Notifiable incident

Notification ID	NTF11753
Duty holder	Woodside Energy Ltd
Facility/Activity	CWLH OKHA FPSO
Nearest state	WA
Incident	OHS-DSCE: Inspection identified aft crane slew encoder drive gear bushes displaced by 30 degrees

Basic information provided at time of notification	
Notification type	Incident
Incident date	05/09/2022 06:30 AM (AWST)
Notification date	05/09/2022 10:59 AM (AWST)
NOPSEMA response date	05/09/2022 11:30 AM (AWST)
Received by	

Summary of information provided	
Brief descriptive title	OHS-DSCE: Inspection identified aft crane slew encoder drive gear bushes displaced by 30 degrees
Incident location	
Subtype/s	Lifting operations
Summary (provided at notification)	Just reporting a damage to safety critical equipment. It's involving some inspections we were doing and our forward crane. We've identified that there is the potential failure to performance standard 20.2. This is an action driven from a previous action involving aft crane and inspecting about inspecting our slow encoders we found that the slow encoder they drive gear bushes had been misplaced and the indication was 30 degrees out from desired position from zero setting. The bushes have now been replaced and the setting has now been set back to zero and no increase to facility risk. 2 brass bushes were found to be dislodged

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		
Job title		

Initial notification category	
Initial category type (based on notification)	Dangerous Occurrence

Running sheet

There are no running sheet entries for this notification

Decision	
Escalate to level 1	Yes
Inspector	
Escalated on	05/09/2022 14:02

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	Shaft alignment bushes had been displaced from their appropriate housing generating adequate
	movement for gear teeth to slip.

Initial report	
Due date	08/09/2022
Received date	05/09/2022
Reviewed date	07/09/2022
Reviewed by	
Additional details provided by duty holder	Brief description of incident During inspection on the FWD Crane it was identified that the slew position encoder of the forward pedestal crane was, at the time of test, indicating 30 degrees from desired position.
	Work or activity being undertaken at time of incident
	Inspection of slew position encoder as part of corrective actions generated from WELEV22080072.
	What are the Internal Investigation Arrangements
	Internal investigation in accordance with the Woodside "Health, Safety and Environment Event Reporting, Investigating and Learning Procedure"
	Action taken to make the work-site safe:
	Action taken Crane was not in service at the time and investigation of fault commenced. 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 Locating bushes reinstalled and Slew Positioning Encoder was corrected.
	Responsible party
	Completion date 05-Sep-2022 Actual or Intended Actual

Final report	
Due date	05/10/2022
Received date	04/10/2022

Reviewed date	06/10/2022
Reviewed by	
Additional details provided by duty holder	Full Report - Part 1 and 2
	Describe investigation in detail, including who conducted the investigation and in accordance with what standard/procedure
	Investigation completed by an analysis of the second secon
	and Environment Event Reporting. An action driven by a recent event (WELEV22080072) identified that the slew position
	encoder of the forward pedestal crane was, at the time of inspection, indicating 30 degrees out from actual position, whilst offline.
	Investigation confirmed that the slew position indication was not in fault and that there was no dangerous occurrence. The
	reported event may be retracted.
	Explanation follows:
	 The shaft alignment bushes mentioned in the 3-day report were found to be not in fault. The slew position encoder, along with several other transmitters, shows random data on the HMI when the 24V common
	supply is isolated. All transmitters, including the encoder, return to normal function and show correct data on the HMI when
	the 24V supply is restored. - The activation of the emergency stop button on the hydraulic power unit has the effect of isolating the 24V supply, and the
	subsequent random data on the HMI. The 24V supply and the HMI data is restored when the E-stop is reset. This effect is
	as-designed and is common to all three Appleton cranes on Okha.
	- On this event, the technician erroneously used the HPU E-stop to isolate the HPU when parking the crane at end of use,
	rather than using the isolation breaker switch as per normal shutdown and isolation procedure. - As an outcome of the investigation, the Production Service Technicians have been made aware of
	the effects of E-stop
	function and reminded of the normal shutdown and isolation procedure. No further action required.

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

Root causes		
Code		
Description	Has the investigation been completed? Yes Root cause analysis Root Causes: Analysis Factor: HP2-1 Human Engineering - Human/Machine Interface Comments Lack of understanding of what the impact is when isolating the crane via the hydraulic power unit emergency stop. (isolates 24v supply to encoder, plus other transmitters)	

All data received	
Date	04/10/2022