

# Notifiable incident

**Incident ID** [6229](#)

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

Incident details	
<b>Division</b>	Occupational Health and Safety
<b>Notification type</b>	Incident
<b>Incident date</b>	01/11/2019 02:40 PM (WST)
<b>Notification date</b>	03/11/2019 05:41 PM (WST)
<b>NOPSEMA response date</b>	03/11/2019 05:48 PM (WST)
<b>Received by</b>	[REDACTED]
<b>Nearest state</b>	WA
<b>Initial category type</b> <i>(based on notification)</i>	Dangerous Occurrence
<b>Initial category</b> <i>(based on notification)</i>	Damage to safety-critical equipment
<b>3 Day report received</b>	06/11/2019
<b>Final report received</b>	02/12/2019
<b>All required data received</b>	02/12/2019
<b>Final category type</b> <i>(based on final report)</i>	Dangerous Occurrence
<b>Final category</b> <i>(based on final report)</i>	Damage to safety-critical equipment
<b>Brief description</b>	OHSE - DSCE - ESD valve 150UZV-2221 did not function correctly
<b>Location</b>	
<b>Subtype/s</b>	Valve failure
<b>Summary</b> <i>(at notification)</i>	Follow up from alarm received during a planned shut down activity, that was conducted on 1 November, revealed that ESD valve (150 UZV-2221) did not function as required. Valve only closed 50% Process involved has been shut down and isolated. Repair plan being prepared. Restart will not occur until valve functionality is restored 3 Day report to follow

<p><b>Details</b> (from final report)</p>	<p>Follow up from alarm received during a planned shut down activity, that was conducted on 1 November, revealed that ESD valve (150 UZV-2221) did not function as required. Valve only closed 50% Process involved has been shut down and isolated. Repair plan being prepared. Restart will not occur until valve functionality is restored 3 Day report to follow</p> <p><b>** As Supplied by Duty Holder**</b></p> <p>Brief description of incident - Activity being undertaken: Planned shutdown of the cold end of process What happened: 150UZV-2221 didn't close fully on demand (50%). Valve is downstream of the de-ethaniser (fractionation train) and part of ESD and EDP system. Current status: Situation is safe as fractionation train is not in operation. Plant will be restarted once functionality is re-established.</p> <p>Work or activity being undertaken at time of incident - Planned shutdown of the cold end of process</p> <p>What are the internal investigation arrangements? 5 Why Causal Reasoning Investigation</p> <p>No loss of containment</p> <p>Action taken to make the work-site safe - 1. Investigate; found valve torque is very high at 50%, actuator is performing per design. 2. Plant remains shutdown until functionality re-established</p> <p>Will the equipment be shut down? Yes, Situation is safe as fractionation train is not in operation. Plant will be restarted once functionality is re-established.</p> <p>If Yes, for how long? 150UZV-2221 - Repair functionality</p> <p>Immediate action taken/intended, if any, to prevent recurrence of incident. 150UZV-2221 confirmed as functional. Responsible - Prelude Production Coordinator. Completion Date - 8 November 2019.</p> <p>What were the immediate causes of the incident? The cause of the valve's failure to close is still being investigated.</p> <p><b>** As Supplied by Duty Holder**</b></p> <p>Has the investigation been completed? Yes</p> <p>Root cause 1 - Actuator undersized</p> <p>Full Report: The actual running to close / running to open torque values provided by Petro valve are 2 -3 times lower resulting in an undersized actuator. Actuator has been replaced by a stronger one. The undersized petro valves issue has been amalgamated into a broader investigation managed under the Prelude Manage Threats and Opportunities (115160) engineering process.</p> <p>Actions to prevent recurrence of same or similar incident: Action - Create MTO to address ongoing petro valves issue. Responsible - [REDACTED]. Completion Date - 11-11-2019 Completed (MTO 115160)</p>
<p><b>Immediate cause/s</b></p>	<p>TBC</p>
<p><b>Root cause/s</b></p>	
<p><b>Root cause description</b></p>	<p>Root cause 1 - Actuator undersized</p>

<p><b>Duty inspector recommendation</b></p>	
<p><b>Date</b></p>	<p>03/11/2019</p>
<p><b>Duty inspector</b></p>	<p>[REDACTED]</p>
<p><b>Recommendation</b></p>	<p>Do not conduct Major Investigation</p>
<p><b>Reasoning</b></p>	<p>Does not meet MI threshold based on information received</p>
<p><b>Supporting considerations</b></p>	

Major investigation decision	
Date	04/11/2019
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	04/11/2019
Inspector	
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	Moderate risk gap. Follow-up information received stated that the actuator for the valve had been replaced and was now functional. Root cause not yet determined. Investigate at the next PI.

Non-major investigation decision	
Date	05/11/2019
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	<a href="#">2051</a>