

Scope of Work

1. Inspection

Inspection shall be carried out in conformance with AS2550 & local standards. Inspection method shall include a visual examination, non-destructive testing, functional testing and operating testing. All such work shall be noted in the records. The following key elements must be inspected;

- Inspection of Cranes components;
 - Structural members
 - Corrosion limits
 - Alignment and distortion tolerance
 - Motion & load distribution check
 - Driving mechanism & mechanical elements
 - Power transmission and/with load testing
 - Alignment
 - Fit & tolerance
 - Safety devices and their accessories
 - Fit & tolerance
 - Brakes and clutches systems
 - Fit & tolerance.
 - Plate wear
 - Alignment
 - Wire rope & chains
 - Gear & drum alignment
 - Reeved on the sheave
 - Strength of ropes and chains
- Inspection of electrical machines, equipment and control system; and if none, an assessment must be done for integrating and installing them which must be incorporated into the report.
 - Inspect all functions and their controls for speed, smoothness of operation and limits of motion.
- Inspection of material and strength requirements for parts of the cranes and wire ropes.
- Inspection of signage, including warning signs and control markings.

2. Assessment Report & recommendation

A written report must be provided on the completion of the inspection the site's crane along with an equipment information sheet (Table 2) for each crane. This report shall contain the minimum of the following;

- Identification of the criteria used for the assessment.
- Inspection procedure & tests; its results and significant findings.
- Detailed assessment report of design working period (DWT)
- Requirements for any action to be completed before using the crane again.
- Assessment of the deflects and damaged requiring repair for each crane.
- Recommended maintenance necessary to ensure its continued safe operation.
- Identify components that require particular attention in routine checks.
- Improvement and automation upgrade recommendations for all respective sites.

Notes

1. All inspection techniques must be non-destructive type testing.
2. Contractor shall provide all materials, tools equipment and labor necessary to perform overhead crane inspections and repairs onsite at all FEA sites. This includes but not limiting to water bags, weights, man lifts, transportation and to accomplish all inspections and assessment. All Inspections and repair works must adhere and compile to Fiji OHS Standards (Ministry of Labour) & AS2550. Bid must be inclusive of all costs.
3. The major assessment shall contain both;
 - (a) a theoretical part, where the remaining design life of each component of the crane is analyzed based on the duty estimation; and
 - (b) a practical part, where physical inspections of all critical components and systems of the cranes are inspected for integrity and functionality.

Upon checking the remaining life of the critical components, the competent person shall identify components that have reached their design life that require overhaul for future safe use.

Price Schedule

Table 1

	FEA Sites	Cost		
		Inspection Works	Assessment & Recommendation Report	Total Price
1. Central				
	Deuba Power Station			
	Levuka Power Station			
	Korovou Power Station			
2. Western				
	Sigatoka Power Station			
	Nadi Power Station			
3. Northern				
	Savusavu Power Station			
	Wainiqueu Power Station			
	Total (VEP)			
	VAT 9%			
	Total (VIP)			

Notes:

1. Indicate currency used in tender bid (USD, FJD, NZD). Payment will be done in currency indicated.
2. Bidder to verify all required measurements.
3. Bidder / Contractor must comply with FEA's financial terms. Any advance payment will require a bank guarantee to be provided to FEA.

Crane Information Sheet

Table 2 Information Sheet (To be completed for each individual crane and attached with report)

Crane Information Sheet	
FEA Site:	.....
Registration No.:	.....
Identification No.:	.....
Model No.:	.....
Serial No.:	.....
Manufacturer's name:	.....
Date of manufacture:	.....
Date and time of last inspection:	.....
Owner's name: FEA	.....
Address:	.....
Maximum rated capacity:	..... kg
Classification:	.....