <p>Note: If any anomalies are identified on inservice equipment, they will be rectified with spare valves.</p> <p>** as supplied by duty holder **</p> <p>6. Brief description of incident - As part of routine inspection work on NGL extraction column, a work party identified that two pilot operated RV's on the relief line from the NGL Extraction Feed Separator had the pilot exhaust ports obstructed. This means that the RV's may not have functioned in service if required. The unit was last online on 3rd February and has an operating pressure range of between 60 and 70 bar.</p> <p>7. Work or activity being undertaken at time of incident - Routine inspection work.</p> <p>15. Action taken to make the work-site safe - No action required to make site safe.</p> <p>21. Immediate action taken/intended, if any, to prevent recurrence of incident. - [[left blank]]</p> <p>22. What were the immediate causes of the incident? - A bug screen was installed at the exhaust port. This was initially believed to possible obstruct the exhaust port.</p> <p>32. Has the investigation been completed? - Yes Root cause analysis - Root cause 1 - N/A Full report - Following the initial finding of the suspected blocked exhaust ports from the Inspector, a detailed inspection was conducted by Maintenance personnel. It was determined that what was thought to be an isolation plug in the exhaust port of the relief valve was in fact an external bug screen in addition to an internal bug screen. Engineering have reviewed this finding and advised that the relief valve exhaust port is capable of operating as designed on the two-pilot operated RV's on the relief line from the NGL Extraction Feed Separator.</p>
Immediate cause/s	Exhaust ports plugged for 2 PRVs
Root cause/s	
Root cause description	Root cause 1 N/A

Duty inspector recommendation	
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Date	18/03/2020
Duty inspector	
Recommendation	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Major investigation decision	
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Date	18/03/2020
Decision	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Non-major investigation review and recommendation	
Date	23/03/2020
Inspector	[REDACTED]
Risk gap	None
Type of standard	Established
Initial strategy	Inclusion in annual stats/data analysis

Recommended follow up strategy	
Recommended strategy	Inclusion in annual report stats / data analysis
Supporting considerations	Shell has reported plugged ports before, however this time they have stated in the 3/30 day report that these ports were not plugged, in fact they were external bug screens, hence this was just a mistake. No risk gap.

Non-major investigation decision	
Date	23/03/2020
RoN	[REDACTED]
RoN review result	Agree with recommendation
Strategy decision	Inclusion in annual report stats / data analysis
Supporting considerations	

Associated inspection	
Inspection ID	