

Detailed Scope of work for assisting the Annual Overhauling Activity:-  
Following jobs will be carried out during the Annual overhauling of Unit:

1. It covers cable Laying & Cable re-rolling, new connections for cables, Disconnection/Re-connect existing cabling as when required. This job includes the temporary Cable laying: up to 2000 meters for the Cable size: Multicore cables sizes up to 16 sq.mm to 150 sq.mm. Al/Cu conductor
2. Temporary Power Supply to be provided in the Boiler, Turbine and Generator, ESP, PWS and BOP area. Temporary Lights with fittings to be provided inside the plant. (Boiler/TG/BOP) #After completion of the job same to be removed and kept at original location. Temporary LDB Shifting and Installation for power supply and Lighting purpose. Lighting Panel (NLP/ELP/DCLP) cleaning and touch up painting in the rusted portion also included in the scope.  
Nos. of Lighting DB Installation work for Temporary lighting, welding, Grinding work etc are as follows-1. Boiler area-30 nos,2.TG area-8 nos, 3.BOP area-5 nos.
3. Cable dressing, clamping in the Cable tray and ferruling as per the requirement. It covers Boilers, TG, ESP and BOP area.
4. Vermin proofing, Cleaning, tightness checking and shifting of Modules of LT Switchgear as per the Outages arranged by MPL EMD Engineer. Cleaning and tightness checking of HT Switchgear. Total number of HV Switchgears Boards.
5. Vermin proofing, Cleaning and tightness checking of 6.6KV HT Breakers, Type-VCB (a). 6.6KV CGL Breaker. (b). 6.6KV Areva Breaker. (c). 6.6KV BHEL Breaker.
6. Vermin proofing, Cleaning and tightness checking of all 415V LT Switchgear.
7. Physical inspection and Cleaning of Service Transformers and providing touch up paint in the rusted portion. Total number of 21 KV/400 KV transformers: 3 nos, Total number of 6.6 KV / 415 V transformers: 22nos, ESP Transformers:72 nos.  
The Job also includes shifting of Filter Machines (1.6KL and 6KL Capacity) along with Oil Drums, Oil Filtration, top up, Leakage arresting, Gasket and Oil Seal replacement work, Oil Pumps and Cooling Fans replacement if required. Oil sample collection and BDV Checking also included in the Scope of work for Service and Power Transformers.
8. Cleaning and tightness checking of 400KV Switch yard equipment's---(a) Tightness checking of jumpers.(b) Housekeeping & upkeep of areas where work is executed by the Vendor.(c) Shifting of required spares & equipment from stores to location of work & scrap materials generated from work location to scrap yard. Transport assistance like truck, forklift etc for the same will be provided by MPL.  
Providing Support service for dismantling and overhauling of 400KV Breakers at 400KV Switchyard-6 nos.
9. Generator and SPVT Cubicles along with Bus duct (21KV and 6.6KV side): (a) Cleaning of Generator and UAT Bus duct. (c) Checking of Insulators and space heaters inside the 21KV and 6.6KV Busduct. (d) Providing touch up paint in the rusted portion.
10. Inspection and Cleaning of LT and HT Motors. Providing touch up paint in the rusted portion.

11. Providing Support for the Maintenance and Overhauling work of Motorised Actuators of type as follows (a). Auma Actuator (b) Limitorque Actuators (c) Antrieb Actuators (c) Rotork Actuators. The job also includes lifting and Shifting of Actuators, Installation of New Actuators, Dismantling of Actuators for Overhauling work, Modification work in the Motorised Actuators (Installation and Commissioning of DOL Starter in place of EPAC Module).

12. Providing Support for the Retrofitting of 415V GE make Air Circuit Breaker by ABB Make for Motor Feeders and Incomer Feeders.

13. Providing Support for the Vermin proofing, Cleaning, tightness checking of ID Fan Channels, Reactor, Thyristor Banks, Blower Motor etc. Cleaning and Maintenance of 3.3KV BHEL make Load Breaker (Qty-4 nos.) also included in the scope of work.

14. Providing 2nos manpower on 12 hours basis for ELCB testing & certification. 2nos ELCB tester will be in the scope of vendor

15. Providing support in the Testing Activity at 400KV Switchyard, GT, UAT, GRP panel, 6.6KV Switchgears and HT Motors also included in the scope of work.

16. Deliverables - (a) All the equipment should be clean, and vermin protected (b) Housekeeping should be intact on and around the electrical equipment's (c) A Logbook shall be maintained by vendor in which, dates, observations, daily job be recorded at the end of every activity. All the necessary working tools and tackles (Box Spanner/Size Spanner/Pliers/Insulated Screw driver/MultiMater/Hand Megger will be covered in the scope of Vendor). Major tools and testing equipments shall be provided by MPL.

16. Following consumables and tools will be in the scope of vendor

- Cotton waste: 1kg
- Electrical cleaning agent: 50 bottle
- Silastic sealant: 200 bottle
- Extension board with tested and certified ELCB:
- Industrial vacuum cleaner: 4 nos
- Torque wrench: 2 nos
- Digital Megger 10kv: 3 nos
- Markin cloth: 500 mtr
- Potable welding machine : 2 nos
- Grinder machine : 4 nos
- 1.5sq mm insulated lug barrel type: 500 nos
- Switchyard isolator grease: 1kg
- ALL PPE especially for work at height. Safety belt : 10 nos
- Plaster of paris putty : 120kg
- Ratchet set : 5 set
- ELCB tester : 2 nos
- 33Kv online neon tester : 2 nos
- Earthing rod : 10 nos
- LT & HT TAPE : 100 mtr each