Notifiable incident

Incident ID	<u>5743</u>
Duty holder:	INPEX Operations Australia Pty Ltd
Facility/Activity:	Ichthys Venturer
Facility type:	Floating production storage and offloading facility

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	24/12/2018 12:00 AM (WST)
Notification date	25/12/2018 11:42 AM (WST)
NOPSEMA response date	25/12/2018 11:43 AM (WST)
Received by	
Nearest state	WA
Initial category type (based on notification)	Dangerous Occurrence
Initial category (based on notification)	Damage to safety-critical equipment
3 Day report received	27/12/2018
Final report received	27/12/2018
All required data received	27/12/2018
Final category type (based on final report)	Dangerous Occurrence
Final category (based on final report)	Damage to safety-critical equipment
Brief description	OHS-DSCE - A number of ESD valves failed to meet performance standard requirements.
Location	
Subtype/s	Facility integrity, Valve failure
Summary (at notification)	The OIM of the Ichthys Venturer facility reported that whilst doing checks and investigations following the facility's non-hazardous emergency shutdown (ESD1) event of which occurred on 24/12/2018, a Performance Standard non compliance was identified. The following Emergency Shutdown Valve: ESDV5708 and ESDV045 (900lb) drain to a Knock Out Drum, and ESDV5708 and ESDV708 (600lb) drain to another Knock Out Drum were recorded with valve closure times in excess of the relevant Performance Standard. The facility is in shutdown and the valves identified in non conformance were stroked and now all valves meet the performance standard.

Details	The OIM of the Ichthys Venturer facility reported that whilst doing checks and investigations following
(from final report)	the facilty's non-hazardous emergency shutdown (ESD1) event of which occurred on 24/12/2018, a Performance Standard non conpliance was identified. The following Emergency Shutdown Valve: ESDV5708 and ESDV045 (900lb) drain to a Knock Out Drum, and ESDV5708 and ESDV708 (600lb) drain to another Knock Out Drum were recorded with valve closure times in excess of the relevant Performance Standard. The facility is in shutdown and the valves identified in non conformance were stroked and now all valves meet the performance standard.
	During the checks and investigation follow up to the facility non-hazardous Emergency Shutdown (ESD1) event on 24/12/2018, a performance standard
	non-compliance was identified.
	The following Emergency Shutdown Valves (ESDV)
	S-708-ESDV-045 from #900 drain to knock out drum
	• S-708-ESDV-046 from #600 drain to knock out drum
	These ESDV's had a recorded closure time in excess of the closure time
	nominated in the 'Shutdown Valves Performance Standard'.
	At 15:50 WST on 24th December 2018, the FPSO had a non-hazardous ESD1 event.
	During the checks and investigation in the follow up from this event, the following Emergency
	Shutdown Valves (ESDV's) detailed below were recorded as having closure times in excess of the
	closure time nominated in the INPEX 'Shutdown Valves Performance Standard':-
	 S-708-ESDV-045 from #900 drain to KO drum
	 S-708-ESDV-046 from #600 drain to KO drum
	Prior to start-up of the facility the S-708-ESDV-045 positioner was changed out and both S-708- ESDV-045 and S-708-ESDV-046 were stroke checked. All valves achieved their required performance
	criteria. New positioner to be ordered for S-708-ESDV-046 and replaced.
	Actions:
	Replace valve positioner on S-708-ESDV-045 FPSO MTL Complete 25 Dec 2018 Exercise S-708-ESDV-045 & S-708-ESDV-046 for re-start. WO 2100014513 FPSO MTL Complete 25 Dec 2018
	Replace valve positioner on S-708-ESDV-046. Notification 10023386 FPSO MTL 31 Jan 2019 Send positioner from S-708-ESDV-045 for Root Cause Analysis.
Immediate cause/s	ESD valves - closure times in excess of performance standards. ESDV failed to meet Performance Standard, suspected shuttle valve stuck condition. The ESDV's did make their closed limit during the incident within the blowdown time but outside of
	the Performance Standard.
Root cause/s	ED - PREVENTIVE MAINTENANCE - PM NI - PM for equip NI
Root cause description	Valve positioner stuck after replacement

Duty inspector recommendation	
Date	26/12/2018
Duty inspector	
Recommendation	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Major investigation decision	
Date	26/12/2018
Decision	Do not conduct Major Investigation
Reasoning	Does not meet MI threshold based on information received
Supporting considerations	

Date	27/12/2018
Inspector	
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended strategy	Investigate within 45 days
Supporting considerations	Consequence - MAE control measure, therefore "serious". Likelihood increase from remote to possible due to ESDV non-compliance . Established standard - as per SoV. Relevant incident - ESDV-045 also failed to meet its performance standard during an ESD event on 22/10/2018 and was notified (RMS 5654). Therefore, escalate to investigate within 45 days.

Non-major investigation decision	
Date	07/01/2019
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate within 45 days
Supporting considerations	Agreed.

Inspection ID

1940