Refurbish and Install Damaged GT-1 Exhaust Duct System by Dec 2018

Background/Business Case

The Sea Eagle FPSO is designed with Five Gas Turbines generation system with total rated output of 50 MW. The power output is used to run the process system, export crude oil/compressed gas to NLNG. As well as power the Satellite Drilling Production Platforms and the RP-A. Four of the Gas Turbines are required to run the plant with full process operation and crude oil offtake.

Currently, one of the turbines GT-1 is unavailable due to damaged exhaust system during start-up in October 2017.

The charter identifies the opportunity with In-house resource (DIY) to discover the spares at Onne Moribund yard and carry out the repair of damaged Collector Transition duct and replace the beyond repair ducts on the system- Exhaust Silencer, Elbow, Transition duct and Bellow.

Potential Benefits & Measures

- Significant savings of circa \$527,528.94 from purchase of new exhaust system as result of new spares found at Onne Moribund vard.
- Significant time saving in down time as a result of the spares discovered at Onne.
- Significant cost saving from award of contract to carry out the repair of transition duct. And installation of the damaged exhaust system.
- Significant time saving to carry out GT-1 Engine change out.
- Restoration of N+1 design philosophy of the power plant.

Project Plan

	<u>Milestones</u>	<u>Timeline</u>	Action Party
•	Critical analysis and scope of the damage	ed Nov, 2017	Amaku - Closed
•	Confirmation of damaged ducts.	15 Dec 2017	Amaku/Ayoola -Closed
	Decommissioning of damaged ducts	April 2018	Amaku - Closed
	Fabrication of Silencer & Elbow skid	April 2018	Omole - Closed
	Welding/Repair of Collection transition	July 2018	Iloakasia - Closed
	Installation of new exhaust system	Oct 2018	Amaku
	Change out of the Circular Exhaust coll	lector Nov 2018	Amaku

High Level Timeline

LO/L1
L2
L3
L4
L5

01 Nov 2017 01 Dec 2017

01 April 2018

01 July 2018 01 Dec 2018.

Critical Success Factors

- Successful identifying of the appropriate spares
- Successful repairing of the damaged Exhaust collection transition
- Successful installation of the Silencer, Elbow, Transition duct, Bellow, Exhaust collection duct and Exhaust collector.

Team Members

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