


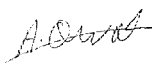
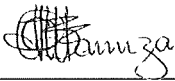

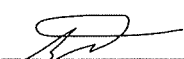
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|  | Transformer string insulators washing scope of work | Doc. no. F/290/007 |
| | | Rev. 0.0 |
| | | Total pages 1 of 4 |
| Matimba Power Station | | Reference Document: PS/290/003 |

Unit: 1 2 3 4 5 6 O/P

Outage IR GO OTHER

Outage Date

Function

| System | System Engineer | Date |
|---------------------|--|------------|
| Transformers | Akhona Qwabe  | 2022-06-15 |
| | APPROVED | Date |
| Engineering H.O.F | Louisa Bamuza  | 2022-06-15 |
| Engineering Manager | Jacky Mathobela  | 2022-06-17 |
| Outage Manager | Rosinah Segooa  | 2022/07/12 |

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| 1 | General Considerations..... | 5 |
| 2 | Scope of Work..... | 6 |
| | Washing of glass string insulators that provide support to overhead lines from steel structures | 6 |

1 General Considerations

The responsible contractor shall take note and responsibility of the following:

1. The contractor supplies cleaning equipment, this must include as a minimum:
 - a. Cleaning detergent (heavy duty liquid alkaline cleaner – Multi Solva)
 - b. Low abrasion anti-statics cloths
 - c. Ropes or similar systems as required for the works
2. The contractor must adhere to the material safety data sheet of the cleaning detergent.
3. The main Personal Protective Equipment (PPE) required is a hard hat, ear protection, safety shoes, safety harness, eye/face protection resistant to alkaline, gloves and protective overalls resistant to alkaline.
4. The contractor must use qualified or authorised people to do the job i.e. working at heights, cleaning of glass insulators, using rope system and use of PPE correctly. The proof of valid qualifications must be submitted prior to the commencement of the work.
5. The contractor must ensure that the work is done under permit to work, this permit shall be issued by the employer after the application has been completed by the contractor.
6. Access to the plant to perform the work must be coordinated with the project leader to ensure that there is no interference or effect on the transformer work which will be done in the same time slot.
7. The work must be completed within the outage duration or as per the project manager's requirement based on the project plan.
8. The contractor is responsible for the cleaning of the 400kV overhead lines string insulators in the generator transformer area.
9. The string insulators are elevated at approximately 25 meters above the ground via steel structures and approximately 10 meters below the Air Cooled Condenser (ACC) fans.
10. Great and reasonable care to be taken during the execution of the cleaning scope of work in order to prevent damages to any equipment such transformers (below), transformer bushings (below), string insulators and other transformer auxiliary equipment in the generator transformer area.
11. The contractor must submit the safety file and adhere to the Matimba Power Station safety requirements throughout the duration of the project.
12. The contractor shall submit a track record or proof of the similar work that has been executed successfully by the contractor.

2 Scope of Work

Washing of glass string insulators that provide support to overhead lines from steel structures

1. Access the work area by climbing on the steel structures of overhead lines (Ensure that the applicable and relevant PPE is used at times).
2. Use a rope to lift the cleaning equipment from the ground to the string insulators position.
3. Visual inspection to be conducted on the string insulators before washing to check the condition of the Glass for any damage. Damages must reported to engineering.
4. Clean the 400kV string insulators on all three phases of the overhead lines situated under the ACC fans (27 in total, 9 per phase).
5. Clean the 400kV string insulators by means of the specified cleaning detergent and low abrasion anti-static cloths.
6. After cleaning wipe and dry the string insulators using dry low abrasion anti-static clothes.
7. Visual inspection to be conducted on the string insulators after washing and damages to be reported to engineering.