

# Notifiable incident

<b>Notification ID</b>	<a href="#">NTF11645</a>
<b>Duty holder</b>	Woodside Energy Ltd
<b>Facility/Activity</b>	Vincent
<b>Nearest state</b>	WA
<b>Incident</b>	OHS-DSCE - Two valves failed to meet performance standard

Basic information provided at time of notification	
<b>Notification type</b>	Incident
<b>Incident date</b>	14/07/2022 07:50 AM (AWST)
<b>Notification date</b>	14/07/2022 04:13 PM (AWST)
<b>NOPSEMA response date</b>	14/07/2022 04:30 PM (AWST)
<b>Received by</b>	[REDACTED]

Summary of information provided	
<b>Brief descriptive title</b>	OHS-DSCE - Two valves failed to meet performance standard
<b>Incident location</b>	Process deck
<b>Subtype/s</b>	Individual performance
<b>Summary (provided at notification)</b>	<p>Two valves failed to close in the 1 second according to performance standard.</p> <p>Names of valves:</p> <p>Inlet alpha STV Tag no. 46 xV5000 Alpha took 1.2 secs. Inlet heater bravo STV Tag No. 46 XV5000 bravo - failed to close.</p> <p>Planned outage for 4 days to investigate the failures.</p>

Request permission to disturb the site	
<b>Permission given</b>	Not Applicable
<b>Permission given by</b>	
<b>Permission given on</b>	

Initial spill and release amounts	
<b>Gas (kg)</b>	
<b>Liquid (L)</b>	
<b>Release type</b>	
<b>More information</b>	

Details of person providing information to NOPSEMA	
<b>Full name</b>	[REDACTED]
<b>Job title</b>	[REDACTED]

Initial notification category	
<b>Initial category type (based on notification)</b>	Dangerous Occurrence
<b>Initial category (based on notification)</b>	OHS - damage to safety-critical equipment

**Running sheet**

There are no running sheet entries for this notification

**Decision**

Escalate to level 1	Yes
Inspector	
Escalated on	18/07/2022 07:48

**Final notification category**

Final category type (based on final report)	Dangerous Occurrence
Final category (based on final report)	OHS - damage to safety-critical equipment

**Immediate causes**

Details	Root cause of failure to be performed post valve replacement - component / entire valve assembly (valve and actuator) to be replaced.
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**Initial report**

Due date	17/07/2022
Received date	16/07/2022
Reviewed date	19/07/2022
Reviewed by	
Additional details provided by duty holder	<p>Brief description of incident: During Annual ESD testing Inlet Heater B steam SDV (46XV5000B) failed to close.</p> <p>Work or activity being undertaken at time of incident: Annual ESD testing</p> <p>What are the Internal Investigation Arrangements: Internal investigation in accordance with Woodside "Health Safety and Environment Event Reporting, Investigating and Learning Procedure"</p> <p>Action taken to make the work-site safe Action taken: Valve report reviewed as part of the ESD annual testing to confirm valve status.</p> <p>Was an emergency response initiated? No Was anyone killed or injured? No</p> <p>Immediate action taken/intended, if any, to prevent recurrence of incident.</p> <p>Action: Confirm that Temperature Control Valve to Steam Inlet Heater B (33-TCV-3102B) closes when trip signal sent to 46-XV-5000B (managed under MoC) Responsible party Completion date 14-Jul-2022 Actual or Intended Actual</p> <p>Action: Confirm that Work Order to replace inlet Inlet Heater B SDV 46XV5000B remains on track for Q4 2022 materials availability Responsible party Completion date 15-Jul-2022 Actual or Intended Actual</p> <p>Brief description of incident Inlet Heater A steam SDV 46XV5000A failed to meet its Maximum</p>

Allowable Response Time (MART) by 1.2 seconds.

Work or activity being undertaken at time of incident: Annual ESD testing

What are the Internal Investigation Arrangements: Internal investigation in accordance with Woodside "Health Safety and Environment Event Reporting, Investigating and Learning Procedure"

Action taken to make the work-site safe:

Action taken Valve report reviewed as part of the ESD annual testing to confirm valve status.

Facility shutdown as part of planned turnaround scope.

Details of any disturbance of the work site As above.

Was an emergency response initiated? No

Was anyone killed or injured? No

Immediate action taken/intended, if any, to prevent recurrence of incident.

Action: 46-XV-5000A inspected and stroke tested to confirm opening and closing time (MART compliance) before restart of hydrocarbon production .

Responsible party [REDACTED]

Completion date 16-Jul-2022

Actual or Intended Actual

Action: Perform operational risk assessment to mitigate potential re-occurrence of 46-XV-5000A failing to meet MART

Responsible party [REDACTED]

Completion date 18-Jul-2022

Actual or Intended Intended

Immediate action taken/intended, if any, to prevent recurrence of incident.

Action: Confirm that Temperature Control Valve to Steam Inlet Heater B (33-TCV-3102B) closes when trip signal sent to 46-XV-5000B (managed under MoC)

Responsible party [REDACTED]

Completion date 14-Jul-2022

Actual or Intended Actual

Action: Confirm that Work Order to replace inlet Inlet Heater B SDV 46XV5000B remains on track for Q4 2022 materials availability

Responsible party [REDACTED]

Completion date 15-Jul-2022

Actual or Intended Actual

#### Final report

**Due date** 13/08/2022

**Received date** 25/07/2022

**Reviewed date** 29/08/2022

**Reviewed by** [REDACTED]

**Additional details provided by duty holder**

Full Report:

Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure  
Captured and reported previously on WELEV22030043 with associated actions. Valve is planned to be replaced under W/O 2100343851, scheduled for Q4 2022, and risk assessed under MOC-103976. Deterioration of the valve over time in the high temperature steam service potentially has contributed to galling of the ball valve and potential failure of the actuator at the 50% range. The valve opens freely to 100%. Risk of deterioration is controlled by having implemented logic changes such that the downstream Temperature Control Valve (TCV) will close automatically on a signal to close 46-XV-5000B which, with other overpressure protection, protects the package. Considering the effectiveness of control measures, and the area of the failed valve being in low a access area, the consequence and likelihood of escalation is tolerable and ALARP. There was a previous event in 2020, from which the action was to add exhaust air boosters to the actuator, which had resolved the issue up until these events.

Actions to prevent recurrence of same or similar incident

Action Replace 46XV5000B valve & actuator Work Order 2100343851

Responsible party [REDACTED]

Completion date 31-Dec-2022

Actual or Intended Intended

VALVE A:

Full Report:

Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure  
46-XV-5000A failed it's MART in May 2022. Deterioration of the valve over time in the high temperature steam service could be attributed to the ball valve galling and potential failure. The way forward is to update MOC-103976 to ensure if there is a failure of 46-XV-5000A to meet MART the downstream Temperature Control Valve will be driven closed.

Actions to prevent recurrence of same or similar incident

Action: Implement control change to close 33-TCV-3102A on 46-XV-5000A close command

Responsible party [REDACTED]

Completion date 31-Aug-2022

Actual or Intended Intended

Action: Replace 46XV5000A Valve & Actuator

Responsible party [REDACTED]

Completion date 30-Jun-2023

Actual or Intended Intended

Action: Create 2 weeks online stroke testing action for Operations until control change to close 33-TCV-3102A on 46-XV-5000A close command is implemented.

Covered under OPAM round 10137

Responsible party [REDACTED]

Completion date 18-Jul-2022

Actual or Intended Actual

**Final spill and release amounts**

Gas (kg) 0.00

Liquid (L) 0.00

Release type

<b>More information</b>	
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<b>Root causes</b>	
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<b>Code</b>	
<b>Description</b>	<p>VALVE B: Has the investigation been completed? Yes Root cause analysis Root Causes: Analysis Factor: EQ4-0 Equipment Repeat Failure Comments Deterioration of the valve over time in the high temperature steam service potentially has contributed to galling of the ball valve and potential failure of the actuator at the 50% range. The valve opens freely to 100%.</p> <p>VALVE A: Has the investigation been completed? Yes Root cause analysis Root Causes Analysis Factor: EQ4-0 Equipment Repeat Failure Comments Valve 46-XV-5000A Inlet heater steam supply, failed to close on Demand during PSD1, missing MART by 2 seconds in Mat 2022. Stroked and MART measured at 22 seconds. Deterioration of the valve over time in the high temperature steam service could be attributed to the ball valve galling and potential failure.</p>

<b>All data received</b>	
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<b>Date</b>	22/08/2022
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