## **Notifiable incident**

Incident ID <u>5363</u>

**Duty holder:** INPEX Operations Australia Pty Ltd

Facility/Activity: CPF Ichthys Explorer

Facility type: Other platform with accommodation facilities when drilling/workover facilities are not in

commission

Incident details	
Division	Occupational Health and Safety
Notification type	Incident
Incident date	15/04/2018 08:33 AM (WST)
Notification date	15/04/2018 05:20 PM (WST)
NOPSEMA response date	15/04/2018 05:25 PM (WST)
Received by	
Nearest state	WA
Initial category type (based on notification)	Dangerous Occurrence
Initial category (based on notification)	Unplanned event - implement emergency response plan
3 Day report received	18/04/2018
Final report received	15/05/2018
All required data received	
Final category type (based on final report)	Dangerous Occurrence
Final category (based on final report)	Unplanned event - implement emergency response plan
Brief description	OHS-UPE - Smoke in south umbilical riser room
Location	
Subtype/s	Alarm, Muster, Electrical, Emergency response
Summary (at notification)	The OIM of the Ichthys Explorer reported smoke from the south umbilical riser room. The area was confirmed to have some electrical cables. The ERT was mobilised and confirmed no fire. A GPA was initiated and all personnel mustered and accounted.

## **Details** (from final report)

The OIM of the Ichthys Explorer reported smoke from the south umbilical riser room. The area was confirmed to have some electrical cables. The ERT was mobilised and confirmed no fire. A GPA was initiated and all personnel mustered and accounted.

General Platform Alarm due to detection of smoke in the south umbilical riser room which houses the Power and Control umbilical between CPF and FPSO and the fibre optic cable connection to shore. CPF Main Power Generators tripped and Emergency Diesel Generators started. Planned operational testing was in progress between CPF and FPSO at the time. Emergency Response team were mobilised to the area and confirmed no fire was present. Some damage to electrical equipment has been identified and is under assessment.

On 15th April 2018 at 08.34am the CPF Facility experienced a General Platform Alarm (GPA) due to a confirmed smoke alarm in the South Umbilical Riser Room. The smoke was a result of an "arc flash" from a failure within the Interconnector Junction Box Enclosure and this resulted in an unplanned personnel muster on the CPF and ASV facilities. The event occurred during the planned Operational Test Procedure for "FPSO Re-start via Subsea interconnection" whereby the FPSO facility was to be in "black start" state and to restart utilising the CPF power through the Interconnector power supply line. Upon confirmed smoke alarm signal, the Responsible Person Electrical (RPE) was requested to investigate further and to confirm de-energisation of system and full isolation was in place for further investigation. There were no personnel in the South Umbilical Riser Room at the time of failure, and witnesses who were working outside the main entrance to the room described a loud bang at the time of the incident and with bulkhead walls vibration from the arc flash shock wave. The South Umbilical Riser Room is not used or required for any thoroughfare of personnel except for entry gained for planned maintenance and inspection for the equipment installed in the room such as:

- CCTV
- Fire extinguishers
- Smoke detector function testing
- · Emergency light function testing
- Light tube change out
- HVAC dampers

Initial review of the room CCTV footage from the South Umbilical Riser Room confirmed an arc flash event at 08:32.43 which caused an explosion within the junction box enclosure. The explosion damaged the enclosure, insulator panels and polycarbonate covers. The 33 kV cables and terminals remained mechanically terminated. There were visible signs of arcing on the termination lugs and partial discharge activity on the topside cable. All electrical protection devices on the system worked as designed cutting off power supply very quickly which minimised further damage. No damage was found to the optical fibre links, which were terminated in an adjacent junction box enclosure. A full testing plan was initiated to test and check all associated electrical equipment within the boundary of this event. Main power was restored on the CPF at 14:00pm and FPSO 10:42am, whereby the facilities were both functioning on Emergency Generator loads. No injuries resulted from this event and consequences were damage to facility equipment only.

## Immediate cause/s

Smoke from cables, not confirmed whether electrical or others.

## Root cause/s

**Root cause description** 

Duty inspector recommendation		
Date	16/04/2018	
<b>Duty inspector</b>		
Recommendation	Do not conduct Major Investigation	
Reasoning	Does not meet MI threshold based on information received	
Supporting considerations		

Major investigation decision	
Date	16/04/2018
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	17/04/2018
Inspector	
Risk gap	Moderate
Type of standard	Established
Initial strategy	Investigate

Recommended follow up strategy	
Recommended strategy	Investigate
Supporting considerations	Further update from INPEX yesterday confirmed that the event is a positive smoke detection and invetsigation commenced by INPEX homing in a junction box at riser bay. Details is still unclear. Overheating from electrical devices / connection is potential ignition sources. Currently there is no HC risk, however, our process is based on potential. I recommend that this incident to be followed up in Pl 1724. (Due next week).

Non-major investigation decision	
Date	17/04/2018
RoN	
RoN review result	Agree with recommendation
Strategy decision	Investigate
Supporting considerations	

Associated inspection	
Inspection ID	1724