

Notifiable incident

Notification ID	NTF11728
Duty holder	Woodside Energy Ltd
Facility/Activity	CWLH OKHA FPSO
Nearest state	WA
Incident	OHS-DSCE: Aft crane slew encoder developed an 8 degree offset, impacting the collision avoidance system.

Basic information provided at time of notification

Notification type	Incident
Incident date	26/08/2022 05:30 PM (AWST)
Notification date	27/08/2022 07:50 AM (AWST)
NOPSEMA response date	27/08/2022 11:00 AM (AWST)
Received by	[REDACTED]

Summary of information provided

Brief descriptive title	OHS-DSCE: Aft crane slew encoder developed an 8 degree offset, impacting the collision avoidance system.
Incident location	Deck
Subtype/s	
Summary (provided at notification)	Failure of safety critical component. The aft crane slew encoder was identified with an 8 degree offset after lifting. The offset alters the programmed and mapped collision avoidance system. Crane not operating within defined limits is a failure of performance standard P20. The aft crane is now out of service pending investigation and repair.

Request permission to disturb the site

Permission given	Not Applicable
Permission given by	
Permission given on	

Initial spill and release amounts

Gas (kg)	
Liquid (L)	
Release type	
More information	

Details of person providing information to NOPSEMA

Full name	[REDACTED]
Job title	[REDACTED]

Initial notification category

Initial category type (based on notification)	Dangerous Occurrence
Initial category (based on notification)	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	29/08/2022 10:58

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	Slew encoder error.
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Initial report

Due date	29/08/2022
Received date	29/08/2022
Reviewed date	29/08/2022
Reviewed by	
Additional details provided by duty holder	<p>Brief description of incident The aft crane slew encoder was identified with an 8 degree offset post lifting activities.</p> <p>This offset alters our programmed & mapped collision avoidance zones and constitutes a failure of our performance standard P20.2 which states lifting appliances shall operate within defined limits.</p> <p>Work or activity being undertaken at time of incident Aft crane lifting operations</p> <p>What are the Internal Investigation Arrangements Internal investigation in accordance with the Woodside "Health, Safety and Environment Event Reporting, Investigating and Learning Procedure"</p> <p>Action taken to make the work-site safe:</p> <p>Action taken: Aft crane parked in safe position and taken out of service. The Okha manual of permitted operations details this failure and is currently in force. Details of any disturbance of the work site Investigation launched to ascertain root cause and implement corrective actions</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 - Aft crane parked in safe position and taken out of service. The Okha manual of permitted operations details this failure and is currently in force.</p> <p>Responsible party Completion date 26-Aug-2022 Actual or Intended Actual</p>

Final report

Due date	25/09/2022
Received date	05/09/2022

Reviewed date	07/09/2022
Reviewed by	██████████
Additional details provided by duty holder	<p>Full Report:</p> <p>Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure Investigation completed by OKHAFLC, OKHAHSEC and HSR in accordance with Woodside Health Safety and Environment Event Reporting. After completing lifting activities, the AFT crane boom was being returned to boom rest. When approaching boom rest, the collision avoidance system activated preventing further movement of the boom. This entails the collision avoidance alarm activating and movement of the boom halted - automatically. The slew angle indicator was not reading correctly, resulting in a shift of the collision zone mapping. When slewing around to 360 degrees, the slew angle reading was out by 2 degrees. On further investigation the shaft key from 1st gear that runs along the slew bearing was absent. This would have had the ability to slip over time which would have caused the crane slew encoder feedback to be incorrect.</p> <p>Actions to prevent recurrence of same or similar incident:</p> <p>Action Replace Slew Encoder on W/O 2100350768 Responsible party ██████████ Completion date 29-Aug-2022 Actual or Intended Actual</p> <p>Action Replace 1st gear key and complete Slew Encoder calibration and collision checks on completion of current servicing Responsible party ██████████ Completion date 30-Sep-2022 Actual or Intended Intended</p> <p>Action Inspect FWD and Midships crane Slew Encoder assemblies for similar faults. Responsible party ██████████ Completion date 30-Sep-2022 Actual or Intended Intended</p>

Final spill and release amounts	
Gas (kg)	0.00
Liquid (L)	0.00
Release type	
More information	

Root causes	
Code	
Description	<p>Has the investigation been completed? Yes</p> <p>Root cause analysis: Root Causes : Analysis Factor: EQ3-0 Equipment Predictive/Preventative Maintenance Comments 1st Gear shaft key was absent and could not be located. Unknown as to whether it has worked loose or absent from last installation of gear. This caused the slew angle indicator to read incorrectly, resulting in a shift of the collision zone mapping.</p>

All data received	
Date	05/09/2022

