



TUNU NODE 2024 TAM BETWEEN 8TH TO 26TH APRIL 2024

COST SAVINGS FOR TUNU NODE TAM 2024

The cost savings in terms of DIY: using inhouse manpower instead of third-party vendor for some major TAM activities, the below shows **a minimum rough estimate** of what we saved:

1. Flowstation Vessel Desanding: Min Est. 15000 USD

Estimated from quote by MC&I (Overo's) team for similar job done by vendor for Tunu CPF vessels. Job scope includes unboxing, flushing to Env Barge and boxing of vessels within a max duration of 5 days. 100% scope of work carried out by Tunu Node Ops team with support from the Mtce team.

- a. Tunu: 7 vessels: Est. 4000 USD
- b. Ogbotobo: 4 vessels: Est. 3000 USD
- c. Opukushi: 7 vessels: Est. 4000 USD
- d. Benisede: 6 vessels: Est. 4000 USD

2. Tunu 4k/8k Inspection & Repairs on Gas Turbines: Min Est. 35000 USD

Internal Solar FSRs from Soku (Dan Nwaogu Arthur), EA (Abatai Francis) and Gbaran (Rotimi Jaiyeola), came to support the TAM, thus reducing the no. of external Solar FSRs required (est. at 5000 USD per day) for average duration of 7 days = 35000 USD). Equipment covered: GTG1/2, EGC1/ 2, AGC1/2

3. Tunu EGC2 Vent fan motor installation: Min Est. 3000 USD

This job required a crane so was planned with other TAM scope requiring crane. Upon installation, the Electrical team observed defective power condapter issue that was tripping the EGC2 MCC(auxiliaries switchgear). Since this power condapter is inaccessible as no spare on site , it would have required a vendor to strip down the LV switchgear to carry out repairs which would have incurred EGC2 downtime, increased gas flaring and vendor cost of up to 3000 USD. The site team did a DIY and rewired a spare feeder, configured it, cleared all alarms, and used it to feed EGC2 auxiliaries. The vent fan is now OK.

4. Tunu Street lighting repairs using Manlift: Min Est. 3000 USD

Despite a lean manpower challenge of just 3 Electrical Mtce personnel on site during the TAM who also doubled as the on-site Turnaround coordinators for the TAM, the Tunu Electrical team beat the odds to restore street lighting to the FLB-Extension accommodation and fence areas which had been a major UA/UC and security concern for years due to poor illumination. Forcados Terminal supported with a manlift and manlift operator as the affected street lighting poles were the non-fallable type, so it has been impossible to access the lamps all these while.

The team rectified multiple earth-fault trips and resolved water ingress issues for the newly installed lamps to restore moderate illumination to the area.

5. Transfer of Emergency Diesel Gen from Tunu to Opukushi: Min Est. 8,000 USD

The scope of this work included uninstallation of the Generator from Tunu using crane, transport to and reinstallation at Opukushi, testing, troubleshooting, and commissioning. This was critical to ensuring Goal Zero during and after the TAM at Opukushi. With the support of personnel from Ogunu Workshop and Lifting & Hoisting teams, the Tunu Mechanical and Electrical Mtce team successfully completed this DIY while navigating challenges with delayed materials and tools, unforeseen part failures and extended scope duration from planned 7 days to over 30 days, without incurring the cost of 3rd party vendor (est. 3000 USD) nor incurring the cost of hiring a diesel generator (est. 120 USD per day) and relieving the asset of the cost of hiring a mobile air compressor all these while Opuk was without an available Emergency Diesel Generator.