GUJARAT INDUSTRIES POWER COMPANY LIMITED
(Surat Lignite Power Plant)
AT & POST NANI NAROLI, TALUKA: MANGROL, DIST: SURAT, PIN 394110 (GUJARAT)
Phone Nos.: EPABX (02629) 261063 to 261072, fax Nos.: (02629) 261112, 261080

TENDER DOCUMENTS FOR;

Biennial contract for Maintenance of Entire Electrical Systems for 4 x 125 MW Power Plant, Solar Plant and colony for years 2017-19

Bid No.: *SLPP/BMC/ELECT/17-19*

INSTRUCTIONS TO BIDDERS & CONDITIONS OF CONTRACT

INDEX

NOTE: All the Bidders should study entire Tender documents carefully & may carry out Plant visit before quoting & submitting their online Bid to understand scope of work and its importance.

NOTICE INVITING TENDER (NIT)
TENDER NO.:SLPP/BMC/ELECT/201719

Name of work	Biennial contract for Maintenance of Entire Electrical Systems for 4 X 125 MW Power Plant, Solar Plant and colony for years 2017-19.
Place of work	Surat Lignite Power Plant, Village: Nani Naroli, Taluka: Mangrol, Dist.: Surat- 394110 (Gujarat).
Quantity	The successful Bidder will be awarded this contract involving total quantities of various items as mentioned against item descriptions in BOQs.
Contract period	TWO YEARS
EMD	Rs. 2,40,000/- (Rupees Two Lac Forty thousand only) by Demand Draft payable at Mosali-Surat/Nani Naroli/Surat or Bank Guarantee in favor of GIPCL from approved Banks mentioned in this tender in subsequent clauses.
Cost of tender document / tender fee	**Rs.3000/-** by Demand Draft in favor of GIPCL payable at Motamiya-Mangrol or Nani Naroli.
Pre Bid meeting	On 13/12/16, 11:00 hrs. at office of GIPCL-Surat Lignite Power Plant, Village: Nani Naroli, Ta. Mangrol, Dist. Surat.
Availability of online e-Tender document	On website: https://www.nprocure.com
Last date of online submission of offer	30/12/16 up to 17:00 hrs. on website: https://www.nprocure.com
Submission of EMD, Tender fee and other supporting documents for technical Bid in physical form.	On or before 03/01/17 till 16:00 hours at office of Surat Lignite Power Plant, Nani Naroli, Dist. Surat.

NOTES:

1. Amendment / corrigendum of the tender document, forms, schedules, etc... may be done any time by the GIPCL during the period of publication of tender in the website. The Bidders are required to visit the website regularly till the last date & time of Bid submission.
2. GIPCL reserves the right to reject any or all the tenders without assigning any reason thereof.
3. The Bidders are required to quote the rate strictly as per the terms and conditions mentioned in the tender document, adhering to technical specifications as well.
4. The Bidders are required to submit their Bids online only through the website https://www.nprocure.com
5. The EMD, Tender fee & other supporting documents are to be submitted in physical form only at the following address:-

   Addl. General Manager (SLPP)
   Gujarat Industries Power Company Limited
   Surat Lignite Power Plant
   At Village: Nani Naroli,
   Taluka: Mangrol,
   Dist.: Surat-394 110, Gujarat.
   Phone: (02629) 261063-72.

SECTION-A
INSTRUCTIONS TO BIDDERS

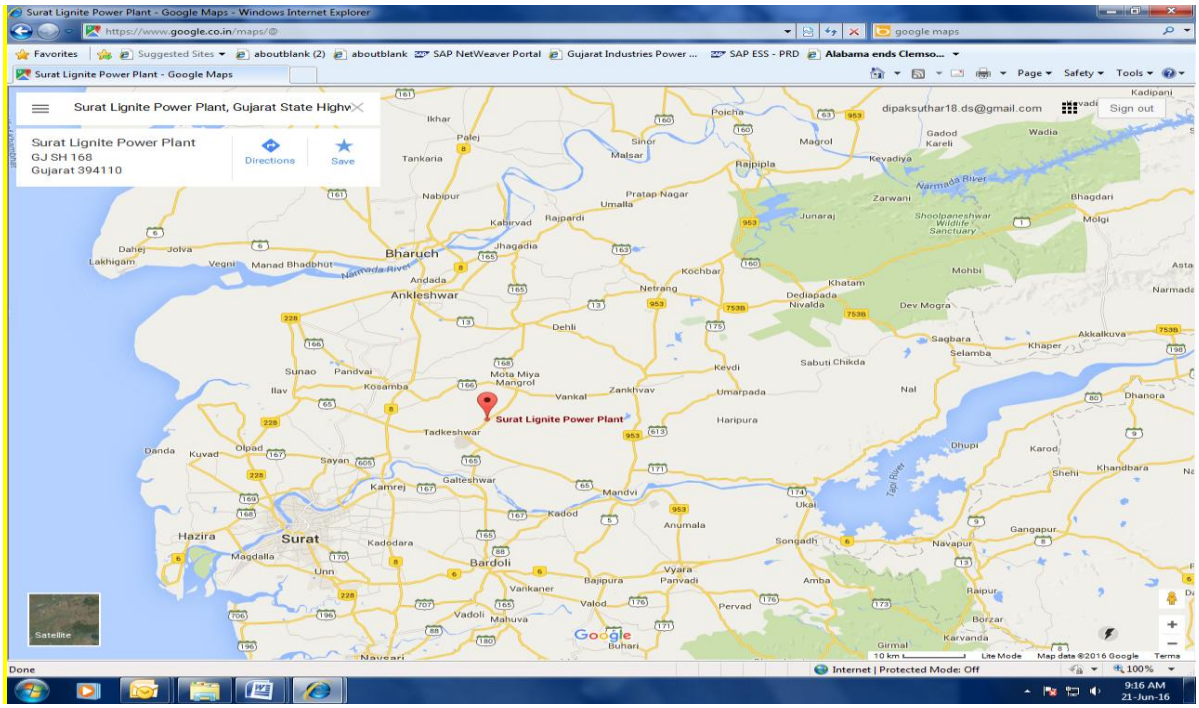
1. PLANT SYNOPSIS

Gujarat Industries Power Company Limited (GIPCL) (henceforth be named Company/GIPCL), is a Premier Power Utility in the State of Gujarat with an installed capacity of 810 MW and 5 MW Solar Power Plant. 51 MW Wind Energy Farm Project is under installation and commissioning stage. GIPCL has issued LOI (Letter of Intent) for 26 MW and 71.40 MW Wind Energy Farm Projects. GIPCL has commissioned 1MWp Distributed Solar Power Projects at two locations in Gujarat viz. at Village: Amrol, Dist. Anand and at Village: Vastan, Taluka Mangrol, Dist. Surat.

Surat Lignite Power Plant (SLPP) with four units of 125 MW capacities each is located at Village: Nani Naroli, Taluka: Mangrol, District: Surat in Gujarat. GIPCL has also operating its own captive Lignite and Lime Stone Mines close to the Power Plant. The Power Plant is based on Circulating Fluidized Bed Combustion (CFBC) technology for the Boilers, where Lignite is burnt along with Lime Stone in the Combustor of the Boiler.

Surat Lignite Power Plant (SLPP) is accessible by road from Kim and Kosamba, which are on Mumbai-Ahmadabad highway. From Kosamba, SLPP is around 32 KM, out of which 27 KM is part of the National & State Highway and balance 5 KM is District Road. From Kim, SLPP is around 18 KM, out of which 13 KM is the State Highway and balance 5 KM is District Road. The nearest Broad Gauge Railway Line is at Kim, which is around 21 KM from the SLPP. Surat is approximately 50 KM from the SLPP. Location Map for SLPP is as under.

Note: Plant Synopsis may be updated for any change in future.



The Company intends to award Biennial maintenance contract for entire electrical system for 4 X 125 MW Power plant which includes Main Plant Electrical Systems, Lignite & Lime stone handling & milling, external Lignite handling system at Mangrol mines end, Ash handling system, solar plants & Lighting system of entire plant and colony (total three package – A, B & C). For a period of two years at SLPP and is therefore like to invite open online tenders offers from experienced & resourceful contractors.

2. Scope of Work

2.1 The scope of work shall be preventive, predictive and breakdown maintenance of entire electrical system of 4 X 125 MW Surat lignite power plant, 5 MW & 1 MW Solar plant and colony (total three packages – A, B & C) which broadly covers Maintenance of :-

a. H.T./MV motors from 190 KW to 4000KW
b. L.T. Motors from fraction KW to 175 KW
c. DC motors from fraction KW to 37 KW
d. HT switchgears / boards and bus ducts
e. LT switchgears, Feeders & panels and bus ducts
f. 220 KV Switchyard & Transformer yard,
g. 125MW Generator system and Generator Bus duct.
h. EHV, HV & service transformers.
i. Protection & Relay panels.
j. Actuators of different makes
k. Maintenance & trouble shooting in 5 MW & 1 MW Solar plant.
l. Battery sets and chargers of various ratings,
m. Variable Frequency Drive and inverter panels,
n. Lighting fixtures, transformers & panels, lighting towers.
o. Miscellaneous equipments such as Hoist, EOT cranes, Earthing system, Package A.C., Soft starter,6.6/11 K.V. A.B. switch & accessories, Heaters, In line magnetic separator.
p. Miscellaneous panels such as hooter panels, Transducer panels, Scoop panel, Sump pump panels, Marshaling panels etc.
q. Attending to fault/defects & breakdown jobs etc.,
r. Shift Electrical Maintenance for lignite handling system.
s. Liasioning with statutory authority like Electrical Inspector for annual inspection of the installation.

Maintenance of above electrical equipment shall be done as per best practices & checklist provided by GIPCL.

The scope also includes all works necessary, which are not specifically mentioned here but required, for effective execution of entire work in all respect within time bound period and are deemed to be included in the scope of the CONTRACTOR. All works shall conform to the specifications, safety norms, legal & statutory requirements.

WORK EXECUTION

Permit to work system (including the LOTO system, as applicable) in vogue shall be followed strictly and accordingly, workers of contractor shall start any work only after all the necessary isolations, issuance of PTW and clearance /

instructions including daily safety briefing (Tool Box Talk) to the contractual workers.

2.2 The bid submitted by the bidder not covering the total scope of work and services as detailed out in the tender document shall be liable for rejection.

2.3 Quantum of job mentioned against all items in the price bid are indicative only & may vary as per site requirement & not to be construed as maximum or guaranteed quantity. The quantities shown in the price bid are approximate quantities for the contract period and they may vary as per job requirements.

2.4 All the miscellaneous activities pertaining to specific work to be executed for satisfactory performance is in the scope of contractor in his quoted rates.

3. GENERAL INSTRUCTIONS

3.1 The Bidders who are interested in participating in the tender must read and comply with the instructions and the terms and conditions contained in the tender documents.

3.2 The Bids shall be filled in by the Bidders clearly, neatly and accurately. Any alteration, erasures or overwriting would be liable to make the tender invalid unless the same is neatly carried out and attested over the full signature of Bidder. The decision of the Company to interpret the information and rates filled in by the Bidder shall be final and binding on the Bidder.

3.3 The Bidders are requested to make themselves fully conversant with the General Conditions of Contract, Special Conditions of Contract, Technical Specifications, site conditions, safety and health aspects and norms to be observed, etc. before submitting their bids so that no ambiguity arises in these respects subsequent to submission of the Bids.

3.4 Before quoting the rates, the Bidder should go through the specifications, scope of work etc. and get himself fully conversant with them. The bid should include cost of mobilization and cost to adhere to all safety norms as described in the tender. No relaxation or request for revision of quoted/accepted rates shall be entertained subsequent to the opening of bid on account of mobilization or Safety costs.

3.5 Bidder has to quote for all three packages A, B & C i.e. for Main plant, LLHS plant & AHS plant and Main plant lighting packages. Partial Bids received shall not be considered. However, GIPCL reserves the rights to allot all the plants/package' work to a single bidder or GIPCL may split the contract between two/three parties separately as it may deem appropriate. In case of splitting of the contract between two/three parties, the L2/L3 bidder shall match the rate with L1 bidder.

3.6 Bidder has to submit all the information and details required in the bid document. Failure to furnish all the information as per required bid documents or submission of a bid containing deviations from the contractual terms and conditions, specifications and requirements shall be rejected.

3.7 The bids shall be submitted within the time frames set out in the Notice Inviting Tender ('**NIT**') and bids submitted thereafter shall not be accepted and considered.

3.8 The tender documents shall not be transferable.

3.9 The Bidders are expected to examine all instructions, forms, terms and specifications in the bid documents and to get fully acquainted themselves with all the conditions and matters which may affect the subject matter of the work/tender or the cost thereof. If any Bidder finds any discrepancies or omissions in the specifications and documents or any doubt in true meaning or interpretation of any part, he shall seek necessary clarifications in writing or during pre bid meeting if required.

3.10 Conditional offers shall not be considered and liable to be rejected.

3.11 The Company reserves the right to extend the deadlines for submission of the bids by giving amendments.

3.12 A Pre-Bid meeting will be organized by the Company as per details given in NIT (Notice Inviting Tender) at GIPCL - SLPP. Bidders or his authorized representative should attend the pre-bid meeting. Bidders may seek any clarifications from the Company on their written request regarding the tender document.

3.13 During evaluation of bids the Company may, at its discretion ask the bidder (s) for clarification of their bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted.

3.14 The Company reserves the right to amend/ modify the bidding documents at any time prior to the deadline for submission of bids, either at its own discretion or in response to the clarification requested by a prospective Bidder. In such case, the Company may in its discretion extend the deadline for submission of bids in order to facilitate the prospective Bidders for incorporating the effect of the amendment in their bids.

3.15 The Bidders shall bear all costs and expenses associated with the preparation and submission of their respective bids, to attend meetings or conferences, if any; including any pre award discussion with the successful Bidder, technical and other presentations, etc. and the Company shall not be liable for any expense thereof.

3.16 If the successful Bidder is a joint venture, formed of two or more companies, the bidder along with the partners shall accept joint and several responsibilities and liabilities for all obligations under the Contract.

3.17 Timely and satisfactory completion of the work and strict adherence to the allotted time frames for jobs shall be the essence of the contract.

3.18 The Company reserves the right to qualify/disqualify any applicant without assigning any reason.

3.19 The Bidder shall be disqualified if any untrue statement or misrepresentation is made in the bid forms, attachments and other supporting documents submitted by the Bidder.

4. PLANT VISIT

The Bidder is advised to visit the Surat Lignite Power Plant (SLPP) after downloading the tender copy from website: http://etender.gipcl.com/ to study the actual working conditions, before submitting their offer. The Bidders shall examine the site of works and its surroundings and see for himself that may be necessary for preparing the Bid and entering into a contract. All costs and liabilities arising out of the site visit shall be at Bidder's account.

The submission of tender by a contractor implies that he has read these instructions, conditions of the contract etc. and has himself aware of the scope, nature of works & specifications of the works to be done. GIPCL will not, therefore after acceptance of contractor's rate, pay any extra charges for any other reason in case the contractor is found later on to have misjudged the site conditions.

Any error in description or quantity or omission in the contract document shall not vitiate the contract or release the contractor from executing the work comprised in the contract according to scope of works, magnitude of the works, requirement of materials, equipment, tools & tackles, labour, etc. Contractor has to complete the work in accordance with the contract documents irrespective of any defects, omissions or errors that may be found in the contract documents.

The Bidder is deemed to have examined and understood the tender document, obtained his own information in all matters whatsoever that may affect the works to be carried out especially mentioned or works which may have to be carried out to fulfill his contractual obligation within the scheduled rates and to have satisfied himself to the sufficiency for his offer. Ignorance of site conditions shall not be accepted by the GIPCL as basis for any claim for compensation. The submission of a Bid by the BIDDER will be construed as evidence that such an examination was made. Any later claims / disputes in regard to rates quoted shall not be entertained or considered by the GIPCL.
The rates quoted by BIDDER shall be based on his own knowledge and judgment of the conditions and hazards involved and shall not be based on any representations of the Engineer.

5. ELIGIBILITY CRITERIA

The following criteria shall be adopted for qualifying the Bidders for further proceeding.

5.1 Bidder should possess minimum **Three years** of experience **out of last five years** (as per following Cl. No.5.2) in similar nature of jobs like **maintenance / projects** in power plants / process industries like fertilizers, chemical, metals and should enclose proof of the same. Bidder shall submit necessary evidence for the same like attested copies of work orders along with work completion certificates from clients. The work completion certificate shall comprise of Order value & Executed value. Bidders should have executed the

work directly. The work executed as a sub-contractor or subletting agency shall not be taken in to consideration.

Note: For evaluation of the bid, the executed value mentioned in the work completion certificated will be considered.

1. Bidder should produce evidence of having experience of successfully completed similar works as defined hereunder during last **five years** ending last day of the month previous to the one in which tender is invited, satisfactory progress of ongoing works etc. secured from clients along with certified copies of documentary evidence preferably photo copies of work experience. The experience should be either of the following:

    a. **One similar completed work costing not less than the amount equal to 60 %(i.e Rs.69.75 Lac) of the Annualized estimated cost.**

    OR

    b. **Two similar completed works each costing not less than the amount equal to 40 %(i.e Rs.46.5 Lac) of the Annualized estimated cost.**

    OR

    c. **Three similar completed works each costing not less than the amount equal to 30 % (i.e Rs.35.0 Lac) of the Annualized estimated cost.**

Bidder should specifically mention fulfilling of above criteria in his offer along with details of work orders & work completion certificates issued by clients.

5.2 Contractor shall have to submit satisfactory work completion certificate from the client. Experience as a sub-contractor will not be allowed and Price Bid of such Bidders will be rejected.

5.3 Tender fee: The tender fee shall be accompanied in form of Demand Draft.

5.4 EMD: The EMD shall be accompanied in the form of DD or Bank Guarantee given by Bank as described in subsequent clause no. 8.

5.5 Bidder should have separate Employees Provident Fund code number towards registration of firm with RPF commissioner.

5.6 Attested copies of relevant documents duly signed & seal on each & every page shall be submitted. The above documents will be analyzed and after satisfaction, the Price Bid will be open. GIPCL may verify the documents, experience certificates issued by concern authority. After opening of technical Bid, if any required attested documents found missing in the Technical Bid submitted by the Bidder, the tender inviting authority may inform to that Bidder only once by E-mail to submit the missing required documents within stipulated time limit. If Bidder/Bidders fail to submit within stipulated time, their Bid will be declared technically disqualified and no further correspondence will be entertained.

5.7 Bidder should have annual turnover of Rs.35.0 Lac (30% of estimated annualized contract value) for last three financial years **i.e. 2015-16, 2014-15 & 2013-14.** Bidder shall furnish annual audited financial statement duly certified by Chartered Accountant for the last three financial years to demonstrate the financial healthiness of the company. The balance Sheet must be in the name of the company. Any type of MOU for this purpose will not be entertained.

The Net worth at the end of the last financial year should be positive.

Note: In case, the annual turnover is less than the statutory guideline which does not require audit, the bidder shall submit the turnover certificate from Chartered Accountant.

5.8 The Bidder has to submit INCOME TAX Permanent Account Number (PAN), TIN/VAT no. of the firm. Copies of the same shall be submitted.

5.9 Bidder has to submit Service Tax registration number. Copy of the same shall be submitted.

5.10 In case Bidder is a joint venture company since last five years, the above requirements/credential of Joint Venture Company / Parent companies shall be considered.

5.11 Bidder should possess valid electrical contractor's license and electrical supervisory permit of contractor's supervisor.

5.12 **The bidder should posses all such licenses applicable / permits which are necessary for execution of the job as per latest rules & regulations.**

The Bidder shall submit all the evidences, documents, attested copies of work orders & work completion certificates etc. as a proof with EMD & Tender Fee and also provide the requisite details online for meeting the prequalification requirements. GIPCL will verify the experience, performance, capability & strength of Bidders, independently for executing the job. GIPCL may visit the site & consult the owner of the industry/property where similar job is executed by Bidder. GIPCL reserves the right to accept/split/cancel/reject any/all Bids without assigning any reason thereof. The tenders of qualified Bidder/Bidders shall only be considered for further evaluation.

6. PRE-BID MEETING

A pre Bid meeting will be arranged at office of Surat Lignite Power Plant as per details given in the NIT (Notice Inviting Tender). All the Bidders are required to attend or send their authorized representative along with authorization letter for attending this meeting. It is desired to attend the Pre-Bid meeting as the work is directly related to the Plant operation and performance of Plant is depending on timely completion of awarded works.

7. LANGUAGE OF BID

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the Company, shall be written in the English language. Any printed literature furnished by the Bidder, written in another language shall be accompanied by an English translation for the purpose of interpretation of the Bid.

8. EARNEST MONEY DEPOSIT

8.1 An EMD of Rs. 2,40,000/- (Rupees Two Lac Forty thousand only) and Non refundable Tender fee Rs. 3,000/- shall accompany with Bid. The EMD & Tender fee shall be in the form of a crossed bank Demand Draft in favor of Gujarat Industries Power Co. Ltd. as per following details:

Bank	**Payable at:**
1. Bank of Baroda	Mosali, Dist: Surat
2. State Bank of India	Nani Naroli, Branch Code: 13423
3. Any Nationalized banks	Surat

8.2 The EMD, in alternative, may be submitted in the form of irrevocable Bank Guarantee in favor of Gujarat Industries Power Company Limited from any Nationalized Bank including Public Sector bank-IDBI Ltd or AXIS Bank, HDFC Bank, ICICI Bank or Kotak Mahindra bank, Yes Bank, Ratnakar Bank, IndusInd Bank, Karur Vysya Bank, DCB Bank, ING Vyasya Bank or The Kalupur Commercial Co-operative Bank Ltd, Rajkot Nagrik Sahakari Bank Ltd, The Ahmedabad Mercantile Co-operative bank Ltd, The Mehsana Urban Co-operative Bank Ltd, Nutan Nagrik Sahakari Bank Ltd as per Performa of BG enclosed with this e-tender under Section-F.

8.3 In case EMD is paid in the form of BG, the same shall be valid for a period of 180 days after the due date for submission of the bid

8.4 The EMD of the successful bidder will be returned after payment of Security Deposit by successful bidder.

8.5 The earnest money deposit paid in the form of demand draft will be refunded to the unsuccessful BIDDER as soon as the tender is finalized.

8.6 Any bid not accompanied with EMD and Tender fee will be rejected. Tender fees and EMD should be submitted in physical form directly to GIPCL as per Clause 6.9.

8.7 No interest shall be payable on EMD.

8.8 The EMD will be forfeited if the BIDDER (i) withdraws his tender after acceptance or (ii) withdraws his tender before the validity date of the tender.

8.9 **SCHEDULE OF EMD & TENDER FEES**

EMD & Tender fee and other documents to be submitted in physical form **within three working days** after due date of closing of the tender	Address for Submission: **AGM - SLPP** **GUJARAT INDUSTRIES POWER CO. LTD.,** **(Surat Lignite Power Plant)** **Village – Nani Naroli, Taluka – Mangrol** **District – Surat 394 110, Gujarat** **Phone : 02629-261063 (10 lines)** **Fax : (02629) 261073 / 261074**

9. SUBMISSION OF BID

A: MODE OF SUBMISSION

The bids shall be submitted online at thehttps://www.nprocure.com within the dates specified in the NIT along with the details of tender fees, EMD in two parts as under:

(a) Pre qualification and Techno-commercial Bid without price.
(b) Price Bid.

Note: Tender fee and EMD shall be submitted in physical form within three working days after due date of closing of the tender.

(a) Pre qualification and Techno-commercial Bid without price:

The tender document duly signed in all pages without price bid along with Techno-commercial deviations, if any, shall accompany the bid. The following Information shall be provided in the techno commercial bid:

1. Qualification and experience of site in charge.
2. Schedule of deviation (Annexure-G) Technical as well as commercial, if any.
3. Qualification & experience of Supervisors/Engineers.

The following supporting documents shall also be submitted along with EMD & Tender Fee in physical form:

1. The tender documents dully signed in all pages without price bid along with techno-commercial deviations, if any.
2. Proof of experience meeting the minimum eligibility criteria
3. Performance certificate issued by clients.
4. Previous work order copies.
5. Details of present work order (if any)

6. Turn over for the last three years, audited annual accounts/financial statements i.e. profit and loss account and balance sheet duly certified by a practicing CA will be required.
7. P.F Number and Allotment Letter.
8. PAN Number.
9. Service tax registration number/certificate copy.

(b) Price Bid:

1. Price Bid shall be submitted only in soft form through n procure e-portalhttps://www.nprocure.com.
   Note: Estimate includes cost of all manpower, equipments, vehicles, consumables, tools & tackles, transportation, Safety statutory compliance, mobilization etc...
2. Service tax shall be paid extra at actual as per prevailing rates as declared by Central Government on submission of documentary evidence.
3. **Bidder shall have to quote the rates in the form of %age. i.e. "At Estimated Value OR _____ percentage below the estimated value OR_____ percentage above the estimated value."**
4. The quantities shown in the price Bid are approximate for the contract period and may vary as per job requirement.
5. The Bidder shall fill the Bid documents with utmost care in consonance with the instructions contained in the Bid documents.
6. Escalation rate at 5% will be considered for second year.

B: METHOD OF TENDERING/SIGNATURE OF BIDS

(i) The Bid must contain the postal address like name, residence and place of business of the person or persons submitting the Bid and must be signed and sealed by the Bidder with his usual signature. The name of all persons signing the documents shall also be typed or printed below the signature on each page.

(ii) Bid by a joint venture/partnership firm must be furnished with full names of all partners and be signed with the partnership name, followed by the signature and designation of one of the authorised partners or other authorised representative(s). A certified copy of the power of attorney authorizing such partner or representative shall also be submitted.

(iii) Bids by a Corporation/Company must be signed with the legal name of the Corporation/Company i.e. by the President/Managing Director/Secretary or other person or persons authorised to Bid on behalf of such Corporation/Company. A certified copy of the board resolution/power of attorney authorizing such partner or representative shall also be submitted.

(iv) The Bidder's name stated on the proposal shall be the exact legal name of the firm.

(v) Erasures or other changes in the Bid Documents shall be initialed by the person signing the Bid.

(vi) Bids not conforming to the above requirements of signing shall be disqualified.

10. MODIFICATION AND WITHDRAWAL OF BIDS

a. The Bidder may modify or withdraw the bid prior to the deadline prescribed for submission of bids.

b. No Bid shall be modified subsequent to the deadline for submission of Bids.
c. No Bid shall be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of bid validity.

11. POLICY FOR BIDS UNDER CONSIDERATION

a. Bid shall be deemed to be under consideration immediately after opening of the bid and till official intimation of award/rejection made by the Company to the Bidders.
b. While the Bids are under consideration, Bidders and / or their representative or other interested parties are advised to refrain from contacting by any means, the Company. The Engineer, if necessary, will obtain clarifications on the Bids by requesting for such information from any or all the Bidders, in writing as may be necessary. The Bidder will not be permitted to change the price or substance of the Bid after the Bid has been opened.

12. EFFECT AND VALIDITY OF THE BID

a. The Bid should be kept valid for acceptance for a period of one hundred and eighty (180) calendar days from the last date of submission of Bids.
b. The submission of any Bid along with the required documents and specifications shall constitute an agreement that the Bidder shall have no cause of action or claim, against the Company for rejection of his Bid. The Company shall always be at liberty to reject or accept any Bid or Bids at his sole discretion and any action will not be called into question and the Bidder shall have no claim in that regard against the GIPCL.

13. OPENING OF BIDS

13.1 The GIPCL will open the pre-qualification/Technical Bid/price Bid, as the case may be, in presence of Bidder's representatives whenever such a procedure has been specified. Otherwise the tender will be opened by the authorized officers of GIPCL.

13.2 **Preliminary Examination:**

13.2.1 The Company will examine the Bids for any computational errors, for sureties furnished by bidder, for authentication of documents submitted and completeness of the Bids.

13.2.2 Arithmetical errors will be rectified on the following basis:

(a) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price will be corrected & will be binding to the bidders
(b) If there is a discrepancy between the Total Bid Amount and the sum of total prices, the sum of total prices shall prevail and the Total Bid Amount will be corrected & will be binding to the bidders.

14. EVALUATION & COMPARISON OF BIDS

14.1 GIPCL shall evaluate the Bids received and accepted by it to ascertain the lowest evaluated Bid in conformity with the specifications of the tender documents.

14.2 The Technical Bids will be examined for minor matters regarding qualification of bids. Subsequent to correspondence with the respective bidders, the decision of Tender Committee will be final.

14.3 All responses to requests for clarifications shall be in writing and shall be presented to the Company through e-mail or in a sealed envelope on or before the given date requested by the Company. If the Technical clarifications sought by the Company do not reach the Company on or before due date, the Bid will be rejected.

14.4 The comparison of all the Bids shall be carried out with reference to the scope of work as per the technical specification. Any deviation/omission shall be evaluated at highest quoted price of the deviation/omission quoted by any of the Bidder. In case a separate price (for omission) is not given by any other Bidder, a reasonable price of the same shall be taken & the same shall be binding to the Bidders.

14.5 The commercial deviation, if any, shall be loaded to bring all the Bids at par. The loading shall be carried out at an interest rate of 2% above PLR of SBI.

14.6 A Bid to be substantially responsive shall be one which on evaluation confirms to all the terms, conditions and specifications of the Bid documents without any material deviation or reservation.

14.7 For the above referred purpose, a 'material deviation' shall be one which:

(a) Which affects in any substantial way the scope, quality or performance of the contract, or
(b) Which limits in any substantial way and in a manner inconsistent with the Bid documents, GIPCL's right or the Bidder's obligations, under the contract, or
(c) Whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

15. RIGHT OF REJECTION OF TENDERS

15.1 GIPCL reserves the right to accept or reject any Bid or to cancel the Bidding process and reject all Bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders regarding the same.

15.2 Any Tender without EMD and Tender fee will be treated as non responsive and shall be rejected at the outset & no further correspondence shall be entertained regarding this.

15.3 GIPCL reserves the right to debar any Bidder from participation in future Bids if such Bidder has quoted an abnormally low rate in the Bid document/price Bid.

16. AWARD OF CONTRACT

16.1 GIPCL will award the contract to that bidder whose quotation has been determined to be substantially responsive and evaluated as the lowest quotation in conformity with the requirements of the specifications and

documents contained herein, provided further that the bidder is determined and evaluated to be qualified to perform the contract satisfactorily.

16.2 The successful bidder shall be intimated of his selection through the Letter of Intent or Letter of Award/ Work Order which shall be sent to him through e-mail, courier, fax or registered mail.

17. CONTRACT PERIOD

17.1 The contract will be for a period of 2 years from the date of actual commencement of operation of the contract as stated in the Work Order ('Contract Period').

17.2 GIPCL reserves the right to extend the Contract Period up to 3 months on the same rates and terms and conditions without any price escalation and entering into any new contract.

17.3 The said Contract Period can be extended if mutually agreed upon by both the parties up to one year and in such a case a revised work order shall be issued at the same rates and terms & condition or at negotiated rates acceptable by both parties i.e. the Company & the Contractor.

18. CONTRACT SECURITY DEPOSIT/ PERFORMANCE BANK GUARANTEE

As a Contract Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance Bank Guarantee (PBG)/Contract security deposit in favor of Gujarat Industries Power Company Limited for guarantee amount at **10%** of the "Annual Contract Price" from any Nationalized Bank including Public Sector bank-IDBI Ltd or AXIS Bank, HDFC Bank, ICICI Bank or Kotak Mahindra bank, Yes Bank, Ratnakar Bank, IndusInd Bank, Karur Vysya Bank, DCB Bank, ING Vyasya Bank or The Kalupur Commercial Co-operative Bank Ltd, Rajkot Nagrik Sahakari Bank Ltd, The Ahmadabad Mercantile Co-operative bank Ltd, The Mehsana Urban Co-operative Bank Ltd, Nutan Nagrik Sahakari Bank Ltd in the format attached in **SECTION-F**, and it shall guarantee the faithful performance of the 'Contract' in accordance with the terms and conditions specified in these documents and specifications. Contract security deposit shall be submitted strictly within twenty one days from the date of LoI or work order, whichever is earlier. The guarantee shall be valid up to retention period of three months from the contract completion date. The Guarantee amount shall be payable to the Company in Bidder's home currency without any condition whatsoever.

The Performance Bank Guarantee (initial security deposit) & retention money (Cash Security deposit) will be returned to the Vendor/Contractor without any interest at the end of the 'Retention Period' after completion of contract and on fulfilling contractual obligations throughout the retention period. However, any delay in submission of initial SD will result in equivalent late release of entire SD after guarantee period.

19. ASSIGNMENT AND SUB-LETTING

The Contractor shall not directly or indirectly assign or sub-let total/any part of the contract to any other party or agency.

20. CONTRACTOR'S OBLIGATIONS

A: DEPLOYMENT & RESPONSIBILITY OF MANPOWER

(i) The Contractor shall deploy suitably qualified and sufficient manpower for timely & satisfactorily execution of the works under the contract.

(ii) The Contractor shall deploy sufficient skilled, Semi-skilled and Un-skilled manpower separately to properly complete the job in given/scheduled time.

(iii) The Contractor shall depute its own workmen/labor with proper identification to enter the plant premises after ensuring that the jobs are scheduled.

(iv) At the time of deploying manpower, the Contractor shall strictly comply all the applicable labor laws/Acts norms including but not restricted to the age of the workers, women workers and shall also ensure that a police verification and security check for all the workmen/labor engaged at the GIPCL site is done and necessary documents regarding the same shall be submitted to the GIPCL's authorized representative/officer-in-charge. Any default in complying with the same or any misrepresentation regarding compliance of the same shall compel GIPCL to initiate appropriate civil or criminal proceedings regarding the same.

(v) The Contractor shall also comply with the safety requirements and provide his workmen/labor with safety equipment like helmets, masks, gum boots, a uniform and other necessary PPEs for properly undertaking the operations involved under this contract. Following are also to be issued:

a) Safety shoes
b) Goggles / face shield.
c) Ear plug / Ear muff.
d) Hand gloves like electrical hand gloves / cotton hand gloves / Chemical hand gloves

(vi) Contractor shall nominate /authorize senior experienced person in writing as site in charge to co-ordinate with GIPCL engineer and who shall bear overall responsibility for performance of the contract. Such person shall remain always available at site or site office allotted to the contractor at SLPP site. Contractor has to submit the authority letter and documentary proof for the same.

(vii) The Contractor shall appoint a supervisor (package wise) who shall co-ordinate with GIPCL's Engineer In - Charge for daily entrusted job. They have to maintain daily records dully signed for the works carried out and duly certified by Engineer-In-Charge. The Contractor in co-ordination with the Engineer-In-Charge shall ensure the availability of adequate manpower to carry out the job satisfactorily on a daily basis. As per the instruction of Engineer-In-Charge they have to allot the work and execute the same in specified time limit.

(viii) During execution of the works, one or more jobs may be required to be done simultaneously and the Contractor shall mobilize additional resources accordingly.

(ix) During emergency or similar situations the Contractor shall be required to mobilize resources as per need within the period of 04 hours as directed by GIPCL. If the contractor fails to mobilize sufficient manpower to complete the job in time, GIPCL will execute the job through other agency at the risk and cost of the contractor with 15% supervision charges& the same will be recovered from the Contractor's bill.

(x) During working in high risk area like hot lines of steam/ water/ oil/electrical equipments the workman must wear a suitable safety apron, safety belt,

safety hand gloves, electrical hand gloves and goggles. It is the contractor's/contractor's supervisor's responsibility to ensure it without fail.

(xi) During unit overhauling, the contractor has to enhance the site manpower as per the requirement to ensure the timely completion of work (During overhauling period quantum of work increases substantially). For this, enhanced work shall be completed by deploying additional manpower with separate supervisor. Payment will be made on item rate basis only. The work during the overhauling period may be carried out round the clock. Contractor should mobilize sufficient number of manpower and execute the work in all shifts with independent manpower. Contractor should not continue the same manpower for more than 12 hours.

B: TOOLS & TACKLES

(i) All tools & tackles and measuring equipments required to execute the contract are in the scope of the contractor (tentative list is attached). The contractor should ensure that tools & tackles and measuring equipments are in healthy & working condition.
Note: If work is suffered due to want of sufficient manpower, tools & tackles, vehicles, equipments, then 25% of the total job cost will be levied as a penalty for each and every instance.

(ii) For proper execution of the scope of work, the contractor is required to maintain sufficient quantity of tools & tackles with in good working condition at site as per day to day work load and emergency situations to complete the work in stipulated time.

(iii) In case of breakdown of equipment, the contractor should work round the clock for putting back the area in service immediately within minimum time. In case of any emergency arising during night hours the contractor should be in a position to mobilize the manpower immediately within minimum time.

(iv) Arrangement for lighting at the work spot has to be made by the contractor. He has to arrange all lighting equipment such as power cable, hand lamps. The contractor has to take prior approval for taking electrical power supply. The contractor should keep hand lamps of 24Volt for confined space and sufficient quantity of 240 Volt and halogen lamp for other area ensuring safety at work place

(v) Pin sockets of IS standards should be used for all connections. For any accident take place & any damage to the equipment and/or injury to human due to carelessness in loose connection, contractors will be held responsible & liable for any recovery/actions

21. Clarification of Bidding Documents

If any Bidder requires any further information or clarification in the Bidding Documents, may notify the Company before one week of last date of submission of online Bid, in writing or by E-mail at the GIPCL's mailing address slppelect@gipcl.com as indicated in the 'Invitation to Bids'. The GIPCL's response (including an explanation of the query) will be sent in writing or by E-mail to all prospective Bidders who have received the Bidding Documents.

22. TIME SCHEDULE

The basic considerations and the essence of the 'Contract' shall be the strict adherence to the time schedule for performing the specified 'Works'.

23. UNDERSTANDING AND CLARIFICATION ON DOCUMENTS AND SPECIFICATION

The Bidder is required to carefully examine the specifications and documents, all the conditions and matters work wise & cost wise. If any Bidder finds any discrepancies or omissions in the specifications and documents or is in doubt for any meaning of any part, he shall request in writing for an interpretation/ clarification to the GIPCL or during Pre-Bid meeting.

All such interpretations and clarifications shall form a part of the Bid documents.

24. PAYMENTS

All the payments against the work order shall be in Indian currency and payable through cheque only.

25. POINTS TO BE CONSIDERED DURING QUOTING ONLINE PRICE BID

a. The schedule of rates shall be read in conjunction with Instructions to Bidders, General conditions of contract, Special conditions of contract and Technical specifications.
b. The quantities given in the schedule of rates are estimated and will be made as per actual work carried out as per the rates of work order.
c. The method of measurement of completed work for payment shall be in accordance with the method of measurement specified in the
d. No separate amount shall be payable for use of auxiliary equipment incidental to or in day to day operation in the course of fulfillment of contractual obligation of the supplier.

Note: Interested bidders are requested to submit the online tender at least two days in advance from the due date set for on line submission of bid in order to avoid non participation of e-tender due to probable technical problem in e-tender system.

26. QUANTITIES

The quantities specified are estimated and for tendering purpose only. Payment will be made, based on actual work done as certified by Engineer-in-charge of GIPCL.

Quantities of individual items may be revised during the course of contract period based on site requirement. Contractor shall not be entitled for any compensation on ground of such alteration in scope of work. GIPCL reserves the right to operate or increase/decrease quantities in each item or omit any item included in Schedule of Quantity at his discretion. Contractor shall have no claim, whatsoever, on grounds of loss of anticipated profit etc. on account of the same.

After commencement of the work, GIPCL, for any reason may not require to be carried out the whole/part of the work as specified in the tender, the ENGINEER-in-charge shall inform the fact for thereof to the CONTRACTOR and contractor shall have no claim for any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out nor shall he have any claim for compensation by reason of any change having been made in the original specifications and instructions which shall involve any curtailment of the work as originally contemplated.

SECTION-B
INSTRUCTIONS TO BIDDERS FOR ONLINE TENDERING

1. Tender documents are available only in electronic format. Bidders can download free of cost from the web site - www.nprocure.com and http://etender.gipcl.com/.
2. All Bids (technical and price Bid) should be submitted online through the website https://www.nprocure.com . No physical submission of price and technical Bid will be entertained as it should be furnished online only. Also no fax, e-mail, letters will be entertained for the same.
3. Following should be submitted 'off-line' in sealed covers separately during dates & time set in NIT at our office at Village: Nani Naroli, Taluka: Mangrol, Dist.: Surat - 394 110, Gujarat.
   [1] Tender Fee, [2] E.M.D. covers [3] Supporting Documents for Technical Bid.
4. Bidders who wish to participate first time in online tenders will have to take digital signature from N- procure. GIPCL will not be held responsible in case of late submission for vendor registration.

SECTION-C
GENERAL CONDITIONS OF CONTRACT

1. CONTRACT SECURITY DEPOSIT/ PERFORMANCE BANK GUARANTEE

As a Contract Security, the successful Bidder, to whom the work is awarded, shall be required to furnish a Performance Bank Guarantee (PBG)/Contract security deposit in favour of Gujarat Industries Power Company Limited for guarantee amount at five percent **(10%)** of the "Annual Contract Price" from any Nationalized Bank including Public Sector bank-IDBI Ltd or AXIS Bank, HDFC Bank, ICICI Bank or Kotak Mahindra bank, Yes Bank, Ratnakar Bank, IndusInd Bank, Karur Vysya Bank, DCB Bank, ING Vyasya Bank or The Kalupur Commercial Co-operative Bank Ltd, Rajkot Nagrik Sahakari Bank Ltd, The Ahmadabad Mercantile Co-operative bank Ltd, The Mehsana Urban Co-operative Bank Ltd, Nutan Nagrik Sahakari Bank Ltd in the format attached in **SECTION-F**, and it shall guarantee the faithful performance of the 'Contract' in accordance with the terms and conditions specified in these documents and specifications. Contract security deposit shall be submitted strictly within twenty one days from the date of LoI or work order, whichever is earlier. The guarantee shall be valid up to retention period of three months from the contract completion date. The Guarantee amount shall be payable to the Company in Bidder's home currency without any condition whatsoever.

The Performance Bank Guarantee (initial security deposit) will be returned to the Vendor/Contractor without any interest at the end of the 'Retention Period' after completion of contract and on fulfilling contractual obligations throughout the retention period. However, any delay in submission of initial SD will result in equivalent late release of entire SD after guarantee period.

2. RECOVERY CLAUSE

(i) In case of any damage of equipment/machinery due to negligence of contractor or any other reasons attributed to contractor the decision of Engineer-in-charge regarding the amount of recovery shall be final and binding subject to a maximum of 10% of contract value. Recovery will be affected from the monthly bills and/or retention money/security deposit.

(ii) If the contractor fails to execute the work as per directions of Engineer (I/c) within the time frame given in work order and as per day to day instructions by Engineer-in-charge, GIPCL shall get the work done by third party at the risk & cost of the contractor with 15% additional overhead charges of GIPCL.

3. ASSIGNMENT AND SUBLETTING OF THE CONTRACT

The contractor shall not assign or sub-let any part of the contract to any other party or agency.

4. DEDUCTIONS FROM CONTRACT PRICE

All costs, charges or expenses that GIPCL may have paid, for which, under the contract the contractor is liable, shall be recovered by the GIPCL. The contractor shall pay all such claims within 15 days of claim failing which the same shall be deducted from the bills of contractor.

5. TERMINATION OF CONTRACT BY GIPCL

Contractor shall be responsible to complete the jobs within agreed time schedule and in case contractor fail to complete the job, GIPCL shall recover from his bill, Security Deposit and / or whatsoever for expenses incurred to complete the job with additional 15% overhead charges.

In case if contractor's services are not found satisfactory with respect to mobilization, time bound completion of work, workmanship & safety (OHSAS policy of GIPCL) then GIPCL has right to terminate the contract at any time by giving him 15 days advance notice without assigning any reason and will make the alternate arrangement at the risk & cost of contractor.

GIPCL may terminate the contract after due recoveries of pending jobs/damages after giving 15 days advance notice to the contractor if any of the following events occur –

i. Contractor is adjudged as insolvent.
ii. Contractor has abandoned the contract.
iii. Contractor fails to proceed with the work with due diligence as per requirements of the contract.
iv. Contractor has neglected or failed persistently to observe or perform any of the acts, matters or things, which as per the contract are to be observed and performed by the contractor.
v. Contractor repetitively violating the safety norms for more than three incidents.
vi. Any major contradiction of applicable labour laws.
vii. Any major deviations from contractual terms and conditions including quality of job.

6. FAILURE & TERMINATION

If the CONTRACTOR after receipt of written notice from the GIPCL/ ENGINEER requiring compliance, with such further drawings and / or the GIPCL /ENGINEER instructions fails within seven days to comply with the same, the GIPCL /ENGINEER may employ and pay other agencies to execute any such work whatsoever as may be necessary to give effect thereto and all costs incurred in connection therewith shall be recoverable from the CONTRACTOR by the GIPCL on a certificate by the GIPCL/ENGINEER as a debt or may be deducted by him from any money due or to become due to the CONTRACTOR.

If the contractor fails to execute the work or fails to mobilize the resources and equipments as per directions of GIPCL / ENGINEER within the time frame given and/or violating the GIPCL's safety rules & regulations, ENGINEER/ GIPCL shall get the work done by third party at the risk & cost of the CONTRACTOR with additional 15% overhead charges of GIPCL and all costs incurred in connection

therewith shall be recoverable from the CONTRACTOR by the GIPCL /ENGINEER as a debt or may be deducted by him from any money due or to become due to the CONTRACTOR.

In case if contractor's services are not found satisfactory with respect to mobilization, time bound material evacuation, workmanship & safety (OHSAS policy of GIPCL) then GIPCL has rights to terminate the contract at any time by giving you 15 days advance notice without assigning any reason and will make the alternate arrangement at cost and risk of the Contractor.

7. SETTLEMENT OF DISPUTES

a. Any disputes or difference of opinion between parties arising out of the contract to the extent possible shall be settled amicably between the parties. If amicable settlement cannot be reached all the disputed issues shall be resolved through arbitration before a Sole Arbitrator appointed by Managing Director, GIPCL according to the provisions of The Arbitration & Conciliation Act, 1996. The place of arbitration shall be at Surat/Vadodara or any other place within state of Gujarat as may be mutually agreed by the parties in consultation with the tribunal.
b. In appointment of the Sole Arbitrator, if the dispute claim is up to a sum of Rs. 25/- Lac, a person having a position equivalent to a Retired District Judge shall be appointed; for the claim higher than Rs. 25/- Lac and up to Rs. 100/- Lac, the same shall be referred to a Retired High Court Judge and for a claim exceeding Rs. 100/- Lac, the same shall be referred to a Retired Supreme Court Judge.
c. Work under the contract shall be continued by the contractor during arbitration proceedings unless GIPCL shall order suspension thereof or any part thereof in writing or unless the matter in such work cannot possibly be continued unless the decision of the Arbitration proceedings is obtained.

8. INTERPRETATION OF CLAUSE

In case of disputes as regards interpretation of any of the clauses or specification, the decision of Addl. General Manager (SLPP) - GIPCL will be final and binding on the contractor.

9. EMPLOYEE'S COMPENSATION INSURANCE

Contractor shall take all risk Insurance Policy to cover all his workmen/employees, staff applicable under the Employee Compensation Act 1923 or any amendment thereof as also insurance cover for third party liability. The contractor shall keep the GIPCL indemnified from all liabilities arising out of his action in pursuance of this contract. The E. C. Policy should be obtained from Surat Jurisdiction and shall be assigned to GIPCL. EC policy should cover the specified contract period.

Contractor shall also obtain additional off-duty coverage insurance policy for all his workers as detailed in tender.

10. STATUTORY REQUIREMENTS

a. COMPLIANCE OF LABOUR LAWS

1. The contractor shall at his own cost comply with the provision of labor laws, rules, orders and notifications whether central or state or local as applicable to him or to this contract from time to time. These Acts/Rules include without limitation of the followings.
2. Contractor shall be solely responsible and shall fully comply with all the provisions of all the labor laws applicable such as the Minimum Wages Act, 1948, Contract Labor (Regulation & Abolition) Act 1970, Factories Act, 1948, Payment of Bonus Act 1965, Employees Provident Fund and Miscellaneous Provision Act 1952, Industrial Dispute Act 1947, Employee Compensation Act 1923, Payment of Gratuity 1972, Interstate Migrant Workmen Act 1979, Equal Remuneration Act with Rules, Order and Notifications issued/made there under from time to time.
3. All other Acts, Rules/Bye-Laws, Orders, Notifications etc. present of future applicable to the contractor from time to time for performing the contract job.

3.1 The Contractor shall provide and be responsible for payment of Wages, Salaries, Bonus, Social charges, Insurance, Food, Accommodation, Transport, Medical and Canteen facilities and other statutory privileges and facilities to his personnel as per law/rules/regulations and orders of the Central Government, State Government, Local Authorities or other authorities as are in force from time to time. All employees of the Contractor shall be employee of the Contractor.

3.2 The contractor shall have a valid license obtained from Licensing Authority under the Contract Labor (Regulation & Abolition) Act-1970 at the time of execution of the contract covering all his employees working at SLPP site and furnish the same failing which GIPCL may terminate the contract at its sole discretion.

3.3 The Contractor shall at the time of execution of the contract have a EPF Code Number obtained from the Authorities concerned under the Employees Provident & Miscellaneous Provisions Act, 1972 and remit contributions in respect of the employees employed by him at SLPP Site to the P.F office concerned every month failing which GIPCL will recover from the outstanding payment to the contractor from GIPCL.PF code of Gujarat region should be taken.

3.4 The Contractor shall maintain all records/registers required to be maintained by him under various labor laws mentioned above and produce the same before the Statutory Authorities whenever required.

3.5 The Contractor shall also submit periodical reports / returns to the various statutory authorities such as the Contract Labour (Regulation & Abolition) Act-1970, Employees Provident Fund Act etc. Under intimation to HR & Admn.Dept.

3.6 The Contractor shall not pay less than the Minimum Wages notified by the Government from time to time to his employees of corresponding categories.

3.7 The Contractor shall be responsible for payment of overtime wages to his workmen, if any, in case they are required to work beyond the prescribed hours under law as per applicable rates.

3.8 The contractor shall take Employee Compensation Insurance Policy for all his employees working at SLPP. The contractor shall indemnify the company against any liability due to any work injury or accident to any of its employees.

3.9 The Contractor shall in the event any of his workmen / employee sustains any injury or disablement due to an accident arising out of and in the course of his employment, provide necessary medical treatment and pay compensation as applicable, required under the Employee Compensation Act, 1923.

3.10 If any of the persons engaged by the Contractor misbehave with any of the officials or the Company or commit any misconduct with regard to the property of the Company or suffer from any serious communicable disease, the Contractor shall replace them immediately.

3.11 The Contractor shall not engage / employ persons below the age of 18 years. Employment of women shall be strictly according to applicable laws.

3.12 GIPCL will have right to deduct and disburse the claims of the individual / parties being a principal employer on any account whatsoever in relation to their employment with the contractor. The Security deposit will be released to the contractor at the end of the contractual tenure subject to an undertaking by the contractor that in the event any of his workmen or the heirs of workmen puts up a claim for recovery of money due to him from the contractor before the appropriate authority under the I.D.Act 1947 or under any other labor laws or for compensation under the Employee Compensation Act, 1923 and the appropriate authority has given a direction for making payment the contractor will meet the same or indemnify GIPCL if in the event GIPCL pays it as Principal Employer.

3.13 The contractor shall make payment of wages to his employees on fixed date within the period specified under the applicable Law, in presence of representative of the company. He will submit a true copy of wage sheet, attendance register and P.F. remitted challans along with ECP copy on monthly basis to HR&A dept. for verification and record.

3.14 The Contractor shall provide Safety items / kits to his employees such as safety shoes, goggles, ear plugs, hand gloves, safety belts etc., if any, required under the law.

3.15 The contractor shall conduct pre-induction and periodic medical checkup of his workmen as per applicable laws.

4. The contractor shall be solely responsible for any accident caused to his workers and should adhere to all rules / regulations as per labor laws of Government and other statutory laws as applicable.
5. The contractor should register himself under the Contract Labor Act, Employee Compensation Act and PF Act (Code no. to be mentioned) and submit the copy of registration certificate and should possess the same from the date of commencement of work, failing which the contract is liable to be cancelled. The E.C. Policy copy should be submitted to the GIPCL before commencement of the work and Labor License should be obtained within one week from the date of issue of form-V. Contractor should apply for Form-V immediately after receipt of LOI. A copy of Labour License shall be submitted to GIPCL, HR & A Department.

6. Contractor shall have to insure his workmen /supervisors etc. under Group Insurance scheme.
7. The Contractor shall be responsible for compliance of all statutory rules, regulation, act enforced from time framed by the government such as Factory Act, Employee Compensation Act, payment of 'Wages Act', Minimum Wages Act', Provident Fund Act, All Labor Laws Act in respect of employees engaged by him for the work and shall have to maintain necessary records. In case any amount becomes due to be payable by him to his employees or to the Government under the above rules, regulation, Acts, GIPCL reserves the right to recover the same from the running bill of the contract.
8. Documentary evidence of deposit of PF paid shall have to be produced by the contractor along with the next bill.
9. Records as per the provisions of various statutory Acts will have to be maintained by the contractor and submitted as and when required.
10. All employees of contractor should maintain due discipline and respect local sentiments. GIPCL reserves the right to direct the contractor to remove any such person who does not comply with it.
    The list is indicative in nature and not an exhaustive one. Any amendment/alteration/Notifications or addition to the existing Law or a new statute shall automatically and immediately become applicable.

b. LEGAL ASPECTS

1. Contractor shall maintain all register required under the Labour Laws & any other applicable laws and make the payment as per the Minimum Wages Act to the workers employed by him.
2. Contractor shall obtain requisite license to carry out this contract under the provisions of Contract Labour Act, 1970 and maintain necessary records and registers under the said Act.
3. Contractor shall submit a copy of each of the registration certificates with respect to Employees Provident Fund and Employee Compensation Act within one week time, from the date of award of this contract.
4. Contractor's employees, agent or sub-agent shall not smoke or light anything within the premises of the GIPCL and carry match box / lighter or any other explosive and /or inflammable material inside the plant.
5. Contractor shall abide by all the statutory rules and regulations like P.F, Labour Laws etc.
6. Contractor shall issue an appointment order to each casual labourer stating therein the nature of job to be performed by him and fix time for which the concerned labourers are likely to be deployed. Contractor shall also issue a temporary identity card specifying the period for which the labourer has been deployed.
7. Contractor is fully liable for the persons engaged by him for above work; however, GIPCL reserves the right to deduct any amount legally justified towards any liability not fulfilled.
8. Contractor shall indemnify GIPCL from any liabilities arising out of the employment of the manpower.
9. If the contractor fails to complete the allocated job within specified time frame, GIPCL shall get the work done by third party at the risk and cost of contractor.

11. PAYMENT OF WAGES

Contractor shall be responsible for compliance of all statutory rules, regulation, act enforced from time framed by the government such as Factory Act, Employee Compensation Act, payment of 'Wages Act', Minimum Wages Act', Provident Fund Act, Payment of Bonus Act, Labor Law Act, maternity benefit act in respect of employees engaged by him for the work and shall have to maintain necessary records. In case any amount becomes due to be payable by him to his employees or to the Government under the above rules, regulation, Acts.

12. ACCIDENT TO WORKMEN

Contractor shall be fully responsible for injury or death of any of your or third party workmen due to any act omission / indiscretion on your part while undertaking the work and contractor shall fully abide by the statutory requirements of the employee's compensation act. GIPCL shall not be liable for any compensation due to accident, death or injury to any of contractor's workmen or any third party due to negligence, act or omission on your part.

13. LIGHTING

General area lighting will be provided by GIPCL. However work area specific lighting should be arranged by contractor.

14. NIGHT/SUNDAY/HOLIDAY SHIFT

The contractor shall depute qualified and adequate resources in night shift/Sunday/holidays for any emergency job, which may come up at night/Sunday/holiday.

15. SAFETY ASPECT

Contractor shall observe all the safety and security rules and regulation of the GIPCL which are at present in force and which may come into force during the pendency of the contract. Any violation of any rules and regulations will entail immediate termination of the contract.

When contractor moves his lifting tools and tackles to the plant area, required test certificates as per the Factory Act 1948 and the state factories rules has to be submitted to safety Deptt. Safety Deptt. will check the certificates and if found okay, then only materials will be allowed to enter inside the plant. Material inward gate pass will be made only after certification from Safety Deptt. Security Deptt. will inform to Safety Deptt., as & when such tools and tackles brought at the gate for making entry in the maintenance site.

The contractor has to submit the list of required safety gears along with safety equipments available with him to safety Deptt. Safety Deptt will check for quantity and quality of the safety gears and then allowed permission of work. Poor quality material will not be allowed to take inside the Plant. If quantity of required safety equipments is not satisfactory, contractor will not be allowed to carry out the work using such safety gears inside the Plant for the work.

16. GENERAL SAFETY CLAUSES

1. The Contractor shall observe and comply, with regard to his workmen working at the SLPP site, the safety norms as per the safety operating standards.
2. The Contractor shall ensure that his workmen are informed and trained regarding the safety standards to be adopted while operating within the SLPP Plant & Mines premises and the Contractor shall brief them regarding the same and use of the Personal Protective Equipment ('PPE').
3. The Contractor shall issue safety shoes and safety helmet of IS standard to all his workmen immediately on execution of the work and the contractor shall ensure that his workmen wears the protective equipments at all times during the work operation. Brand name for safety shoe & safety helmet shall be suggested by safety representative of SLPP site.
4. Other safety gears like ear plug, dust mask, hand gloves, safety goggles, gum boots, full body safety uniform and belts, safety net etc. shall be issued and used as per the job requirements. Safety helmet shall be of YELLOW COLOUR ONLY. Contractor will procure safety shoes & safety helmet from a reputed company with at least 12 months' guarantee and shall produce the guarantee certificate and IS standard certificate to the safety department. Contractor should purchase safety shoes of reputed brands. Safety shoes will be issued every year. IS certificate and guarantee certificate must be obtained from the vendor and submitted to the Safety department. Safety shoes should be heat, water, oil and chemical resistant, having an anti-slippery sole of 15298- 2002 make.
5. It is the duty of contractor to ensure that his workmen are wearing required PPEs as per work requirement. Contractor should ensure that their workers are wearing Safety helmet, safety shoes, dust mask, goggles, ear plug etc. at all times when they are at work throughout the contract period. The contractor has to maintain the PPE issue register with signature of workmen.
6. Contractor will reissue these PPEs in case of damage or misplacement of the same. Replacement shall be made immediately.
7. The contractor shall be responsible for providing first aid or emergency medical help and treatment to his workmen in the event of any accident or injury.
8. If it is observed that contractor is not issuing required PPEs timely and that of required quality, GIPCL will issue the required PPEs to contract workers and back charge the same with 25% overhead charges of GIPCL.
9. All lifting tools and tackles shall be duly certified by competent person in conformity with the statutory requirements and certificate in form no. 10 as per rule 60 of Gujarat Factories Rules, 1963 and section 29 of the Factories Act, 1948 shall be submitted every year before using such tools and tackles. In case of purchase of new lifting tools and tackles, form no. 10 as per the said rules shall be submitted before they are taken into use. All lifting tools and tackles shall be of reputed make having International manufacturing standard and shall be maintained in proper and workable condition.
10. The Contractor shall nominate one Safety Officer with required qualification for supervising the daily job/ shutdown jobs for observing and maintaining the safety aspects at site. He is solely responsible for any safety measures during maintenance work. He has to ensure that all the workmen working at site are equipped with essential PPE's and proper safety arrangement is made at the SLPP site.
11. After mobilization of any tools & tackles to site, which includes chain pulley blocks, D-shackles, wire ropes, winch machines, Mobile crane, Hydra etc. shall be offered

for inspection with all above statutory test certificate before using at site for any work. They should use all tools and tackles only after certification by GIPCL representative/safety officer.

12. When working at height, working on ceiling or roof covered with fragile materials, full body harness safety belt, ladders and crawling boards shall be used to prevent accident. Further, during working on height, contractor should arrange proper scaffolding of still pipes, safety net, full body safety belt, fall arrestor system etc. Advice and instructions of engineer in charge/ safety in charge shall be strictly complied with in this regard. All necessary safety precautions shall be taken by the contractor to prevent accident and personnel injuries while working on height.
13. Flash back arrestors made of reputed manufacturer shall be provided on cutting torch, on DA cylinders and on O2 cylinder. Cylinder caps also required for handling the cylinders at the work at height area. Gas cylinders shall be transferred through gas cylinder trolley only with cylinder cap and stored up right (vertical) position only. All gas cylinders shall be hydro tested / certified as per gas cylinder rules 2004. Gas cylinders shall be stored, handled as per gas cylinder rules 2004.
14. All vehicles shall be operated by licensed drivers only. All vehicles' PUC to be tested as per Government approved RTO guidelines. All Vehicles must be parked in Parking space designated by GIPCL. If any vehicle is found inside the plant premises other than the parking area such vehicles shall be handed over to Security dept. and their entry shall be cancelled for movement inside the plant premises with immediate effect.
15. All electrical equipment shall be in good condition and free from any defect. Electrical tools & equipments i.e. welding machine, grinding and drill machine etc. may be checked by the electrical engineer of the contractors regularly, every six month at least and report to be submitted to concerned HOD and safety depts.
16. During hot work, contractor will use fire curtains like asbestos sheets or fire blankets to prevent falling and spreading of sparks and hot material on and around the work area. Contractor will procure and use such items. ELCB / RCCB shall be provided with rating of 9-30 milli ampere on welding machine and all portable power tools.
17. The contractor shall fill – up Incident notification form (S-I), Incident Investigation form (S-II) and near miss report within time limit as specified in forms, if any accident, Incident, near miss occurred while working at SLPP site.
18. Major AMC / ARC contractor (Where the man power strength is more than 50 and above) should appoint / nominate one qualified safety officer and he shall be responsible for addressing all the safety related aspects of execution of contract jobs and he will in close co ordination with safety officer of SLPP and attend all safety related meeting such as safety committee, on job safety training etc. Where the contractual man power is less than 50, the site incharge of the contractor will act as a safety officer and he will perform all the duties of safety officer as mentioned above.
19. No loose connection / joints allowed in electrical cables during performance of any kind of job.
20. Safety shoes to be issued to female employees also.
21. All the vehicles shall be fit as per RTO guidelines and valid fitness certificate is required as per RTO guidelines.
22. The Contractor's nominated safety officer shall be imparted regular on-job safety training like tool-box talk etc. and submit a record of such training in safety dept, respective dept and HR&A dept.
23. The Contractor shall comply all the new requirements related with safety as informed by the HOD / Safety department from time to time.

24. Penalty to be imposed for Violation of safety norms is proposed as follows:-
The Contractor & Contract workmen shall strictly adhere to Safety standards / Guidelines as per practices. The list provided below is an indicative list to explain the principles behind safety practice. If the contract workmen fail to comply with safety standards as per category A, B & C below, penalty shall be levied on the contractor as per the table mentioned below:

Category	Classification	Examples / Cases	Penalty
A	PPEs Related	Working without helmet, shoes, safety belt, gloves etc.	Rs. 100 /- per instant.
B	WI Related	Failure to adhere to HSE guidelines/plans, careless attitude in material handling, Machine being used with damaged machine guard, unsafe electrical work - workout plug top/improper electrical joints/cables lying on ground, electrical equipment working without proper earthing, machine being used without machine guard, Welding machine without ELCB / RCCB of proper rating, Gas cylinder without test certificate, Cylinder cap, NRV / Flash back arrester, Cylinder trolley etc.	• Rs. 500 /- per instant. • After three incidence, Per incidence Rs. 2500/- • Continuous unsafe acts will disqualify the contractor from further participation in tender of GIPCL-SLPP.
		Unsafe working practices at height more than 3 meters	
		Working without permit or non-compliance with permit conditions like hot work, height work etc. as applicable, lifting tools and tackles being used without third party inspection certificates in form no. 9/10 as per Factory Act – 1948 etc..	
C	Unsafe Practices	Breach of safe practices by a particular person repeatedly for three times.	Suspend the entry gate pass for one week. □ After two suspensions his gate pass will be cancelled.

Penalty so levied against the contractors and company employees will be used during the observation of National Safety Day.

The contractor, workmen following good safety practices in their work area continuously will be rewarded / honored on National safety day.

17. REJECTION OF WORK:

If, as a result of inspection, examination or testing, the GIPCL's Representative/Engineer decides that any materials, work or workmanship is defective or otherwise not in accordance with the Contract, the GIPCL/Engineer/ GIPCL's Representative may reject such plant, materials, work or workmanship and shall notify the CONTRACTOR promptly, stating his reasons. The CONTRACTOR shall then promptly make good the defect and ensure that the rejected item complies with the Contract. If Contractor failed to rectify the rejected work or workmanship, GIPCL/Engineer reserves the right to deduct or withhold amount against rejected work or Workmanship. CONTRACTOR shall not entitle for any claim or release of hold payment until rectify the defect up to satisfactory of GIPCL. If Contractor failed to rectify any such defective work or workmanship, GIPCL reserve the right to rectify at risk and cost of the CONTRACTOR and deducted by the GIPCL from any amount due, or to become due, to the CONTRACTOR's dues.

If the GIPCL/Engineer/GIPCL's Representative requires such materials, work or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If such rejection and retesting cause the GIPCL additional costs for the traveling and lodging costs of GIPCL/Engineer's personal for attending the retest, such costs shall be recoverable from the CONTRACTOR by the GIPCL and may be deducted by the GIPCL from any amount due, or to become due, to the CONTRACTOR.

18. GENERAL TERMS AND CONDITIONS:

a. All tools & tackles, labours, equipments, vehicles, etc… to execute the contract are in the scope of the contractor. The contractor should ensure that tools & equipments are in healthy condition.
b. The decision of the Engineer-in-charge shall be final and binding on the contractor for defining the terms and condition included in this contract.
c. If the work is not found satisfactory, Engineer-in-charge reserves the right to take suitable action.
d. Contractor shall nominate / authorize senior experienced person in writing as site in charge to co-ordinate with GIPCL engineer and shall bear overall responsibility of contract including joint measurement, billing etc. Such person shall remain always available at site or site office allotted to the contractor at SLPP site. Contractor has to submit the authority letter and documentary proof for the same. Such person shall function from site office of contractor at SLPP.
e. Contractor shall also nominate one safety supervisor at site and shall submit nomination of safety supervisor in writing before commencement of contract. Safety supervisor shall arrange small safety talk on every day morning or whenever required with all workers working under this contract. He shall coordinate with concern department's Engineer-in-charge on daily basis and report daily observations, tool-box talk records etc. The work shall not be allowed without deploying safety supervisor and a penalty equal to Rs. 1,000/- per day absent of safety supervisor shall be levied from Contractor.

f. Contractor shall strictly follow the existing work permit system of the GIPCL and any future revisions.
g. The contractor has to take EC insurance policy for their workmen. The contractor has to submit labor license and PF account number to the Engineer-in-charge before start the work.
h. The contractor has to do the job timely. GIPCL shall not compromise in delay. In case of delay of work without any valid reason, the GIPCL reserves the rights to carry out the work by deploying other agencies at the risk & cost of contractor with additional 15% overhead charges.
i. Contractor shall mobilize the resources as per need within the period of four hours. If the contractor fails to mobilize sufficient resources to complete the job in time, GIPCL will execute the job through other agency at the risk and cost of the contractor with additional 15% overhead charges.
j. Contractor should mobilize all resources for efficient & smooth execution of contract within seven days from the date of issue of Letter of Intent/Work Order.
k. The prices / item rates quoted shall remain firm till completion of the contract and any agreed extensions thereafter and shall not be subject to any escalation (only 5% escalation in the item rate will be considered for second year), idle charges for labor, machinery, overhead expenses etc… due to any reason whatsoever. No price escalation / idle charges shall be entertained due to delay in work on unavailability of work front, non-issue of work permit, holding of work permit for any reason, unavailability of contractor's supervisor, unavailability of contractor's safety supervisor, violation of safety rules, unsafe act by any of contractor's worker, negligence & ignorance of safety & quality instructions of GIPCL Engineer-in-charge or any other reason whatsoever.
l. Contractor must fulfill all the safety regulations and to take safety measures to avoid hazards. Contractor shall arrange all standard adequate healthy safety PPEs like but not limited to approved quality safety shoes & safety helmets, standard dust masks, safety goggles, etc… as required and shall use exclusively under this contract for all the time during working at specified locations failing which, the Engineer-in-charge may hold the work and will take necessary action including penalty as decided. If the contractor repeatedly violates safety rules/regulations (more than three successive incidents), Engineer-in-charge may take necessary action against the contractor, including appropriate financial penalty and/or termination of contract.
m. One or more jobs may be required to be done simultaneously and contractor shall mobilize additional resources accordingly.
n. Timely completion of all jobs and works shall be the essence of this Contract. Contractor should closely monitor each activities and complete the jobs as per the time given by and under the supervision of the Engineer-In-charge and shall ensure that sufficient manpower is deployed for the same.
o. The contractor has to complete the works as per the planning schedule and their respective supervisor has to interact with Engineer In Charge for PTW (Permit to work), work instruction, Return of permit.
p. The contractor has to submit daily reports showing work carried out with details of available manpower, tractors etc.
q. Any job other than the listed jobs in work order shall be executed by the contractor on instruction from GIPCL and payment shall be made to the contractor on respective item rate only.
r. The Government of India has enacted the Micro, Small and Medium Enterprises Development Act, 2006 (the "Act") and the Act has come into force from October 2, 2006. The Bidder shall confirm whether your organization is registered under the Micro, Small and Medium Enterprises Development Act, 2006. If your

organization is registered under the Act, please specify the category i.e., Micro Enterprise, Small Enterprise or Medium Enterprise under which it is registered and kindly attach a copy of your registration certificate.

s. The Bidder shall provide details of registration along with copy of the registration certificate issued by the District Industries Centre/Department of Industries, etc of the respective State Government. It is to be noted that large scale industries and trading firms have been excluded from the purview of the Act.

t. GIPCL is an ISO 9001, ISO 14001, OHSAS 18001 & ISO 50001:2011 (EnMS) certified company, and GIPCL gives extreme importance to maintain these global standards. Contractor shall be required to observe these standards while working with GIPCL. Contractor should ensure that his workmen/labour work in accordance with them.

19. CONTRACTOR'S SUPERVISION

The contractor shall, during the whole time the work is in progress, employ a qualified experienced site-in-charge of the works with adequate experience in handing of jobs of this nature and with the prior approval of the GIPCL / ENGINEER. Such in-charge shall be constantly in attendance at the site during working hours. During CONTRACTOR'S supervisory engineer absence during working hours, if unavoidable, and also beyond working hours, when it may be necessary to give directions, orders may be given by the ENGINEER / GIPCL and shall be received and obeyed by the CONTRACTOR'S superintendent or Foreman who may have charge of the particular part of the work in reference to which orders are given. If requested to do so, the ENGINEER /GIPCL shall confirm such orders in writing. Any directions, instructions or notices given by the ENGINEER / GIPCL to him, shall be deemed to have been given to the CONTRACTOR. The representative of the CONTRACTOR shall have all necessary powers to receive materials from the GIPCL, issue valid receipts for the same, engage labour or purchase materials and proceed with the work as required for speedy execution.

None of the CONTRACTOR'S Superintendents, engineers, supervisors or labour should be withdrawn from the work without due notice being given to the GIPCL / ENGINEER; further no such withdrawals shall be made if in the opinion of the GIPCL / ENGINEER such withdrawals will jeopardize the required pace of progress / successful completion of the work.

The CONTRACTOR shall employ in or about execution of the work only such persons as area careful, skilled and experienced in their respective trades, and the GIPCL shall be at liberty to object to and require the CONTRACTOR to remove any person employed by the CONTRACTOR in or about execution of works who in the opinion of the ENGINEER misconducts himself or is incompetent or negligent in the proper performance of his duties and all such persons shall not again be employed upon the works without the prior permission of the GIPCL.

Neither the CONTRACTOR and the PURCHASER nor the ENGINEER shall hire or employ any employee of the other party except by mutual consent.

20. CONTRACTOR TO REMOVE ALL OFFENSIVE MATTER IMMEDIATELY AND CLEAN-UP.

All loose materials, wastage, packing materials, cut pieces or other matter of an offensive nature shall not be deposited on the surface, but shall at once be carted away by the CONTRACTOR to some pit or place provided by him away from the site of work and approved by local authorities.

As a part of the work included in this contract, the CONTRACTOR shall completely remove and satisfactorily dispose of all temporary works to the extent directed. He shall tear down and dispose of all temporary works, shall remove or grade, to the extent directed, all plant and equipment, shall satisfactorily dispose off all rubbish resulting from the operations under this contract and shall do all work necessary to restore the territory embraced within the site of his operations to at least as good order and conditions as at the beginning of the work under this contract.

21. FACILITIES TO BE PROVIDED BY GIPCL

A. The Company shall provide the following facilities to the Contractor at the site:

a. Electricity & water at nearest available one point. Further distribution to be done by contractor at their cost.
b. Quarter(s) for supervisor/ engineers on chargeable basis in GIPCL's township at discretion of GIPCL if available.
c. Workshop facility as available at site only. However contractor may visit the workshop to ensure the existing facility. For the facilities other than available, contractor has to carry out the job outside at their own cost.
d. Site office shall be provided at site.
e. First aid facilities as available on chargeable basis.

B. Items/services to be provided by GIPCL free of cost**.**

a. Spares
b. Lubricants
c. Consumables like Rustolene, cotton waste, Chindi waste, plastic sheets, insulation tapes, Teflon tapes, lugs, ferrules, CRC, and fittings.
d. Special tools & tackles, testing & measuring instruments

The contractor shall shift the items from GIPCL stores/warehouse at his own cost. Contractor shall give reconciliation of the materials drawn

Apart from the above, no other facilities shall be provided by the GIPCL. The contractor shall provide necessary facilities, including accommodation for their labour at his own cost.

C. GIPCL shall also conduct an orientation program appraising the workmen regarding the safety norms and measures to be observed during work operations at the plant site.

22. WORK MEASUREMENT/CERTIFICATION

a. The work to be performed being a specialized nature, the contractor should be fully conversant with modern practices and should be able to carry out works independently of large thermal power plant. The contractor shall therefore be required to engage qualified/ experienced personnel to undertake the work as per specifications and requirement.
b. Contractor should maintain one computer with printer for keeping daily records and maintain the data.
c. The Contractor shall be required to furnish satisfactory job completion report to GIPCL. The submission of report should be on daily basis, the monthly bill payment shall be released based on the certified reports of the works.
d. Inspection of work will be done by Engineer in Charge or his authorised representative. If the work is not found satisfactory engineer in charge reserves the right to take suitable action and shall be binding to the contractor.

23. PUBLIC HOLIDAYS

The Contractor shall be responsible for giving benefit to all his employees, employed in whatsoever capacity, 09 Public/Paid holidays and the same shall be notified in advance and due communication thereof shall be made to the Management.

24. BENEFIT PAYABLE IN CASE OF ACCIDENT OCCURRING OUTSIDE PREMISES OR BEYOND THE COURSE OF EMPLOYMENT

The Contractor shall provide an insurance coverage (Medical + Death Benefit) for sum of Rs. 01/-Lakh to all his workmen/labour deployed at GIPCL-SLPP site for the accident taking place anywhere outside the Company premises or at any place when the workman is not in course of his employment.

25. FORCE MAJEURE

The performance of the obligations herein contemplated may be suspended without incurring the penalty in the event of the subsistence of Force Majeure conditions.

If a Force Majeure situation arises, the affected Party shall promptly notify the other Party in writing of such conditions and the performance shall be suspended as per mutual agreement.

For the purposes of this clause, 'Force Majeure' means an event beyond the control of the Party and not foreseeable by the Party and shall include events of floods, explosions, riots, wars, hurricane, epidemics, any other Act of God, quarantine restrictions, terrorism, government actions and provided always that such acts result in the impossibility of the further performance of the contract.

26. INDEMNITY

The Contractor shall indemnify and keep harmless GIPCL from and against all actions, proceedings, claims, demands, losses, costs, damages and expenses

whatsoever which may be brought against or suffered by GIPCL which it may sustain, pay or incur as a result of or in connection with the performance/ purported performance/ non-performance of the contract by the Contractor.

In case, in any litigation pertaining to labour employed through contractor if any direction or order is issued by court at any point of time the contractor shall comply with and implement such direction or order whether passed at the time of award of contract or during the pendency of contract. Further, the Contractor shall indemnify the GIPCL against all consequences arising and affecting GIPCL owing to the compliance of the orders by the Contractor.

27. GOVERNING LAW AND JURISDICTION

This tender document and contract shall be governed by the laws of India and the Courts at Surat shall have jurisdiction regarding the same.

28. Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Condition of Contract, then unless a different intention appears, the provision of the Special Conditions of Contract shall prevail to the extent of such repugnancy of variance.

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SECTION-D
SPECIAL CONDITIONS OF CONTRACT

1. DETAIL SCOPE OF WORK

The scope of the work for the Contractor is to maintain the entire electrical system and Equipments of 4 X 125 MW power plant and solar plants by deploying qualified and skilled manpower

A. Main Plant Electrical System. (PACKAGE - A)

Preventive / Breakdown Maintenance of Electrical Equipments

All Electrical Equipments of Main plant systems FOR 4 X 125MW **Phase-1 & 2** (Boiler area / Turbine area, Balance of plant area, 220 KV switchyard, Bodhan / Patna pump house etc) and solar plant(5 MW & 1 MW) is included for Preventive Maintenance/Breakdown Maintenance/ Overhauling/ Servicing as indicated and included in the Price schedules. All the maintenance activities should be started only after ensuring that the equipment is isolated and discharged by local earthing.

The details of maintenance work to be carried out is below:-

A) MAINTENANCE OF HT/ LT MOTORS

1 Check tightness of terminal connections.
2 Check availability of plain, spring washers and replace if necessary.
3 Check healthiness of space heater. Measure space heater resistance and current
4 Tightness of cooling fan & fan cover, replacement if required.
5 Lubrication/ greasing of the bearings.
6 Check for availability / tightness of earth connections.
7 Tightness of foundations bolts.
8 Cleaning of cooling tubes of the motor
9 Winding resistance measurement
10 Megger value for motors.
11 Sealing of cable at terminal box of space heater, main cable box.
12 Checking of speed switch connections.
13 Checking healthiness of speed switch controller (Whenever applicable).
14 Cable support tightness.
15 Checking of cable if disconnected.
16 Replacement of gaskets of motor terminal box if applicable
17 Drying out of motors having low insulation resistance value.
18 Removal/ replacement of damaged motor TB.
19 Fan cover removal & re-installation if required for Instruments checking
20 Replacement of bearings if required.

21 Any other job as required

B) MAINTENANCE OF LT FEEDERS

1 Checking of power contactor kits, cleaning, replacement if needed.
2 Tightness of power and control cables.
3 Cleaning of modules with blower.
4 Checking of BMR setting
5 Correctness of fuses
6 Replacement of damaged components & blown fuses.
7 Module alignment.
8 Checking, rectification and alignment of module.
9 Checking of shorting links.
10 Cleaning and greasing of sliding surfaces for draw out type modules.
11 Testing of module in test position/ service position for functional checks.
12 Tightness and dressing of external cabling in the cable alley.
13 CT/PT wiring checks
14 Tightness checking, mounting, earthing checking of PB station, replacement of Components if required.
15 Any other job as required

C) MAINTENANCE OF SF6/VACUUM / AIR CIRCUIT BREAKERS

1 Checking of vacuum / SF6 gas pressure.
2 Filling SF6 gas if required.
3 Attending leakage (SF6)
4 Cleaning of breaker compartment, metering and control circuit compartment.
5 Checking of alignment of breaker and necessary rectification.
6 Cleaning and application of petroleum jelly at contacts.
7 Checking/alignment of test / service position switches.
8 Checking/ alignment / rectification of breaker rack in rack out mechanism.
9 Checking/Replacement of spring charging motor, servicing of spring charging motors.
10 Mechanical setting for closing/ trip coils.
11 Replacement of damaged rollers.
12 Replacement of damaged components of breakers.
13 Tightness and dressing of wiring.
14 Tightness of external power cable, earthing lead.
15 Sealing of cable compartment.
16 Function checking in test / service position, local/ remote position.
17 Replacement of faulty components- like indicating lamps, meters.
18 Checking of control fuses, fuse bases, replacement of fuses, fuse bases.
19 Alignment checking of breaker control plug.
20 Tightness checking mounting earthing, checking of PB stations, replacement of components if required.
21 Any other job as required.

D) MAINTENANCE OF HT/ LT BOARDS / UPS & VFD PANELS

1. Removal of bus bar compartment cover and through cleaning by hot air blower/ clothes/ all compartment covers.
2. Bus bar tightness with torque wrench.
3. Physical check of bus bar support insulators, CTs, PTs, replacement if required
4. Cleaning / tightness checking of control bus bars.
5. Cleaning / tightness checking of cable alleys.
6. Tightness/ meggering of cable termination
7. Continuity and tightness of earthing connections.
8. Cleaning/tightness of control transformer modules, bus LT modules, line PT modules.
9. Bus PT module alignment.
10. Checking of all spare feeders.
11. Door fixing / alignment.
12. Replacement of gaskets .
13. Meggering of control, power buses.
14. Meggering of all transformers.
15. Checking of thermostats/ space heaters.
16. HV test if required by E-I-C
17. Replacement of missing components.
18. Checking of inter panel wiring.
19. Sealing holes / opening by Aluminum foil / sealastic.
20. Any other job as required

E) MAINTENANCE OF POWER TRANSFORMERS

1. Checking of oil level in Buchholz relay, conservator and tank.
2. Topping of oil if required.
3. Checking of colour of breather and replacement of silica gel if required.
4. Inspection of transformer accessories and piping
5. Attending the leakage by tightening the joints / replacing 'O' ring/ Gaskets/ Washers etc.
6. Examination of bushing for cracks/ Dirt and oil leakage.
7. Examining and cleaning of bushings.
8. Replacement of damaged / faulty components.
9. Checking the transformer oil for dielectric strength.
10. Coordinating and assistance for oil filtration.
11. Checking of contactors/ interlocks/ tightness of wiring for marshalling Kiosk.
12. Maintenance of cooler fan bearings, lubrication etc.
13. Checking of off/ on load tap changer mechanism limit switches.
14. Assistance for tan d, capacitance, DGA and other to special test to be carried out at independent laboratories.
15. Sealing of holes in cable box.
16. Checking of OTI /WTI/BUCKOLZE/PRD, Alarm, protections ckecking.
17. Rectification of wiring.

18 Checking of oil level in OTI/WTI pockets.
19 Checking of earthing tightness after Measurement of earth pit resistance of body & neutral earth pits.
20 Checking of IR value of motors, vibrations and noise, carrying out drying out and balancing if required.
21 Checking and inspection of all the tank, accessories, paint, touch-up if required.
22 Replacement of any gaskets.
23 Checking the contacts for burning and putting marks on director switch of OLTC.
24 Assistance in filtration of director switch oil.
25 Checking tightness of bushing top connectors.
26 Through cleaning of transformer body.
27 Any other job as required

F) 220 KV ISOLATOR/EARTH SWITCH MAINTAINANCE

1 Cleaning of salt/dust deposition on the surface of the isolators.
Spraying anti tracking spray as & when required.
2 Checking of contacts for alignment, any abnormality, contact pressure.
3 Lubrication of the contacts.
4 Contact resistance measurement, if directed by E-I-C
5 Checking of motors/lubrication of the mechanism.
6 Conduct mili volt test on contacts, if directedby E-I-C.
7 Checking of simultaneous closing of all contacts and complete contact making in closed. Alignment to be done if disturbed.
8 Checking of all interlocks.
9 Tightness of all control cabling
10 Tightness of all connections (Power & Structure).
11 Checking and setting of limit switches if required.
12 Space heater circuit checking.
13 Any other job as required.

G) 220 KV CIRCUIT BREAKER MAINTAINANCE

1 Cleaning of Insulators.
2 Cleaning of air receiver.
3 Cleaning of switch cubicle.
4 Greasing/Oiling whereas required.
5 Cleaning/Replacement of filters.
6 Check breaker opening/closing times and simultaneous contact making test.
7 Check the tripping/closing coils.
8 Check/Test heater circuits.
9 Check breaker operation electrically/mechanically.
10 Check trip circuit.
11 Check contact resistance
12 Checking of interlocks/controls indications.
13 Calibration of meters/gauges/switches

14 Check relay operation/electrical connections.
15 Measure insulation resistance of breakers.
16 Filling SF6 gas if required.
17 Attending leakage if observed.
18 Check terminal blocks/terminal tightness.
19 Checking of earthing connection / busbar tightness.
20 Tightness of all structural & power connection.
21 Air piping to be checked for leakage and is to be attended if any.
22 Replacement of compressor motor in case of failure.
23 Any other job as required

H) VOLTAGE TRANSFORMER MAINTENANCE

1 Checking and cleaning of insulators.
2 Checking/Sealing of secondary terminal box with gaskets.
3 Checking and prevention of oil leakage.
4 Checking earth and HV connections.
5 Checking connection tightness
6 Check pressure diaphragm for EMVT.
7 Check IR value.
8 Measurement of Capacitance/TAN d with external agency
9 Checking of aging behavior.
10 Tightness of power & structural connection.
11 Any other job as required

I) CURRENT TRANSFORMER MAINTAINANCE

1 Cleaning of insulators.
2 Sealing of secondary terminal boxes with gaskets, terminal tightness.
3 Checking of earthing connection.
4 Checking terminal tightness and corrosion if any.
5 Checking and behavior of oil leaks.
6 Checking of IR Values.
7 Measurement of Capacitance/TAN d with external agency
8 Tightness of power & structural connection.
9 Any other job as required

J) POST INSULATOR MAINATAINANCE

1 Check and clean the insulators. Spraying anti tracking spray as & when required
2 Check earthing connection.
3 Check of IR values.
4 Any other job as required

K) LIGHTNING ARRESTOR MAINTAINANCE

1 Check and clean arrestor housing insulator.
2 Check leakage current monitor. Replacement if required
3 Check resistance of ground connection/earthing.
4 Tightness of power & structural connection.
5 Check of IR values.
6 Any other job as required

L) MARSHALLING PANEL MAINATAINANCE

1 General cleaning of panels, relays and contactors.
2 Check all contacts for abnormality.
3 Check control circuits/interlocks.
4 Check tightness of terminals.
5 Check for ingress of water/dust if any.
6 Replacement of gaskets if required.
7 Relay testing and replacement if found faulty.
8 Any other job as required

M) WAVE TRAP MAINATAINANCE

1 Check over voltage arrestors.
2 Check bolt tightness.
3 Check end ring insulation.
4 Check and clean support insulators.
5 Any other job as required

N) CLAMPS/CONNECTORS/CORONA RINGS/ INSULATOR MAINTENANCE

1 Checking for abnormality
2 Checking tightness/status of jumpers.
3 Cleaning string insulators.
4 Checking of tightness of clamps/connectors.
5 Joint of conductor to be replaced in case of failure.
6 Replacement of clamps if required.
7 Replacement of string insulation if required.
8 Any other job as required

O) EARTHING MAINTAINANCE

1 Tightness of connection.
2 Earth resistance measurement of earth mat.
3 Measurement of resistance of earth pit.
4 Tightness of bolts/joints. Replacement of nut bolts if found rusted
5 Checking of earth connection.
6 Any other job as required

P) MAINTENACE OF BUSDUCT

1 Meggering of bus duct
2 Checking of insulators.
3 Blowing of hot air equipments.
4 Checking of flexible tightness.
5 CT wiring checking and tightness
6 Cleaning of NGR/NGT
7 Meggering of NGR/NGT
8 Replacement of bushing gaskets.
9 Replacement of damaged components.
10 Joint tightness and sealing.
11 HV Test
12 Checking of earthing connections/ continuity.
13 Replacement of weak insulators.
14 Any other job as required

Q) MAINTENANCE OF ACTUATORS

1 Setting of limit switch, torque switches.
2 Cleaning of torque switch, limit switch gears.
3 Replacement of faulty parts.
4 Tightness of power and control cables.
5 Checking preventive of oil leakage, topping of oil.
6 Greasing of limit switch mechanism.
7 Meggering
8 Measurement of winding resistance
9 Sealing of Crack ,holes.
10 Sealing of motor terminal boxes.
11 Replacement of gaskets
12 Check for hand wheel operation during manual and during auto operation
13 Drying out of motors having low insulation resistance value.
14 Any other job as required

R) MAINTENANCE OF DC SYSTEM

A. Battery

1 Cleaning of batteries, stand, vent plug, insulators of battery.
2 Applying of petroleum jelly on battery terminals as and when required
3 Measurement of specific gravity, voltage and temperature of cells.
* Frequency in such a way that measurement cycle per set is completed within 30 days.
4 Replacement of batteries, containers, battery cables/links, vent plug/level indicator and any other portion of battery whenever required.

5 Checking of battery voltage and current.
6 Checking of terminal connection tightness.
7 Topping of battery with Distilled water as and when required.
8 Reporting of abnormalities to the engineer in-charge.
9 Monitoring condition of exhaust fan, lighting, battery condition including leakage, water tap availability.
10 Cable tightness check.
11 Lighting/Exhaust fan system monitoring.
12 Replacement of battery stand as and when required.
13 Any other job as required

B. Chargers

1 Cleaning of panel by air blower than manual cleaning.
2 Tightness of power, control circuits
3 Tightness of external connections.
4 Checking of fuses, power contactor, control contactors, BMRs.
5 Functional checking of control circuit
6 Bus bar tightness checks.
7 Replacement of faulty parts.
8 Meggering
9 Boosting charging of partially discharged battery as and when required.
10 Replacement of gaskets.
11 Door alignments.
12 Sealing of top cable entries.
13 Any other job as required

S) MAINTNANCE OF EARTHING SYSTEM

1 Checking for continuity of earthing
2 Regular checking of earth electrodes test pits.
3 Regular watering of test pit, earth electrodes.
4 Addition of charcoal/ salts if required.
5 Measurement of earth resistance.
6 Connection of earthing of equipment to the grid whenever it s found disconnected, including welding.
7 Checking of continuity of lightning arrestors up to the earth pit.
8 Alignment, mounting of vertical air termination.
9 Any other job as required

T) MAINTENANCE OF MISCELLANEOUS PANELS

1 Cleaning
2 Tightness of power cables, bus bar, control cables, external cabling.
3 Checking for fuses, components.
4 Earthing tightness.

5 Replacement of gaskets.
6 Checking of power, Control transformers.
7 Replacement of damage/ faulty components.
8 Tightness / alignment of panel doors.
9 Checking of contactor kits - power contactors, MCBS, CTS, switches etc.
10 Functional checking of panel.
11 Meggering of control / power circuit.
12 Any other job as required

U) MAINTENANCE OF SUMP PUMPS

1 Check the tightness of control/power cables in the system.
2 Check the interlocks in the system for correction.
3 Check and replace the oil in the pump if necessary.
4 Check and replace the damaged parts of the pump.
5 Check for availability of earthing connection and its tightness.
6 Cleaning of strainers.

V) MAINTENANCE OF HOISTS- CRANES

1 Checking healthiness of DSL, insulators and their cleaning.
2 Check and clean the auxiliary control panels.
3 Check and clean contactors, power contacts.
4 Check for tightness of control / power cables.
5 Checking of interlocks, limit switches, safety switches installed in the systems.
6 Check/ clean pendent switches.
7 Meggering of DSL, Cables, motors in the system.
8 Replacement of faulty/ damaged components.
9 Checking for the healthiness of the resistance in the system.
10 Lubrication of bearings in the system motors.
11 Check and clean the isolating switch contacts.
12 Check healthiness of the control transformers, auxiliary transformers in the system.
13 Check healthiness of space heaters of motors used in the system.
14 Check and replace the control/ power fuses in the systems.
15 Check for availability of earthing and its tightness.
16 Checking/ cleaning of PB station, tightness of terminals/ Cables, cleaning of contacts.
17 Any other job as required

W) MAINTENANCE OF EX-FANS, ROOF EXTRACTION FANS

1 Cleaning of fan/motor assembly.
2 Lubrication of bearings.

3 Fan blade tightness checking.
4 Checking of terminals- cleaning, tightness, and replacement of burnt out terminals.
5 Checking of availability/ tightness of earthing.
6 Alignment of fan blade with respect to shaft.
7 Checking of starters of exhaust fan for
a.) Correctness of starter, its thermal settings.
b.) Cleaning of starter contacts.
c.) Tightness of cables, connections.
d.) Cleaning of starter from inside.
e.) Availability, tightness of earthing.

X) ELECTRICAL MAINT. WORKS AT BODHAN / PATANA PUMP HOUSE (16Km FROM PLANT)

1 Electrical maintenance of HT & LT motors / transformers / HT & LT panels/ breakers / DP structure/Battery & charger etc as per schedule.

Y) ELECTRICAL MAINT. WORKS AT SOLAR PLANT (7 Km FROM PLANT)

1 Electrical maintenance of HT & LT transformers / HT & LT panels/ breakers / 66 KV switchyard, invertors, Battery & charger etc as per schedule **(to be done after 17:30 hours).**

Z) **Other jobs required to maintain the system in healthy condition**

1 Attending to fault/defects & breakdown jobs etc.

2. Removal / laying of different size power & control cables, their glanding & termination as per requirement.
3. Erection / removal of all the type panels, JBs, MK etc including all the accessories as and when required
4. Erection / removal of motors, Transformers, actuators & other electrical equipments including all the accessories as and when required
5. Providing supply to welding machines and other electrical equipment as & when required
6. All the modification jobs required for system
7. Other the other job required for healthiness of the system & plant

The list of equipments with tentative quantity for two year is enclosed herewith as Price schedule A1 to A5.

B. Lignite & Lime stone handling & milling, external Lignite handling system at Mangrol mines end, Ash handling system (Package-B).

1) Preventive / Defect Maintenance of Electrical Equipments

All Electrical Equipments of following systems is included for Preventive Maintenance /Defect Maintenance/Overhauling/Servicing as indicated and included in the Price schedule-Electrical, Annexure- (Preventive & Defect):-

a) Lignite Handling System
b) Limestone handling System
c) Limestone Milling System.
d) Ash handling System
e) ELHS (mines end)
f) Maintenance of lighting system of entire Lignite handling, Limestone handling , Limestone milling system including weigh bridge at Gate No. 4 , ash handling system and ash water recovery system& ELHS (Mines end).
g) Ventilation system of following Switchgear rooms:
   i) Lignite & Limestone handling Switchgear room
   ii) Lignite mining Switchgear room
   iii) Bunker lignite MCC room
   iv) PCH MCC room
   v) Battery charger & Battery room of Lignite & Limestone handling Switchgear room
      and Ventilation system of various conveyor tunnels.
   vi) Ash handling MCC room.
   vii) Ash water recovery MCC room.

h) Air conditioning plant, Air compressor & its cooling towers of entire Lignite handling, Limestone handling & Milling plants & Ash handling plants & ELHS (Mines end).
i) Battery chargers/ Battery sets/ of Lignite handling System and Fire fighting system near gate no.4 & recovery MCC. Also Electrical drives i.e. booster pump pertaining to Fire Fighting system is included
j) Earthing network of Lignite handling, Limestone handling plant, Limestone milling plant, Ash handling plant & ELHS (Mines end).
k) All equipments of Lignite run off pond.
l) All equipments of Feeder breaker System, ELHS (Mines end).
m) 6.6 KV/415 V distribution transformers of Lignite & limestone handling and at Mines site office& ELHS (Mangrol Mines end).
n) All equipments of Dust Extraction System.
o) All equipments of Dry fog / Dust suppression System
p) All equipments of Industrial Vacuum System.
q) All equipments pertaining to Zero Discharge System.

2) **Responsibilities during shift maintenance**.

a) Since it is a continuous running plant, contractor should ensure deployment of one Diploma Engineer & One ITI Electrician (SK) each per shift (B & C) for smooth, safe and defect free running of the system.
b) It shall be responsibility of contractor that no protection/ sequential/ process interlocks is bypassed to keep the equipments operational. In case of emergency, which calls for bypassing of certain interlocks, due permission has to be obtained from GIPCL Shift in-charge followed with proper logging in the By-pass Register maintained in the Control Room.
c) All works carried out in the shift should be properly logged in the shift logbooks. Details of Interlocks bypassed should be entered in the log book.
d) All support in terms of resources/ assistance should be extended to Shift Electrical maintenance group in case of **critical defects** affecting the system running without any additional cost. Critical defects/breakdown occurring in shift which

directly affect system availability / lignite bunkering/Ash handling need to be attended immediately for which all support of required manpower should be made available from General maintenance group without any additional cost.

e) It is expected that shift maintenance group works in close co-ordination with Operation personnel to meet the system requirements immediately, for which their movement within the plant should be informed from time to time to the Control Room Engineer.

The details of maintenance work to be carried out are below:-

MAINTENANCE OF HT/ LT MOTORS

1 Check tightness of terminal connections.
2 Check availability of plain, spring washers and replace if necessary.
3 Check healthiness of space heater. Measure space heater resistance and current
4 Tightness of cooling fan & fan cover, replacement if required.
5 Lubrication/ greasing of the bearings.
6 Check for availability / tightness of earth connections.
7 Tightness of foundations bolts.
8 Cleaning of cooling tubes of the motor
9 Winding resistance measurement
10 Megger value for motors.
11 Sealing of cable at terminal box of space heater, main cable box.
12 Checking of speed switch connections.
13 Checking healthiness of speed switch controller (Whenever applicable).
14 Cable support tightness.
15 Checking of cable if disconnected.
16 Replacement of gaskets of motor terminal box if applicable
17 Drying out of motors having low insulation resistance value.
18 Removal/ replacement of damaged motor TB.
19 Fan cover removal & re-installation if required for Instruments checking
20 Replacement of bearings if required.
21 Any other job as required

B) MAINTENANCE OF LT FEEDERS

1 Checking of power contactor kits, cleaning, replacement if needed.
2 Tightness of power and control cables.
3 Cleaning of modules with blower.
4 Checking of BMR setting
5 Correctness of fuses
6 Replacement of damaged components & blown fuses.
7 Module alignment.
8 Checking, rectification and alignment of module.
9 Checking of shorting links.
10 Cleaning and greasing of sliding surfaces for draw out type modules.
11 Testing of module in test position/ service position for functional checks.

12 Tightness and dressing of external cabling in the cable alley.
13 CT/PT wiring checks
14 Tightness checking, mounting, earthing checking of PB station, replacement of Components if required.
15 Any other job as required

C) MAINTENANCE OF SF6/VACUUM / AIR CIRCUIT BREAKERS

1 Checking of vacuum / SF6 gas pressure.
2 Filling SF6 gas if required.
3 Attending leakage (SF6)
4 Cleaning of breaker compartment, metering and control circuit compartment.
5 Checking of alignment of breaker and necessary rectification.
6 Cleaning and application of petroleum jelly at contacts.
7 Checking/alignment of test / service position switches.
8 Checking/ alignment / rectification of breaker rack in rack out mechanism.
9 Checking/Replacement of spring charging motor, servicing of spring charging motors.
10 Mechanical setting for closing/ trip coils.
11 Replacement of damaged rollers.
12 Replacement of damaged components of breakers.
13 Tightness and dressing of wiring.
14 Tightness of external power cable, earthing lead.
15 Sealing of cable compartment.
16 Function checking in test / service position, local/ remote position.
17 Replacement of faulty components- like indicating lamps, meters.
18 Checking of control fuses, fuse bases, replacement of fuses, fuse bases.
19 Alignment checking of breaker control plug.
20 Tightness checking mounting earthing, checking of PB stations, replacement of components if required.
21 Any other job as required

D) MAINTENANCE OF HT/ LT BOARDS / UPS & VFD PANELS

1 Removal of bus bar compartment cover and through cleaning by hots air blower/ clothes/ all compartment covers.
2 Bus bar tightness with torque wrench.
3 Physical check of bus bar support insulators, CTs, PTs, replacement if required
4 Cleaning / tightness checking of control bus bars.
5 Cleaning / tightness checking of cable alleys.
6 Tightness/ Meggering of cable termination
7 Continuity and tightness of earthing connections.
8 Cleaning/tightness of control transformer modules, bus LT modules, line PT modules.
9 Bus PT module alignment.
10 Checking of all spare feeders.
11 Door fixing / alignment.

12 Replacement of gaskets .
13 Meggering of control, power buses.
14 Meggering of all transformers.
15 Checking of thermostats/ space heaters.
16 HV test if required by E-I-C
17 Replacement of missing components.
18 Checking of inter panel wiring.
19 Sealing holes / opening by Aluminum foil / silastic .
20 Any other job as required

1.1. Checking the healthiness of gaskets, nuts, bolts, fittings.
1.2. Cleaning of the glasses.
1.3. Cable termination tightness checking and gland checking.
1.4. Checking of any damage to the cable or instruments.
1.5. Zero calibration of the analyzer.
1.6. Checking the availability of signal in the control room.
1.7. Power supply checking.
1.8. Checking of setup parameters.

E) EARTHING MAINTAINANCE

1 Tightness of connection.
2 Earth resistance measurement of earth mat.
3 Measurement of resistance of earth pit.
4 Tightness of bolts/joints. Replacement of nut bolts if found rusted
5 Checking of earth connection.
6 Any other job as required

F) **MAINTENACE OF BUSDUCT**

1 Meggering of bus duct
2 Checking of insulators.
3 Blowing of hot air equipments.
4 Checking of flexible tightness.
5 CT wiring checking and tightness
6 Cleaning of NGR.
7 Meggering of NGR.
8 Replacement of bushing gaskets.
9 Replacement of damaged components.
10 Joint tightness and sealing.
11 HV Test
12 Checking of earthing connections/ continuity.
13 Replacement of weak insulators.
14 Any other job as required

G) **MAINTENANCE OF ACTUATORS**

1 Setting of limit switch, torque switches.

2 Cleaning of torque switch, limit switch gears.
3 Replacement of faulty parts.
4 Tightness of power and control cables.
5 Checking preventive of oil leakage, topping of oil.
6 Greasing of limit switch mechanism.
7 Meggering
8 Measurement of winding resistance
9 Sealing of Crack ,holes.
10 Sealing of motor terminal boxes.
11 Replacement of gaskets
12 Check for hand wheel operation during manual and during auto operation
13 Drying out of motors having low insulation resistance value.
14 Any other job as required

H) MAINTENANCE OF DC SYSTEM

A. Battery

1 Cleaning of batteries, stand, vent plug, insulators of battery.
2 Applying of petroleum jelly on battery terminals as and when required
3 Measurement of specific gravity, voltage and temperature of cells.
* Frequency in such a way that measurement cycle per set is completed within 30 days.
4 Replacement of batteries, containers, battery cables/links, vent plug/level indicator and any other portion of battery whenever required.
5 Checking of battery voltage and current.
6 Checking of terminal connection tightness.
7 Topping of battery with Distilled water as and when required.
8 Reporting of abnormalities to the engineer in-charge.
9 Monitoring condition of exhaust fan, lighting, battery condition including leakage water tap availability.
10 Cable tightness check.
11 Lighting/Exhaust fan system monitoring.
12 Replacement of battery stand as and when required.
13 Any other job as required

B. Chargers

1 Cleaning of panel by air blower than manual cleaning.
2 Tightness of power, control circuits
3 Tightness of external connections.
4 Checking of fuses, power contactor, control contactors, BMRs.
5 Functional checking of control circuit
6 Bus bar tightness checks.
7 Replacement of faulty parts.
8 Meggering
9 Boosting charging of partially discharged battery as and when required.
10 Replacement of gaskets.

11 Door alignments.
12 Sealing of top cable entries.
13 Any other job as required

I) MAINTENANCE OF HOISTS- CRANES

1 Checking healthiness of DSL, insulators and their cleaning.
2 Check and clean the auxiliary control panels.
3 Check and clean contactors, power contacts.
4 Check for tightness of control / power cables.
5 Checking of interlocks, limit switches, safety switches installed in the systems.
6 Check/ clean pendent switches.
7 Meggering of DSL, Cables, motors in the system.
8 Replacement of faulty/ damaged components.
9 Checking for the healthiness of the resistance in the system.
10 Lubrication of bearings in the system motors.
11 Check and clean the isolating switch contacts.
12 Check healthiness of the control transformers, auxiliary transformers in the system.
13 Check healthiness of space heaters of motors used in the system.
14 Check and replace the control/ power fuses in the systems.
15 Check for availability of earthing and its tightness.
16 Checking/ cleaning of PB station, tightness of terminals/ Cables, cleaning of contacts.
17 Any other job as required

J) MAINTENANCE OF EX-FANS, ROOF EXTRACTION FANS

1 Cleaning of fan/motor assembly.
2 Lubrication of bearings.
3 Fan blade tightness checking.
4 Checking of terminals- cleaning, tightness, and replacement of burnt out terminals.
5 Checking of availability/ tightness of earthing.
6 Alignment of fan blade with respect to shaft.
7 Checking of starters of exhaust fan for
a.) Correctness of starter, its thermal settings.
b.) Cleaning of starter contacts.
c.) Tightness of cables, connections.
d.) Cleaning of starter from inside.
e.) Availability, tightness of earthing.
8 Any other job as required

Other jobs required to maintain the system in healthy condition

1 Attending to fault/defects & breakdown jobs etc.

2. Removal / laying of different size power & control cables, their Glanding & termination as per requirement.
3. Erection / removal of all the type panels, JBs, MK etc including all the accessories as and when required
4. Erection / removal of motors, Transformers, actuators & other electrical equipments including all the accessories as and when required
5. Providing supply to welding machines and other electrical equipment as & when required
6. All the modification jobs required for system.
7. Other the other job required for healthiness of the system & plant

The list of equipments with tentative quantity for two year is enclosed herewith as Price schedule B1 to B4.

(C) MAIN PLANT, SOLAR PLANT, COLONY LIGHTING SYSTEM(PACKAGE - C)

Detailed Scope of Work for Main plant, solar plant, Bodhan & Patna pump house and colony Lighting system is

A. ATTENDING DEFFECTS OF LIGHTING FIXTURES

1. Identification & rectification of lighting fixtures not glowing in a particular circuit and fault tracing.
2. Cleaning of all the lighting fixture parts.
3. Checking of tightness of terminal connections in fixture, control gear box.
4. Checking of availability / tightness of earth connections.
5. Checking & rectification of mounting arrangement of lighting fixture for adequate strength and required hardware.
6. Sealing of holes if any.
7. Replacement of gaskets if required.
8. Checking of healthiness of lighting components.
9. Removal/ replacement of damaged parts.

B. ATTENDING DEFFECTS OF EXHAUST, CEILING & WALL MOUNTING FANS.

1. Cleaning of fan/motor assembly.
2. Lubrication of bearings & varnishing.
3. Fan blade tightness checking.
4. Checking of terminals- cleaning, tightness, and replacement of burnt out terminals.
5. Checking of availability/ tightness of earthing.
6. Alignment of fan blade with respect to shaft.

C. PM OF LIGHTING PANELS, LIGHTING DISTRIBUTION BOARDS & HT/LT PANELS.

1. Cleaning of lighting panels, LDBs & HT/LT Panels.
2. Cleaning of MCBs, ELCB/ RCCBs, contactors, timers, meters in lighting panel, LDBs & HT/LT Panels.
3. Checking healthiness of ELCB/ RCCBs by simulation.
4. Checking tightness of incoming & outgoing cables to the panel and re-termination and re-glanding if required.
5. Cleaning of busbar section & proper sealing to make the same dust & vermin proof.
6. Checking of bus bar insulators and making needful rectification.
7. Providing sheds/ covering by polythene sheets / application of aluminum adhesive foil to protect lighting panels from water dripping from any source.
8. Fixing of aluminum sheets on lighting panels wherever acrylic transparent sheets are found broken.
9. Sealing of openings in cable alley and gland plates.
10. Checking of isolator handle operation (on/off) and replacement of the same, if not in order.
11. Checking & rectification of alignment of panel door hinges.

D. ATTENDING DEFFECTS OF 1-PH RECEPTACLES

1. Checking for availability /broken handles and replacement.
2. Tightness of cable termination.
3. Cleaning of receptacle body (internal & external)
4. Checking for availability of receptacle outlet cover and its retaining chain and replacement if necessary.
5. Checking of availability of voltage with circuit on and logging of voltage at each outlet.
6. Checking and rectification of fault in a particular receptacle circuit.
7. Earthing tightness to each receptacle to be checked and providing the same if missing.

E. ATTENDING DEFFECTS OF 3-PH RECEPTACLES

1. Checking for availability /broken handles and replacement.
2. Tightness of cable termination.
3. Cleaning of receptacle body (internal & external)
4. Checking for availability of receptacle outlet cover and its retaining chain and replacement if necessary.
5. Checking of availability of 3-ph voltage with circuit on and logging of voltage at each outlet.
6. Checking and rectification of fault in a particular receptacle circuit.
7. Checking of loop in & loop out cable for proper termination.
8. Checking correctness for rating & healthiness of fuses in individual receptacles and needful rectification.

9. Checking availability of all cover bolts and gaskets and providing the same if missing.
10. Earthing tightness to each receptacle to be checked and providing the same if missing.

F. ATTENDING DEFFECTS OF LIGHTING CIRCUITS

1. Checking & restoring healthiness of individual lighting circuit fed from the lighting panel.
2. Rectification of the lighting fixtures detected not glowing, during preventive maintenance.
3. Proper sealing of pull boxes, elbow bends by plaster of Paris/aluminum foil if necessary.
4. Checking of tightness & rectification of clamping of lighting conduits on supports.
5. Tightening of adapter nipple to ensure proper strength to lighting conduit.
6. Clamping of flexible conduit between lighting fixture and rigid conduit to ensure that the lighting wires are not exposed.

G. OTHER MISCELLANEOUS JOBS

1. Erection / removal of all the type of lighting fittings including all the accessories as and when required.
2. Erection / removal of all type of receptacles, switches, switch box etc. including all the accessories as and when required.
3. Erection / removal of Complete distribution board including internal wiring and cabling.
4. Erection / removal of all type of fans including all the accessories as and when required.
5. Erection / removal of all type of junction boxes, lighting panels and lighting distribution boards including all the accessories as and when required.
6. Erection / removal of all type of lighting transformers / panels including all the accessories as and when required.
7. Erection / removal of 1 Ph & 3 Ph energy meters as and when required.
8. Erection / removal of GI conduits, flexible conduits, PVC rigid conduits, GI chains, flexible conduits, casing capping etc. including all the accessories as and when required.
9. Erection / removal of GI & MS channels, angles and flats for lighting equipments as and when required.
10. Daily area checking for proper illumination and daily area wise lighting status recording and reporting to EIC.
11. Minor civil work, lubrication work etc. for proper lighting system as directed by engineer in-charge.
12. Removal / laying of different size power & control cables, their glanding & termination as per requirement.
13. Providing temporary lighting at various locations as per requirement.
14. Providing supply to welding machines and other electrical equipment as & when required.

The list of equipments with tentative quantity for two year is enclosed herewith as Price schedule C1 & C2.

1.1 SPECIFIC REQUIREMENT OF CONTRACT

(A) Timely completion of all jobs and works shall be the essence of this Contract. Contractor should closely monitor each activities such as preventive maintenance, break down and annual shutdown jobs and complete the jobs as per the time given by and under the supervision of the Engineer-In-charge and shall ensure that sufficient qualified & experience manpower is deployed for the same.

(B) The contractor has to complete the preventive maintenance (PM) as per the planning schedule and their respective supervisor has to

interact with Engineer In Charge for PTW (Permit to work), work instruction, Return of permit and successful trial run. Contractor must carry out the Preventive maintenance jobs as per the equipment PM check sheet provided by the GIPCL, also after completion of the PM jobs; this duly filled PM check sheet is to be submitted duly signed to Engineer in charge.

(C) The contractor has to submit daily reports showing maintenance work carried out spare parts/ consumables etc. replaced.

(D) One nos. Utility vehicles are to be kept for maintenance activity as per tender guideline. Only utility vehicle is allowed equivalent to Mahindra Bolero Maxi truck, TATA 207 DI RX PICK UP etc having more than 60 HP power. Vehicle should not be older than four years during entire contract period.

(E) The Contractor shall provide 03 (Three) pairs of good quality stitched uniform to their workmen deployed at GIPCL, SLPP site once in year within one month from the date of commencement of contract. Failing in which appropriate penalty will be imposed.

(F) Communication equipment like mobile phone is to be provided to all responsible persons like site in charge and all engineers/supervisors. Any change in communication mode/number is to be intimated in writing to engineer in charge

(G) All the general tools & tacked shall be brought and maintained by contractor. Special tools & tackles and testing /measuring instrument shall be provided by GIPCL. The contractor should ensure that tools are in healthy condition all the time.

(H) If any equipments or part are found damaged due to negligent / faulty maintenance the equipment cost of such damages shall be recovered from the contractors monthly bill/retention money/security deposit.

(I) The contractor shall have to collect the spares, lubricant etc in required quantity duly approved by GIPCL Engineer whenever necessary from GIPCL store / warehouse. Contractor shall have to arrange transportation for above. The cost of transportation will be on contractor's account. The contractor is responsible for safe transportation, handling and storage. If equipment fails due to improper lubrication or intermixing, the cost of such damages shall be recovered from contractor bills. It is the responsibility of contractor to keep various lubricants separately to avoid intermixing. The failure /defects of equipment due to improper method of maintenance, equipment assembly due to contractor negligence, the losses will be recovered from contractors bills.

(J) In case of breakdown of equipment, the contractor should work round the clock if required for putting back the equipment in services immediately within minimum time.

(K) Contractor shall nominate /authorize a person and communicate to the GIPCL in writing as Site in charge & assistant site incharge cum supervisors. They shall co-ordinate with GIPCL engineer and bears overall responsibility of contract. Such persons shall function from site office of contractor at SLPP.

(L) The decision of the engineer in charge shall be final and binding on the contractor for defining the terms and condition included in this contract.

(M) Engineer in charge or his authorized representative may do inspection of work at any time. If the work is not found satisfactory, engineer in charge reserves the right to take suitable action.

(N) Breakdown of the plant : In the event of breakdown of the plant leading to a likely shut down of more than one month, the following shall be applicable :

I. GIPCL shall give a notice to the contractor for demobilization.

II. Payment to the full shall be made for a period of one month and a prorata payment to the extent of demobilization staff should be made thereafter.

III. 15 days notice will be given to the contractor before the pre-commencement of the plant for remobilization of the plant.

IV. During the period of one month when the plant will be rendered idle, GIPCL will have right to utilize their services in any other manner as deemed fit by GIPCL.

V. Contractor shall not be eligible for any compensation for demobilization and remobilization.

(O) Arrangement for lighting at the work spot while carrying out maintenance activities has to be made by the contractor. He has to arrange all lighting equipments such as power cable, hand lamps etc. The contractor has to take prior approval for taking electrical power supply.

(P) One or more jobs may be required to be done simultaneously and contractor shall mobilize additional resources accordingly.

(Q) Monthly/quarterly reconciliation of material / spares issued by GIPCL to the contractor shall be done and record to be maintained by the contractor. All the scrap generated should be disposed off to the scrap yard or any other designated place as instructed by Engineer In Charge for which no separate payment will be made by GIPCL.

(R) **Defect liability period**: The defect liability period for respective job shall be maximum 6 months or the period between the two preventive maintenance frequencies of respective job as applicable**.** During defect liability period, if any defect arises in jobs which have been already executed, shall be rectified by the contractor free of cost.

(S) The contractor has to complete the preventive maintenance (PM) as per the planning schedule and his respective site in charge shall interact with Engineer In charge for execution of the same. However, planning the preventive maintenance jobs will be done solely at the discretion of GIPCL. The preventive maintenance shall be done on all days including Sundays & holidays. No separate charges are payable for working in these days.

(T) Any job other than the listed jobs in work order shall be executed by the contractor on instruction from GIPCL and payment shall be made to the contractor as per manpower rates in price schedule for unforeseen jobs**.** No claim/ compensation by contractor shall be entertained by GIPCL towards non-carrying out of preventive maintenance jobs during such period, nor any minimum billing can be guaranteed.

(U) Price and rates quoted, shall include cost of all consumables, (except free issue materials by GIPCL) labour, supervision, transport, uniform for all workman, taxes, octroi, local taxes and levies if any etc. and any such other costs as are not specifically mentioned herein, but may be incurred by the contractor for the satisfactory and timely completion of the work.

(V) For planned shutdown contractor should be able to mobilize the required manpower. The information of shutdown in such case shall be more than 3 days. However, if contractor fails to provide required manpower for shutdown /breakdown jobs in time, the preventive maintenance will be deferred by GIPCL during shutdown /major Breakdowns. The payment for the jobs not covered in the preventive/breakdown maintenance price schedules shall be paid as per the man-day rates quoted by the contractor for that cadre of workmen in the price bid and accepted by GIPCL. No claim/Compensation shall be entertained by GIPCL towards non-carrying out of preventive maintenance during such period. In case of breakdown of equipment, the contactor should work round the clock for putting back the equipment in service immediately within minimum time.

(W) The contractor should ensure that all the PM activities planned is completed in the same day preferably within normal working hours

between 08:30 Hrs to 17:30 Hrs for main plant**. However for Solar plant most of the PM activities cab be taken up after 17: 30 hours only, after shutdown of the system.**

(X) Contractor shall make their own arrangement for transportation of manpower & spares within plant premises for attending all the maintenance activities. For which contractor may deploy vehicle to transport spares, minimum checking tools & instruments, especially for attending defects occurring any time during the day. However looking to the safety point of view of the power plant for major shipment of equipments & manpower GIPCL shall provide its own vehicle / Tractor. However all the requirements should be pre-planned so that the requirements can be fulfilled in time.

(Y) The frequency of work indicated in the **Price Schedule** for Breakdown Maintenance/Miscellaneous job is tentative and is as per the past experience, repetitions of these are not expected in normal case and no minimum work can be guaranteed. As such payments will be made only for the Breakdown Maintenance /Miscellaneous Jobs carried out. No claim, whatsoever, will be entertained by GIPCL in case the frequency indicated is not carried out.

(Z) It is necessary that contractor should have computer and printer at his cost at the site office in order to prepare neat daily work reports, material report & monthly billing etc..

(AA) Contractor should mobilize all resources for efficient & smooth execution of contract within 15 days from the date of issue of Letter of Intent.

(BB) To ensure reliable operation, only qualified and experienced personnel and supervisors shall have to be employed. All persons deputed for maintenance work shall be subject to GIPCL approval.

1.2 Performance Requirements :-

Following performance is expected from the successful bidder while executing the work:-

i. The percentage of Preventive maintenance achieved should be more than 95% of the total preventive maintenance planned in the month UNLESS any major breakdown has occurred and the manpower is diverted to attend the breakdown. However the penalty for non achievement of planned P.M. shall be applied on average of strike rate of 3 months, which allows for absorption of unforeseen breakdown & gives opportunity for improvement of

strike rate. the threshold of P.M. frequency for application of penalty shall be 95% as per clause no. 20 (B)

ii. All preventive maintenance activities shall be thoroughly supervised by a qualified Engineer and all checklist of preventive maintenance shall be filled in by the Engineer himself. Any defect observed during preventive maintenance but cannot be attended due to genuine reasons shall be mentioned in the checklist. The engineer supervising the job should ensure good quality of the work as per modern practices and should have multidisciplinary approach so as to suggest the possible measures in case certain abnormality is observed by him which may affect the satisfactory operation of equipment in future. It is expected that the engineer supervising the job gives prompt feedback to GIPCL Engineer – in charge regarding any abnormality observed so as to witness the same by him, before equipment box-up.

iii. The contractor supervisor, supervising the work shall be responsible for ensuring the safety of the workmen and should see that all Workmen use proper safety gears for attending all jobs included in scope of work.

iv. Contractor's supervisor / technician should ensure the isolation of equipment before starting the work. Work should be done as per standard procedure and check list.

v. Minor tack welding jobs to suit the requirements of Electrical system to be carried out by Contractor as and when required.

vi. RA Bill of the preceding month should be submitted by 5th day of the succeeding month.

vii. Contractor should maintain the discipline at work place and time of reporting of workmen/Engineer for duty to be monitored and needful action to be taken in case of defaults.

viii. Illumination & welding supply requirements of other maintenance agencies working is to be met timely, so that the maintenance works of the system is not adversely affected to reduce the system availability.

ix. Power generation being essential services, maintenance activities shall be carried out on all the days including holidays / Sundays. As such, contractor has to deploy man power accordingly.

GIPCL is an ISO 9001, ISO 14001, OHSAS 18001 & ISO 50001:2011 (EnMS) certified company, and GIPCL gives extreme importance to maintain these global standards. Contractor shall be required to observe these standards while working with GIPCL. Contractor should ensure that his workmen work in accordance with them

1.3. PENALTY CLAUSE :-

A.	Non Availability of site In-charge.	A. After total Two days of unauthorized absence of site In-charge per Month, either continuous or separately, a penalty of Rs 1000/- per day shall be recovered. B. Deduction for non availability of site in charge shall be limited to ceiling limit of Rs 30000/- per month. C. Sunday / PH shall be excluded from counting.
B.	Less than 95 % achievement in completion of Preventive Maintenance work per quarter against Preventive Maintenance schedule issued by GIPCL without any justifiable reasons.	A. Penalty if 95 % or more PM achieved per month - Nil. B. Penalty for PM achieved less than 95 %- @ Rs 2000.00 for every one percent reduction in preventive maintenance. C. Deduction for penalty due to short fall in PM shall be limited to Rs 15,000/- per month.
C.	Deployment of Less Manpower in Shift maintenance.	A. No deployment of manpower – no payment shall be done. B. In addition to nonpayment as above, penalty @ 0.25 times the rates accepted by GIPCL for respective category for Shift Maintenance / unforeseen works whichever is more shall be applied.
D.	Improper Supervision Deployment of less than 2 Engineers per day for supervision of Preventive maintenance work including Site In-charge	A. 1.25 times the rate accepted by GIPCL for Engineer for Shift maintenance / Unforeseen works whichever is more. (excluding Sunday's & PH) B. Deployment of two engineers will not be applicable for Sundays / and PH. However, on Sundays & PH, one Engineer to be deployed instead of two engineers for supervision of maintenance activities. Failure to this shall attract penalty.
E	Delay in attending defect that occurred in shift maintenance beyond four working shifts for reasons attributable to contractor	Rs 200.00 per defect per day.
F	Shortage of tools & tackles	Rs 300.00 per day per Tools & tackles **or** GIPCL will issue the same and cost with overhead charges @25% shall be deducted from the contractor's bills
G	Shortage of measuring & testing instruments	Rs 300.00 per day per measuring & testing equipment **or** GIPCL will issue the same and cost with overhead charges @25% shall be deducted from the contractor's bills
H	Unsafe work	Rs 1000.00 per day per instant.
I	Damage to GIPCL equipments /	A. Free Replacement / repair up to satisfaction of GIPCL OR

	machinery	1.25 times cost of equipment GIPCL has incurred. B. Erection after repairs will be done by contractor without any extra cost to GIPCL.
J	Use of GIPCL vehicle for shifting man power for attending Preventive / Breakdown Maintenance work	1.25 times the cost incurred by GIPCL for particular route.
K	Liquidated Damages	In case of failure to adhere to the time schedule by contractor, penalty will be levied at the discretion of Engineer In Charge considering extent of delay in particular work. LD of 1 % of the contract value per hour for the delayed work shall be deducted from Contractor's bill subject to a maximum of 5% of the value of that particular work.
L	Improper housekeeping after completion of work.	1.25 times the cost incurred by GIPCL for particular Instant.
M	Unsatisfactory Work (Improper Maintenance)	Rs 1000.00 per instance.
N	Violation of safety norms	The safety rules to be observed shall be as per attached annexure- B. For safety violations, penalties as mentioned in above annexure –B Shall be applicable.

1.4 DISPOSAL OF MATERIAL

(A) The Contractor must ensure that all the generated scrap, cotton waste, waste oil, tools and tackles are removed from the site immediately and he must ensure cleaning of the site. Further, these items should be disposed off to the scrap yard or any other designated place as instructed by Engineer In Charge. In case of heavy weight items, if required transportation may be arranged by the GIPCL at the discretion of the engineer in charge. If the scrap removal is not done within the stipulated time given by GIPCL Engineer, the scrap will be removed by GIPCL at the Contractor's cost with penalty and it will be deducted in the RA bill.

(B) Hazardous waste like waste oil and oil/grease soaked cotton waste oil to be collected in separate container and then shift to the designated area as per the instruction of engineer in charge.

(C) It is the responsibility of site incharge to segregate and remove the scrap from site. Work will be certified by GIPCL engineer only after removal of scrap to the scrap yard.

1.5 SCOPE OF CONTRACTOR

1. All tools & tackles, tractors, required vehicles to execute the contract will be in the scope of the contractor. The contractor should ensure for healthiness/working conditions of tools, tackles & vehicles.
2. All safety/PPEs required during work at site are to be arranged by the contractor.
3. The Contractor shall have to provide necessary facilities including accommodation for their labor at their own cost.
4. Contractor has to depute their full time experienced overall site-in-charge & independent Location/Package wise supervisors for work execution as per specification and for day to day work planning & coordination with respective department's Engineer-in-charge, to obtain day to day Location/Package wise work permits, to get daily location wise work supervision, to record Location/Package wise joint work done reports/measurements/trip certification, to prepare Location/Package wise separate bills, to prepare & apply Location/Package wise manpower gate pass, to maintain Location/Package wise statutory & legal compliance records, etc…

1.6 TO REMEDY DEFECTIVE WORK

If the work or any portion thereof shall be damaged in any way excepting by the acts of the GIPCL, or if defects not readily detected by proper inspection shall develop before the final completion and acceptance of the whole work, the CONTRACTOR shall forthwith make good, without compensation, such damage or defects in a manner satisfactory to the ENGINEER / GIPCL. In no case shall defective or imperfect work be retained even if contractor followed all technical specifications. GIPCL will not compromise for quality of materials, works & workmanship.

The CONTRACTOR shall remain liable under the provisions of this clause notwithstanding the passing by the GIPCL of any certificate, final or otherwise or the passing of any accounts.

1.7 DAILY DIARY AND PROGRESS REPORT :

A daily diary register will be kept in the ENGINEER'S office. The CONTRACTOR will supply all detailed information every day at 9:00 hours for the day preceding and the diary will be jointly signed by the ENGINEER and the CONTRACTOR'S representatives, every day in token of its correctness. A works instruction book, serially numbered will also be kept in the ENGINEER'S office and all day to day instructions will be given in that book. The CONTRACTOR'S representative shall report every day to see these instructions and sign them at the bottom in token of his having seen them.

The CONTRACTOR shall supply all information regarding procurement of materials and progress of work, as is required by the ENGINEER for compiling the weekly progress reports. This information shall be supplied by 9:00 hours on every Monday, for the preceding week.

2. PRICE & RATES

The rates quoted by the Bidder in the online Price Bid shall be inclusive of cost of all labor, supervision, cost of safety supervisor, shifting, transportation, loading, unloading, equipment, all tools & tackles, safety equipments & PPEs, Royalties, Rents, Excise duty, Sales Tax, Stamp Duties, Central or State Government or Local body or Municipal Taxes or Duties, Turn over Tax, Work Contract Tax, VAT, Octroi duty and / or any other duty / tax (excluding Service Tax), levied by the Central, State Government or other Public bodies etc…and such other costs that are not specifically mentioned herein but will be incurred by the contractor for the satisfactory and timely completion of the work. The quoted rates shall be deemed to include for everything mentioned in the specification, all leads & lifts, contractor's overheads & profits for due performance of the work under this contract and such other costs that are not specifically mentioned herein but will be incurred by the contractor for the satisfactory and timely completion of the work. The rates shall also include cost for mobilization / demobilization of manpower, equipments, materials, etc...

The rates shall be firm for entire contract period (5% escalation will be applicable for second year) and also during extension, if required and shall not be subject to any escalation in prices, idle charges for labor, machinery, overhead expenses etc. No price escalation / idle charges shall be due to any reason whatsoever.

The prices / item rates quoted by Bidder shall remain firm till completion of the contract period (5% escalation will be applicable for second year) and any agreed extensions thereafter and shall not be subject to any other escalation, idle charges for labor, machinery, overhead expenses etc. No price escalation / idle charges shall be payable due to delay in work by contractor or due to non-availability of work front by GIPCL or any reason whatsoever.

The price/rate quoted by CONTRACTOR shall be considering mobilization of all required manpower, tools & tackles, materials, equipment for timely and satisfactory completion of all scope of work.

The value and/or quantum of work may be increased or decreased depending upon day to day requirement. However, item rates remains unchanged and the payment shall be made as per the actual quantity executed as informed & certified by GIPCL representatives.

3. CONTRACT PERIOD

Contract period will two years from the date of commencement (mobilization period will be 15 days from the date of issue of LoI or Work Order whichever earlier).

4. TERMS OF PAYMENT

A. Conditions of Payment:

The contractor shall raise the location wise separate running invoices in duplicate every month in respect of the work performed or completed during the month along with the documents as hereinafter provided. On receipt of the invoice complete in all respects and with all the said documents, the payment in respect

of the same shall be made within 21 days of such receipt of a complete invoice as per the following terms of payment:

(i) 100% of monthly RA bill along with 100% taxes shall be released against the work executed duly certified by GIPCL Income Tax (IT) will be deducted at source from monthly RA bills as per the rules in force.

(ii) Security deposit at 5% of annual contract value shall be submitted as per clause no.: 1 of Section-C. Security deposit & retention money will be returned to the Contractor without any interest after retention period of three months from actual contract completion date as certified by Engineer-in-charge as per clause no.: 1 of Section-C.

(iii) Service tax shall be paid along with bills after fulfillment of following terms.
   (a) Submission of copy of registration certificate issued by Service Tax Authority (to be furnished only once).
   (b) Citing the service Tax Registration no. And the date of issue of registration certificate on invoices.
   (c) Claim of Service Tax amount with percentage (%) separately shown on the invoices.
   (d) The contractor shall be required to submit the proof of payment of service tax of previous month/quarter, as may be applicable as & when demanded by GIPCL/Owner/company.
   (e) The Bidder shall inform the Owner in the event of its registration certificate is cancelled or discontinued for whatsoever reason.

(iv) At the time of submission of the first monthly RA Bill, the Contractor shall submit a certificate from Engineer-in-charge regarding availability of tools & tackles, equipments, vehicles etc at site**.** The Contractor shall also furnish the checklist as per **ANNEXURE-A** enclosed with the Section-F of tender document along with the RA bill of respective month.

(v) The contractor along with monthly RA Bill shall submit copy of P.F. Challan, Xerox copies of wages register of previous month, Xerox copies of attendance sheet of respective month & copy of ECR statement indicating the employee and employer's P.F contribution of previous month with respect of employees employed by him for the contract at GIPCL site.

(vi) The Contractor shall submit his Final Bill within a period of three months of the expiration or earlier termination of the contract or any extensions that may be granted by GIPCL to the Contractor. GIPCL shall not entertain any bill for any work item after expiration of period of three months.

(vii) The Contractor shall include all his claims in the Final Bill submitted by him and accordingly the final bill submitted by the Contractor shall be deemed to be inclusive of all and whatsoever the claims that the Contractor may have from GIPCL. The Contractor shall not be entitled to claim any amounts which are not mentioned in the Final Bill and the Contractor shall be deemed to have waived any claims not mentioned in the Final Bill and shall not be entitled to recover the same from GIPCL subsequent to the submission of the Final Bill on any account and GIPCL shall stand absolved of all its liabilities in respect of any such claims not raised by the Contractor in his Final Bill.

B. Validity and Uniformity of Rates

The rates shall be valid for a period of two years of the Contract Period and shall remain unaltered during the first year of the Contract Period and 5 % escalation will be considered for second year.

5. SUBMISSION OF TECHNICAL DOCUMENTS TO THE ENGR-IN-CHARGE

Contractor shall submit following documents to the Engineer-in-charge for verification purpose of the bill:-

(i) **Measurement sheet along with joint record of work done in the form of joint inspection report/ check list** duly signed by authorized representative of contractor and GIPCL Engineer.

The bill will not be entertained without submission of above documents.

6. SUBMISSION OF STATUTORY COMPLIANCES WITH EACH BILL

Contractor shall submit each RA bill of work carried out along with following documents.

(i) Copy of statutory compliance like labour license, wages payment register, EC Policy, PF paid Challan with ECR, etc… along wage certificate pertaining to respective bill period.
(ii) Notarized Indemnity Bond as per Performa, in case of Final bill.
(iii) No claim - No arbitration certificate as per Performa, after releasing final bill payment.

Bill submitted without any of the above documents shall not be processed for payment.

7. MEASUREMENT& DAILY REPORTS

a. The contractor has to complete the preventive maintenance (PM) as per the planning schedule and their respective supervisor has to interact with Engineer In Charge for PTW (Permit to work), work instruction, Return of permit and successful trial run. Contractor must carry out the Preventive maintenance jobs as per the equipment PM check sheet provided by the GIPCL, also after completion of the PM jobs, this duly filled PM check sheet is to be submitted duly signed to Engineer in charge.

b. The contractor has to submit daily reports showing maintenance work carried out spare parts/ consumables etc. replaced.

8. MOBILIZATION AND EXECUTION

a) Contractor shall mobilize the resources at site within 04 hours from the time the intimation given by GIPCL.
b) Contractor shall provide required separate & independent site supervisors who will be responsible for supervision and execution of job in specified time with respect to quality, specifications, site preparations, safety, co ordination with GIPCL, issue of work permits, joint measurements, etc...

The supervisors shall coordinate with the Engineer-in-charge of GIPCL for proper execution of the job.

c) The resources required for execution of above jobs will vary from time to time, hence contractor shall mobilize the resources accordingly.

d) Contractor shall provide accommodation for the persons deployed by him for the work at his own cost.

9. QUANTITY OF WORK

The estimated quantities of work required to be carried out by the contractor are as given in the Section-E (Schedule of Quantity). estimated and shall vary according to the exigencies of work at site. However, the rates quoted by Bidder shall remain firm irrespective of any variation in estimated quantities. Contractors shall engage required nos. of labors alongwith required tools & tackles as per work load and emergency situations throughout the contract period to perform his contractual duties.

In case, contract quantity/amount exhausted before completion of contract period, GIPCL reserve the rights to increase the quantities or contract amount for successful completion of entire contract period. Contractor shall responsible to complete the particular job up to entire satisfaction of Engineer-in-charge. The item rates remain firm & unchanged till completion of the contract and any agreed extensions thereafter and shall not be subject to any escalation, idle charges for labor, machinery, overhead expenses etc… for any reason whatsoever. The quantum of work of individual item may be up to any extent depending upon requirement. However, item rate remains unchanged. Under this contract, contractor has to execute all work as per the Plant requirement.

10. GENERAL CONDITIONS OF CONTRACT

General Conditions of Contract (Section-C) and detail specification prepared by the company will be applicable for this contract. The same is enclosed herewith. Bidders are advised to go through the same.

Where any portion of the general conditions of contract is repugnant to or at variance with any provisions of the special conditions of contract, then unless a different intention appears, the provision of the special conditions of contract shall prevail to the extent of such repugnancy of variance.

SECTION-E
SCHEDULE OF QUANTITIES

Surat Lignite Power Plant - 4X125 MW, Unit # I & II:

A1 : Price schedule for Main plant Electrical SLPP-1 PM (Package-A)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	PM OF 6.6KV BFP MOTOR- 2000KW	NOS	18	1650	29700
2	PM OF 6.6KV AIR COMPRESSOR MOTOR- 320 KW	NOS	12	1650	19800
3	PM OF 6.6KV PA FAN MOTOR- 1120 KW	NOS	8	2188	17504
4	PM OF 6.6KV SA FAN MOTOR- 1250KW	NOS	8	2188	17504
5	PM OF 6.6KV ID FAN MOTOR -725KW	NOS	8	1650	13200
6	PM OF 6.6KV FBHE BLOWERS MOTOR-190 KW	NOS	24	1650	39600
7	PM OF 6.6KV SEAL AIR BLOWER MOTOR- 225 KW	NOS	12	1650	19800
8	PM OF 6.6KV COOLING WATER PUMP MOTOR - 560KW	NOS	15	1650	24750
9	PM OF 6.6KV CEP MOTOR -300KW	NOS	12	1650	19800
10	PM OF 6.6KV RWP MOTOR AT BODHAN-275 KW	NOS	6	1650	9900
11	PM OF 6.6KV HT BREAKER AND ITS PANEL	NOS	20	550	11000
12	PM OF LT BREAKER AND ITS PANEL	NOS	8	550	4400
13	PM OF LT MOTOR & ITS MODULE UP TO 3.0 KW (63 TO 100 FRAME)	NOS	780	544	424320
14	PM OF LT MOTOR & ITS MODULE 3.1 KW TO 3.7 KW (112 FRAME)	NOS	90	544	48960
15	PM OF LT MOTOR & ITS MODULE 3.8 KW TO 9.3 KW (132 FRAME)	NOS	100	544	54400
16	PM OF LT MOTOR & ITS MODULE 9.4 KW TO 15 KW (160 FRAME)	NOS	108	544	58752
17	PM OF LT MOTOR & ITS MODULE 15.1 KW TO 22 KW (180 FRAME)	NOS	38	544	20672
18	PM OF LT MOTOR & ITS MODULE 22.1 KW TO 30 KW (200 FRAME)	NOS	28	544	15232

19	PM OF LT MOTOR & ITS MODULE 30.1 KW TO 45 KW (225 FRAME)	NOS	108	544	58752
20	PM OF LT MOTOR & ITS MODULE 45.1 KW TO 60 KW (250 FRAME)	NOS	40	544	21760
21	PM OF LT MOTOR & ITS MODULE 60.1 KW TO 90 KW (280 FRAME)	NOS	60	544	32640
22	PM OF LT MOTOR & ITS MODULE 90.1 KW TO 200 KW (315 FRAME)	NOS	106	544	57664
23	PM OF DC MOTORS & ITS MODULE UP OT 15KW	NOS	8	544	4352
24	DC MOTORS & ITS MODULE15.1KW TO 37KW	NOS	4	1088	4352
25	PM OF ACTUATOR, ITS MOTOR & MODULE < 1 KW	NOS	20	272	5440
26	PM OF ACTUATOR, ITS MOTOR & MODULE >1 <=5 KW	NOS	10	544	5440
27	PM OF HOIST, ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL - UP TO 10 TON	NOS	55	1650	90750
28	PM OF TG 175/30 Tons EOT CRANE, ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL EOT CRANE	NOS	2	3277	6554
29	PM OF TG 40/10 Tons EOT CRANE ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL EOT CRANE	NOS	2	2738	5476
30	PM OF CWPH 20/10 Tons EOT CRANE ALONG WITH ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL EOT CRANE.	NOS	2	1650	3300
31	PM OF WORKSHOP & WARE HOUSE10 Tons EOT CRANE ALONG WITH ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL EOT CRANE .	NOS	4	1650	6600
32	PM OF 6.6 KV UNIT BOARD SWGR BUS-A (U1A,U2A) 19 VERTICALS	NOS	4	10357	41428
33	PM OF 6.6 KV UNIT SWGR BUS-B (U1B,U2B) 19 VERTICALS	NOS	4	10357	41428
34	PM OF 6.6 KV STATION BOARD SWGR.(C1,C2) 18 VERTICALS	NOS	4	9818	39272
35	PM OF 6.6 KV COLONY BOARD SWGR.(S/S1 & 2) 4 VERTICALS	NOS	4	2738	10952
36	PM OF 6.6 KV SWGR. AT BODHAN 7 VERTICALS	NOS	2	3826	7652
37	PM OF 11 KV SWITCHGEAR 4 VERT AT BODHAN P/H	NOS	2	2738	5476
38	PM OF 11KV DOUBLE POLE STRUCTURE AT BODHAN P/H	NOS	2	2199	4398
39	PM OF 415V AC MCC BUS- A -7 VERT. DOUBLE FRONT WITH LT BREAKER	NOS	2	3826	7652
40	PM OF 415V AC MCC BUS- B - 4 VERT. DOUBLE FRONT	NOS	2	2738	5476
41	CLARIFIED SWITCHGEAR BUS- A - 10 VERT. DOUBLE FRONT	NOS	3	5476	16428
42	PM OF 415V CLARIFIED SWITCHGEAR BUS- B - 9 VERT. DOUBLE FRONT	NOS	3	5476	16428

43	PM OF 415V DM PLANT SWITCHGEAR BUS- A -5 VERT. DOUBLE FRONT	NOS	2	2738	5476
44	PM OF 415V DM PLANT SWITCHGEAR BUS- B -5 VERT. DOUBLE FRONT	NOS	2	2738	5476
45	PM OF 415V FOPH SWITCHGEAR BUS- A -6 VERT. DOUBLE FRONT	NOS	2	2738	5476
46	PM OF 415V FOPH SWITCHGEAR BUS- B -7 VERT. DOUBLE FRONT	NOS	2	3288	6576
47	PM OF 415V RAW WATER SWITCHGEAR BUS- A -6 VERT. DOUBLE FRONT	NOS	3	3288	9864
48	PM OF 415V RAW WATER SWITCHGEAR BUS- B -5 VERT. DOUBLE FRONT	NOS	3	2738	8214
49	PM OF 415V SB MCC BUS-A -5 VERT DOUBLE FRONT	NOS	4	2738	10952
50	PM OF 415V SB MCC BUS-B -4 VERT. DOUBLE FRONT	NOS	4	2738	10952
51	PM OF 415V WORKSHOP BUS-A 4 VERT. DOUBLE FRONT	NOS	2	2199	4398
52	PM OF 415V WORKSHOP BUS-B -2 VERT. DOUBLE FRONT	NOS	2	1650	3300
53	PM OF 415V SSS BUS- A -10 VERT. DOUBLE FRONT	NOS	2	5476	10952
54	PM OF 415V SSS BUS- B -9 VERT. DOUBLE FRONT	NOS	2	4926	9852
55	PM OF 415V UNIT SERVICE SWITCH GEAR BUS-A -16 VERT. DOUBLE FRONT	NOS	4	8730	34920
56	PM OF 415V UNIT SERVICE SWITCH GEAR BUS-B -16 VERT. DOUBLE FRONT	NOS	4	8730	34920
57	PM OF 415V DG BUS-A 6 VERT. DOUBLE FRONT	NOS	2	2738	5476
58	PM OF 415V DG BUS-B 3 VERT. DOUBLE FRONT	NOS	2	2199	4398
59	PM OF 415V CWPH SWITCHGEAR BUS-A 7 VERT. DOUBLE FRONT	NOS	2	3826	7652
60	PM OF 415V CWPH SWITCHGEAR BUS-B 7 VERT. DOUBLE FRONT	NOS	2	3826	7652
61	PM OF 415V CWPH SWITCHGEAR BUS-C 6 VERT. DOUBLE FRONT	NOS	2	3277	6554
62	PM OF 415V NE SWITCHTGEAR 11 VERT. DOUBLE FRONT	NOS	4	6015	24060
63	PM OF 415V TVDC BUS-A 10 VERT. DOUBLE FRONT	NOS	4	5476	21904
64	PM OF 415V TVDC BUS-B 6 VERT. DOUBLE FRONT	NOS	4	3277	13108
65	PM OF 415V BVDC BUS-A 5 VERT. DOUBLE FRONT	NOS	4	2738	10952
66	PM OF 415V BVDC BUS-B 5 VERT. DOUBLE FRONT	NOS	4	2738	10952
67	PM OF 415V ESP SWGR.-A 7 VERT. DOUBLE FRONT	NOS	6	3838	23028
68	PM OF 415V ESP SWGR.-B 6 VERT. DOUBLE FRONT	NOS	6	3277	19662
69	PM OF 415V 415 UPS ACDB 7 VERT. DOUBLE FRONT	NOS	4	2738	10952
70	PM OF 415V PM OF 415V SWITCHYARD ACDB 5 VERT. DOUBLE FRONT	NOS	2	2738	5476
71	PM OF 415V LT SWGR. AT BODHAN	NOS	2	1638	3276

72	PM OF 220V UNIT DCDB BUS-A 4 VERT. DOUBLE FRONT	NOS	4	2177	8708
73	PM OF 220V UNIT DCDB BUS-B 3 VERT. DOUBLE FRONT	NOS	4	1638	6552
74	PM OF 24V UNIT DCDB 7 VERT. DOUBLE FRONT	NOS	4	3826	15304
75	PM OF 220V SWITCHYARD DCDB 4 VERT. DOUBLE FRONT	NOS	2	2177	4354
76	PM OF 220V STATION DCDB BUS-A 3 VERT. DOUBLE FRONT	NOS	2	1638	3276
77	PM OF 220V STATION DCDB BUS-B 2 VERT. DOUBLE FRONT	NOS	2	1627	3254
78	PM OF150MVA, 230 KV/10.5 KV OIL FILLED GENERATOR TRANSFORMER ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS	NOS	4	3826	15304
79	PM OF 25MVA, 230 KV/6.6 KV OIL FILLED STATION TRANSFORMER ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS	NOS	4	2738	10952
80	PM OF 18MVA, 10.5 KV/6.9KV OIL FILLED UNIT AUX. TRANSFORMER ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS	NOS	4	2738	10952
81	PM OF LT OIL FILLED TRANSFORMERS OF 1250 KVA AND ABOVE UPTO 2 MVA (6.6 KV/0.433KV) ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS	NOS	52	1650	85800
82	PM OF LT OIL FILLED TRANSFORMERS OF 500 KVA (6.6 KV/0.433KV)ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS	NOS	12	1650	19800
83	PM OF OIL FILLED TRANSFORMERS OF1000 KVA (11.5 KV/7KV) ALONGWITH NGR /NGT, HT/LT BREAKERS & PANELS AT BODHAN	NOS	8	1650	13200
84	PM OF ESP FIELD TRANSFORMER (RATING-96.922 KVA, AC I/P VOLT-360V, O/P-49450V)	NOS	48	1088	52224
85	PM OF TRANSFORMER 415V BUSDUCT AND SWITCHGEAR TIE BUSDUCT	NOS	16	1088	17408
86	PM OF 6.6KV C1-U1A AND C2-U2B BUS DUCT	NOS	4	1088	4352
87	PM OF 220KV LINE BAY EQUIPEMENTS INCLUDING CT, PT, ISOLATOR BREAKER, COMPRESSOR AND ITS MOTOR	NOS	12	2738	32856
88	PM OF 220KV TRANSFORMER BAY EQUIPEMENTS INCLUDING CT, PT, ISOLATOR, BREAKER, COMPRESSOR AND ITS MOTOR	NOS	12	2738	32856
89	PM OF 220KV BUS COUPLER BAY EQUIPEMENTS INCLUDING CT, PT, ISOLATOR, BREAKER, COMPRESSOR AND ITS MOTOR	NOS	2	2738	5476
90	PM OF BREAKER COMPRESSOR AND ITS MOTOR	NOS	24	544	13056
91	EARTH PIT PM, EARTH RESISTANCE MEASUREMENT AND WATERING IN EARTH PIT	NOS	200	272	54400
92	PM OF GENERATOR, EXCITER & DIODE WHEEL	NOS	4	3277	13108

93	PM OF GENERATOR ISOLATED PHASE BUS DUCT INCLUDING SPVT CUBICLE-SURGE CAPACITOR/NGT/NGR	NOS	4	3826	15304
94	PM OF AVR	NOS	4	1088	4352
95	PM OF DG set Alternator, NGR & its starter motor	NOS	4	1088	4352
96	PM OF ESP FIELD CONTROL PANEL ALONGWITH FIELD TRANSFORMER TERMINAL BOX AND SUPPLY MODULE	NOS	96	1088	104448
97	PM OF AHU CONTROL PANEL & ITS SUPPLY MODULE	NOS	14	544	7616
98	PM OF ATOMIZING AIR HEATER PANEL AT 3.2 METER & ITS MODULE	NOS	4	544	2176
99	PM OF HTP (HEAT TRACING PANEL) PANEL & ITS SUPPLY MODULE AT FOPH AND 3.2 METER	NOS	8	544	4352
100	PM OF HFO HEATER PANEL & ITS SUPPLY MODULE	NOS	2	544	1088
101	PM OF LDP & ITS SUPPLY MODULE AT FOPH AND DM PLANT	NOS	6	544	3264
102	PM OF OIL CENTRIFUGE PANEL & ITS SUPPLY MODULE	NOS	4	272	1088
103	PM OF TUBE CLEANING SYSTEM PANEL(OLTC) & ITS SUPPLY MODULE	NOS	4	272	1088
104	PM OF WARE HOUSE ACDB & ITS SUPPLY MODULE	NOS	2	1088	2176
105	PM OF 110V ACDB & ITS SUPPLY MODULE	NOS	4	544	2176
106	PM OF 230V ACDB & ITS SUPPLY MODULE	NOS	4	544	2176
107	PM OF 220V DCDB (DC EOP/JOP) & ITS SUPPLY MODULE	NOS	4	544	2176
108	PM OF 220V DCDB (HYDB) & ITS SUPPLY MODULE	NOS	4	544	2176
109	PM OF AUX. CONTROL PANEL FOR ESP & ITS SUPPLY MODULE	NOS	6	2738	16428
110	PM OF VOLTAS ACDB & ITS SUPPLY MODULE FOR UPS	NOS	4	544	2176
111	PM OF DG AMF PANEL & FIRE DIESEL ENGINE CONTROL PANEL	NOS	6	544	3264
112	PM OF DC EOP PANEL	NOS	4	544	2176
113	PM OF DC JOP PANEL	NOS	4	544	2176
114	PM OF 415V UPS BATTERY SET (200 CELLS, 2.2V, 2000AH)	NOS	32	3277	104864
115	PM OF 220V UNIT/STATION BATTERY SET (107 CELLS, 2.2V,1200AH)	NOS	42	2188	91896
116	PM OF 24V BATTERY SET (13 CELLS/SET, 2.2V,2000AH)	NOS	56	1088	60928
117	PM OF 110V UPS BATTERY SET (192 CELLS/SET, 2.2V,250AH)	NOS	56	2177	121912
118	PM OF 220V (110 CELLS, 2.2V,300AH) SWITCHYARD BATTERY SET	NOS	16	1650	26400
119	PM OF 52V(26 CELLS, 2.2V,350AH ,) PLCC BATTERY SET	NOS	12	1088	13056

120	PM OF DG & EBFP BATTERY SET (8 CELL OF 12V EACH PER DG)	NOS	96	1088	104448
121	PM OF HYDRANT PUMP DIESEL ENGINE BATTERY SET (4 CELL OF 12V)	NOS	24	1088	26112
122	PM OF 110V, 200AH BATTERY SET AT BODHAN	NOS	12	1088	13056
123	PM OF 110V FLOAT & BOOOST CHARGER AT BODHAN	NOS	2	544	1088
124	PM OF FLOAT & BOOST CHARGER FOR 220V BATTERY ALONG WITH SUPPLY MODULE	NOS	12	1088	13056
125	PM OF SWITCHYARD PLCC CHARGER FOR 48V BATTERY ALONG WITH SUPPLY MODULE	NOS	2	544	1088
126	PM OF FLOAT & BOOST CHARGER FOR 24V BATTERY ALONG WITH SUPPLY MODULE	NOS	8	1088	8704
127	PM OF 415V UPS PANELS 3X200A THREE CUBICLE PER UPS	NOS	4	2188	8752
128	Daily cleaning of Lift car of Boiler -1, 2 & Service building lift (1 Job considered for all 3 lift)	NOS	100	135	13500
129	Daily checking of exhaust fans at TG FLOOR, charger rooms, battery rooms, MCC rooms, blower rooms (1 job considered for all above fans)	NOS	100	135	13500
131	POLYTHENE SHEET COVERNG OF ALL ELECTRICAL EQUIPMENT/ SEALING OF FOPH HEATER/ROOF EXHAUST FAN PER KG BASIS	kgs	500	135	67500
132	Only external cleaning 150MVA, 220KV/10.5KV GENERATOR TRANSFORMER	NOS	2	2188	4376
133	Only external cleaning 25MVA, 220KV/6.6KV STATION TRANSFORMER	NOS	2	1650	3300
134	Only external cleaning 18MVA, 10.5KV/6.6KV UNIT AUX. TRANSFORMER	NOS	2	1650	3300
135	Only external cleaning 2MVA 6.6KV/415V transformer	NOS	2	544	1088
136	Only cleaning by blower for Float & boost chargers	NOS	56	272	15232
137	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 24V BATTERY SET	NOS	8	1088	8704
138	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 110V UPS BATTERY SET	NOS	8	2165	17320
139	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 415V UPS BATTERY SET	NOS	4	3277	13108

140	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 220V BATTERY SET	NOS	6	1627	9762
141	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 52V PLCC BATTERY SET	NOS	2	1088	2176
142	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG,INSULATOR CLEANING/REPLACEMENT for 110V BATTERY SET AT BODHAN	NOS	2	1088	2176
143	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR 220KV LINE FEEDER & B/C FEEDER	NOS	8	1088	8704
144	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR STATION TRANSFORMER FEEDER	NOS	4	1088	4352
145	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR Generator Relay Panel	NOS	4	1088	4352
146	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR Incomer 1 & 2 , B/C feeders of 415V LT switchgears	NOS	10	1088	10880
147	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR 11/6.6 KV SWGR AT BODHAN	NOS	2	1088	2176
148	ASSISTING IN SERVICING/DEFECT WORK WITH SERVICE ENGINEER i.e. UPS/CHARGER/ACTUATOR/LA CURRENT ANALAYSE/THERMOGRAPHY/ OTHER MISC WORK (ONE TECHNICIAN/DAY)	NOS	50	550	27500
149	ASSISTING IN SERVICING/DEFECT WORK WITH SERVICE ENGINEER i.e. UPS/CHARGER/ACTUATOR/LA CURRENT ANALAYSE/THERMOGRAPHY/ OTHER MISC WORK (ONE HELPER/DAY)	NOS	50	539	26950
150	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR 6.6KV Transformer feeders	NOS	20	1088	21760
151	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR 6.6KV SWGR. I/C & Tie feeders	NOS	10	1088	10880
152	ASSISTING IN RELAY TESTING & PROTECTION SCHEME CHECKING FOR HT/LT MOTOR FEEDER	NOS	20	1088	21760
153	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 125MW, 10.5kv GENERATOR	NOS	4	1088	4352

154	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 150MVA, 220KV/10.5KV GENERATOR TRANSFORMER	NOS	4	1088	4352
155	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 25MVA, 220KV/6.6KV STATION TRANSFORMER	NOS	4	1088	4352
156	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 18MVA, 10.5KV/6.6KV UNIT AUX. TRANSFORMER	NOS	4	1088	4352
157	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 220KV CT / EMVT	NOS	12	544	6528
158	Greasing work in All HT motors of SLPP-1	NOS	6	4354	26124
159	Greasing work in All LT motors of SLPP-1 (wherever greasing provision is their)	NOS	6	4354	26124
160	Only air path cleaning after removing the fan cover in HT motors (other than PM)	NOS	20	1088	21760
161	UP TO 1.2 kw motor bearing replacement including cable removal & re-connection, cleaning shifting etc	NOS	60	544	32640
A1	**Total estimate value for main plant SLP1 PM for two year without escalation**				**3335114**

A2 : Price schedule for Main plant Electrical SLPP-2 PM (Package-A)

Sn	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	PM OF 6.6KV BFP MOTOR- 4000 KW	NOS	12	1650	19800
2	PM OF 6.6KV AIR COMPRESSOR MOTOR- 400 KW	NOS	9	1650	14850
3	PM OF 6.6KV PA FAN MOTOR- 1150 KW	NOS	8	2188	17504
4	PM OF 6.6KV SA FAN MOTOR- 975 KW	NOS	8	2188	17504
5	PM OF LT 415V ID FAN MOTOR -850 KW	NOS	8	1650	13200
6	PM OF 6.6KV FBHE BLOWERS MOTOR-200 KW	NOS	24	1650	39600
7	PM OF 6.6KV SEAL AIR BLOWER MOTOR- 180 KW	NOS	12	1650	19800
8	PM OF 6.6KV ASH COOLER BLOWER MOTOR-180 KW	NOS	12	1650	19800

9	PM OF 6.6KV COOLING WATER PUMP MOTOR - 1900 KW	NOS	9	1650	14850
10	PM OF 6.6KV CEP MOTOR -300KW	NOS	12	1650	19800
11	PM OF 6.6KV RIVER WATER PUMP MOTOR AT PATNA-360 KW	NOS	12	1650	19800
12	PM OF 6.6KV HT BREAKER AND ITS PANEL	NOS	20	825	16500
13	PM OF LT BREAKER AND ITS PANEL	NOS	24	544	13056
14	PM OF LT MOTOR & ITS MODULE UP TO 3.0 KW (63 TO 100 FRAME)	NOS	760	544	413440
15	PM OF LT MOTOR & ITS MODULE 3.1 KW TO 3.7 KW (112 FRAME)	NOS	50	544	27200
16	PM OF LT MOTOR & ITS MODULE 3.8 KW TO 9.3 KW (132 FRAME)	NOS	144	544	78336
17	PM OF LT MOTOR & ITS MODULE 9.4 KW TO 15 KW (160 FRAME)	NOS	53	544	28832
18	PM OF LT MOTOR & ITS MODULE 15.1 KW TO 22 KW (180 FRAME)	NOS	43	544	23392
19	PM OF LT MOTOR & ITS MODULE 22.1 KW TO 30 KW (200 FRAME)	NOS	37	544	20128
20	PM OF LT MOTOR & ITS MODULE 30.1 KW TO 45 KW (225 FRAME)	NOS	38	544	20672
21	PM OF LT MOTOR & ITS MODULE 45.1 KW TO 60 KW (250 FRAME)	NOS	64	544	34816
22	PM OF LT MOTOR & ITS MODULE 60.1 KW TO 90 KW (280 FRAME)	NOS	96	544	52224
23	PM OF LT MOTOR & ITS MODULE 90.1 KW TO 200 KW (315 FRAME)	NOS	68	544	36992
24	PM OF DC MOTORS & ITS SUPPLY MODULE UP OT 15 KW	NOS	8	544	4352
25	DC MOTORS & ITS SUPPLY MODULE15.1KW TO 37KW	NOS	4	1088	4352
26	PM OF ACTUATOR, ITS MOTOR & SUPPLY MODULE < 1 KW	NOS	20	272	5440
27	PM OF ACTUATOR, ITS MOTOR & MODULE >1 <=5 KW	NOS	4	544	2176
28	PM OF ACTUATOR, ITS MOTOR & SUPPLY MODULE > 5 KW	NOS	4	544	2176
29	PM OF HOIST ALONG WITH ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL - UP TO 10 TON	NOS	52	1650	85800
30	PM OF CWPH 30 Tons double girder EOT CRANE, ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL	NOS	2	2188	4376
31	PM 7.5 /5 Tons SINGLE GIRDER UNDER SLUNG CRANE ALONG WITH ITS MOTOR, THRUSTER BREAK COIL & CONTROL PANEL . (DG, AIR COMPRESSOR ,CLARIFY Water room)	NOS	6	1650	9900
32	PM OF CWPH 10 Tons semi-gantry EOT CRANE ALONG WITH ITS MOTOR, THRUSTER BREAK COIL &	NOS	2	2188	4376

	CONTROL PANEL				
33	PM of Air washer room electric hoist 5 T along with its motor, thruster break coil and control panel	NOS	2	1650	3300
34	PM of AC plant room electric hoist 3 T along with its motor, thruster break coil and control panel	NOS	2	1650	3300
35	PM OF 6.6 KV UNIT BOARD SWGR BUS-A (3CA, 4CA) 19 VERTICALS	NOS	4	10357	41428
36	PM OF 6.6 KV UNIT SWGR BUS-B (3CB, 4CB) 19 VERTICALS	NOS	4	10357	41428
37	PM OF 6.6 KV STATION BOARD SWGR.(0CA, 0CB) 12 VERTICALS	NOS	4	6553	26212
38	PM OF 6.6 KV SWGR. AT PATNA 9 VERTICALS	NOS	2	4365	8730
39	PM OF 11 KV SWITCHGEAR 4 VERT AT PATNA P/H	NOS	2	2188	4376
40	PM OF 11KV DOUBLE POLE STRUCTURE AT PATAN P/H	NOS	2	1650	3300
41	CLARIFIED SWITCHGEAR BUS- A - 10 VERT. DOUBLE FRONT, ODB SWITCHGEAR	NOS	3	5465	16395
42	PM OF 415V CLARIFIED SWITCHGEAR BUS- B - 10 VERT. DOUBLE FRONT, ODB SWITCHGEAR	NOS	3	5465	16395
43	PM OF 415V DM PLANT SWITCHGEAR BUS- A -5 VERT. DOUBLE FRONT, OSC SWITCHGEAR	NOS	2	2738	5476
44	PM OF 415V DM PLANT SWITCHGEAR BUS- B -5 VERT. DOUBLE FRONT, OSC SWITCHGEAR	NOS	2	2738	5476
45	PM OF 415V SB MCC BUS-A -4 VERT DOUBLE FRONT	NOS	4	2188	8752
46	PM OF 415V SB MCC BUS-B -4 VERT. DOUBLE FRONT	NOS	4	2188	8752
47	PM OF 415V SSS BUS- A -8 VERT. DOUBLE FRONT, ODA SWGR	NOS	2	4376	8752
48	PM OF 415V SSS BUS- B -9 VERT. DOUBLE FRONT, ODA SWGR	NOS	2	4926	9852
49	PM OF 415V AC & V BUS-A 6 VERT. DOUBL FRONT, OTA SWGR	NOS	2	3277	6554
50	PM OF 415V AC & V BUS-B 7 VERT. DOUBL FRONT, OTA SWGR	NOS	2	3277	6554
51	PM OF 415V UNIT SERVICE SWITCH GEAR BUS-A -14 VERT. DOUBLE FRONT, 3DA/4DA SWITCHGEAR	NOS	4	7641	30564
52	PM OF 415V UNIT SERVICE SWITCH GEAR BUS-B -14 VERT. DOUBLE FRONT, , 3DA/4DA SWITCHGEAR	NOS	4	7641	30564
53	PM OF 415V DG BUS-A 4 VERT. DOUBLE FRONT, 0DG SWGR	NOS	2	2188	4376
54	PM OF 415V DG BUS-B 5 VERT. DOUBLE FRONT, 0DG SWGR	NOS	2	2738	5476
55	PM OF 415V DG SET NO. 3 AUX. PANEL	NOS	2	3277	6554
56	PM OF 415V DG SET NO. 4 AUX. PANEL	NOS	2	3277	6554

57	PM OF 415V CWPH SWITCHGEAR BUS-A 7 VERT. DOUBLE FRONT, 3DC SWITCHGEAR	NOS	2	3826	7652
58	PM OF 415V CWPH SWITCHGEAR BUS-B 8 VERT. DOUBLE FRONT, 3DC SWITCHGEAR	NOS	2	3826	7652
59	PM OF 415V CWPH SWITCHGEAR BUS-C 8 VERT. DOUBLE FRONT, , 3DC SWITCHGEAR	NOS	2	3826	7652
60	PM OF 415V NE SWITCHTGEAR 13 VERT. DOUBLE FRONT, 3DG / 4DG SWITCHGEAR	NOS	4	6003	24012
61	PM OF 415V TVDC BUS-A 9 VERT. DOUBLE FRONT, 3KB/4KB SWITCHGEAR	NOS	4	4926	19704
62	PM OF 415V TVDC BUS-B 11 VERT. DOUBLE FRONT, 3KB/4KB SWITCHGEAR	NOS	4	4354	17416
63	PM OF 415V MISC. BUS-A 5 VERT. DOUBLE FRONT, 3QA/4QA SWITCHGEAR	NOS	4	2738	10952
64	PM OF 415V MISC. BUS-B 5 VERT. DOUBLE FRONT, 3QA/4QA SWITCHGEAR	NOS	4	2738	10952
65	PM OF 415V BVDC BUS-A 5 VERT. DOUBLE FRONT, 3HB/4HB SWITCHGEAR	NOS	4	2738	10952
66	PM OF 415V BVDC BUS-B 6 VERT. DOUBLE FRONT, 3HB/4HB SWITCHGEAR	NOS	4	2738	10952
67	PM OF 415V ESP SWGR.-A 4 VERT. DOUBLE FRONT	NOS	6	2727	16362
68	PM OF 415V ESP SWGR.-B 5 VERT. DOUBLE FRONT	NOS	6	2727	16362
69	PM OF 415V ESP AC & V SWGR.-A 3 VERT. DOUBLE FRONT, OTB SWGR	NOS	6	1650	9900
70	PM OF 415V ESP AC & V SWGR.-B 3 VERT. DOUBLE FRONT, OTB SWGR	NOS	6	1650	9900
71	PM OF 415V 415 UPS ACDB 18 VERT. DOUBLE FRONT, 3DD / 4DD BOARD	NOS	4	6553	26212
72	PM OF 415V LT SWGR. AT PATNA	NOS	2	1650	3300
73	PM OF 220V UNIT DCDB BUS-A 3 VERT. DOUBLE FRONT, 3FA / 4FA BOARD	NOS	4	1627	6508
74	PM OF 220V UNIT DCDB BUS-B 2 VERT. DOUBLE FRONT, 3FA / 4FA BOARD	NOS	4	1627	6508
75	PM OF 220V STATION DCDB BUS-A 2 VERT. DOUBLE FRONT, 0FA BOARD	NOS	2	1627	3254
76	PM OF 220V STATION DCDB BUS-B 3 VERT. DOUBLE FRONT, 0FA BOARD	NOS	2	1627	3254
77	PM OF 150MVA, 230 KV/10.5 KV OIL FILLED GENERATOR TRANSFORMER alongwith Control PANELS	NOS	4	3826	15304
78	PM OF 45MVA, 10.5 KV/6.9KV OIL FILLED UNIT AUX. TRANSFORMER ALONGWITH NGR , HT BREAKERS & PANELS	NOS	4	2738	10952

79	PM OF LT OIL FILLED TRANSFORMERS OF 1250 KVA AND ABOVE UPTO 2.1 MVA (6.6 KV/0.433KV or 0.725KV) ALONGWITH NGR /NGT, HT BREAKERS & PANELS	NOS	52	1650	85800
80	PM OF LT OIL FILLED TRANSFORMERS OF 1600 KVA (6.6 KV/0.433KV) ALONGWITH NGR, HT/LT BREAKERS & PANELS FOR PATNA PUMP HOUSE	NOS	8	1650	13200
81	PM OF LT OIL FILLED TRANSFORMERS OF 500 KVA (6.6 KV/0.415KV) ALONGWITH NGR, HT/LT BREAKERS & PANELS	NOS	4	1650	6600
82	PM OF ESP FIELD TRANSFORMER (96.922 KVA, I/P V-360V)	NOS	48	1650	79200
83	PM OF 6.6KV 3CA-0CA & 4CB-0CB BUS DUCT	NOS	4	1088	4352
84	PM OF 220KV LINE BAY EQUIPEMENTS INCL. CT, PT, ISOLATOR, EHT BREAKER etc	NOS	9	2738	24642
85	PM OF 220KV TRANSFORMER BAY EQUIPEMENTS INCL CT, PT, ISOLATOR, BREAKER,COMPRESSOR & its MOTOR	NOS	6	2738	16428
86	PM OF 220KV BUS COUPLER BAY EQUIPEMENTS INCL CT, PT, ISOLATOR, BREAKER, COMPRESSOR & its MOTOR	NOS	2	2738	5476
87	EARTH PIT PM, EARTH RESISTANCE MEASUREMENT & WATERING IN EARTH PIT	NOS	200	272	54400
88	PM OF GENERATOR, EXCITER & DIODE WHEEL	NOS	4	3277	13108
89	PM OF GENERATOR ISOLATED PHASE BUS DUCT INCLUDING SPVT CUBICLE-SURGE CAPACITOR/NGT/NGR	NOS	4	3826	15304
90	PM OF UAT SEGRTD PHASE BUS DUCT FROM LV1 TO HT SWGR	NOS	4	2715	10860
91	PM OF UAT SEGRTD PHASE BUS DUCT FROM LV2 TO HT SWGR	NOS	4	2715	10860
92	PM OF DIGITAL AVR	NOS	4	1088	4352
93	PM OF DG set Alternator, NGR & its motor	NOS	4	1088	4352
94	PM OF ESP FIELD CONTROL PANEL ALONGWITH FIELD TRANSFORMER TERMINAL BOX AND SUPPLY MODULE	NOS	96	1088	104448
95	PM OF AHU CONTROL PANEL & ITS SUPPLY MODULE	NOS	14	272	3808
96	PM OF HTP (HEAT TRACING PANEL) PANEL & ITS SUPPLY MODULE AT FOPH AND BOILER 6.5 METER AREA	NOS	8	1088	8704
97	PM OF OIL CENTRIFUGE PNL & ITS MODULE	NOS	4	544	2176
98	PM OF TUBE CLEANING SYSTEM PANEL(OLTC) & ITS MODULE	NOS	4	544	2176
99	PM OF AUX. CONTROL PANEL FOR ESP & ITS SUPPLY MODULE	NOS	4	2177	8708
100	PM OF DG AMF PANEL & FIRE DIESEL ENGINE CONTROL PANEL & main & standbay charger	NOS	6	2177	13062
101	PM OF DG MAIN / STANDBY BATTERY CHARGER SET	NOS	8	544	4352

102	PM OF DC EOP STARTER PANEL	NOS	4	544	2176
103	PM OF DC JOP STARTER PANEL	NOS	4	544	2176
104	PM OF 415V UPS BATTERY SET (204 CELLS, 2.2V, 1715AH)	NOS	24	3277	78648
105	PM OF 220V UNIT/STATION BATTERY SET (108 CELLS, 2.2V, 1285AH)	NOS	36	2188	78768
106	PM OF 110V UPS BATTERY SET (170 CELLS, 2.2V, 645AH)	NOS	48	2738	131424
107	PM OF DG CONTROL BATTERY SET (24V TWO SET, 180AH)	NOS	72	544	39168
108	PM OF DG CRANKING BATTERY SET (24V TWO SET, 360AH)	NOS	72	272	19584
109	PM OF EBFP BATTERY SET (24V TWO SET, 180AH)	NOS	72	544	39168
110	PM OF HYDRANT PUMP DIESEL ENGINE BATTERY SET (4 CELL OF 12V)	NOS	22	544	11968
111	PM OF 110V, 165 AH VRLA BATTERY SET AT PATNA	NOS	6	1088	6528
112	PM OF 110V FLOAT & BOOOST CHARGER AT PATNA	NOS	2	544	1088
113	PM of APFC PANEL AT PATNA	NOS	2	544	1088
114	PM of HT CAPACITOR PANEL (04 nos.)	NOS	2	1088	2176
115	PM of FCMA SOFT STARTER PANEL (04 nos.)	NOS	2	1650	3300
116	PM OF FLOAT & BOOST CHARGER FOR 220V BATTERY ALONG WITH SUPPLY MODULE	NOS	12	1088	13056
117	PM OF 415V UPS PANELS 3X200KVA THREE CUBICLE PER UPS	NOS	4	2188	8752
118	PM OF GENERATOR CIRCUIT BREAKER	NOS	4	1088	4352
119	PM OF BUS TRANSFER SYSTEM PANEL	NOS	4	272	1088
120	PM OF DATA CONCENTRATOR SYSTEM PANEL	NOS	4	272	1088
121	PM OF CO2 PANEL	NOS	4	272	1088
122	PM OF ID FAN VFD PANELS	NOS	8	544	4352
123	PM OF ID FAN VFD BREAKER PANELS & BRAKING RESISTOR	NOS	8	1088	8704
124	PM OF RAPCON CONTROLLER PANEL	NOS	4	544	2176
125	PM OF MAIN FIRE ALARM PANEL	NOS	4	544	2176
126	PM OF 415V AC FUSE DB	NOS	4	544	2176
127	PM OF LOCAL PANELS LIKE PANEL FOR LIGNITE GATE VALVE, SPIES VALVE, CHLORINATION SYSTEM PANEL, FIRE HYDRANT PANEL, PTP SYSTEM PANELS, ETP SYSTEM PANELS, Chlorination system heaters ETC.	NOS	30	272	8160
128	PM RELATED TO SCADA Panel, TRANSDUCER Panel, Disturbance Recorder, etc	NOS	6	544	3264
129	Daily cleaning of Lift car of Boiler -3, 4 & Service building lift (1 Job considered for all 3 lift)	NOS	100	135	13500
130	Daily checking of exhaust fans at TG FLOOR, charger rooms, battery rooms, MCC rooms, blower rooms (1 job considered for all above fans)	NOS	100	135	13500

131	POLYTHENE SHEET COVERNG OF ALL ELECTRICAL EQUIPMENT/ SEALING OF FOPH HEATER/ROOF EXHAUST FAN PER KG BASIS	KG	400	135	54000
132	Only external cleaning 150MVA, 220KV/10.5KV GENERATOR TRANSFORMER	NOS	4	2188	8752
133	Only external cleaning 45MVA, 10.5KV/6.6KV UAT	NOS	4	1650	6600
134	Only external cleaning 2 / 2.1 MVA 6.6KV/415V transformer	NOS	4	544	2176
135	Only external cleaning 1.6 MVA 6.6KV/415V transformer	NOS	4	544	2176
136	Only cleaning by blower for Float & boost chargers	NOS	56	272	15232
137	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG for 110V UPS BATTERY SET	NOS	8	1627	13016
138	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG for 415V UPS BATTERY SET	NOS	4	2727	10908
139	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG for 220V BATTERY SET	NOS	6	1627	9762
140	ASSISTANCE DURING BATTERY CAPACITY TEST FOR REMOVAL OF BATTERY LINK, CLEANING, FIXING , TOPPTING UP,VENT PLUG for 110V BATTERY SET AT PATNA	NOS	2	1088	2176
141	ASSISTING IN NUMERICAL TESTING & PROTECTION SCHEME CHECKING FOR 220KV LINE FEEDER & B/C FEEDER AND ITS CONTROL & RELAY PANEL CLEANING	NOS	8	1088	8704
142	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR Generator NUMERICAL NUMERICAL RELAY Panel AND ITS CONTROL & RELAY PANEL CLEANING	NOS	4	1088	4352
143	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR Incomer 1 & 2 , B/C feeders of 415V LT switchgears	NOS	10	1088	10880
144	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR 11/6.6 KV SWGR AT PATNA	NOS	4	1088	4352
145	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR 6.6KV SWGR. I/C & Tie feeders	NOS	10	1088	10880
146	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR 6.6KV Transformer feeders	NOS	20	1088	21760
147	ASSISTING IN NUMERICAL RELAY TESTING & PROTECTION SCHEME CHECKING FOR HT/LT MOTOR FEEDER	NOS	20	1088	21760

148	ASSISTING IN SERVICING/DEFECT WORK WITH SERVICE ENGINEER i.e. UPS/CHARGER/ACTUATOR/LA CURRENT ANALAYSE/THERMOGRAPHY/ OTHER MISC WORK (ONE TECHNICIAN/DAY)	NOS	50	550	27500
149	ASSISTING IN SERVICING/DEFECT WORK WITH SERVICE ENGINEER i.e. UPS/CHARGER/ACTUATOR/LA CURRENT ANALAYSE/THERMOGRAPHY/ OTHER MISC WORK (ONE HELPER/DAY)	NOS	50	550	27500
150	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHING FOR 125MW, 10.5kv GENERATOR	NOS	4	1088	4352
151	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 150MVA, 220KV/10.5KV GENERATOR TRANSFORMER	NOS	4	1088	4352
152	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 45MVA, 10.5KV/6.6KV UNIT AUX. TRANSFORMER	NOS	4	1088	4352
153	ASSISTING IN TAN DELTA & CAPACITANCE, PI MEASUREMENT BY REMOVING & RE-FIXING THE REQUIRED CONNECTIONS /JUMPER, CLEANING BUSHINGS, ETC FOR 220KV CT / EMVT	NOS	40	544	21760
154	Only cleaning of 415V UPS BATTERY SET (204 CELLS, 2.2V, 1715AH)	NOS	24	1088	26112
155	Only cleaning of 220V UNIT/STATION BATTERY SET (108 CELLS, 2.2V, 1285AH)	NOS	36	1088	39168
156	Only cleaning of 110V UPS BATTERY SET (170 CELLS, 2.2V, 645AH)	NOS	48	1088	52224
157	Greasing work in All HT motors of SLPP-2	NOS	6	4354	26124
158	Greasing work in All LT motors of SLPP-2 (wherever greasing provision is their)	NOS	6	4354	26124
159	Only air path cleaning after removing the fan cover in HT motors (other than PM)	NOS	20	1088	21760
160	UP TO 1.2 kw motor bearing replacement including cable removal & re-connection, cleaning shifting etc	NOS	48	544	26112
A2	**Total estimate value for main plant SLP2 PM for two year without escalation**				**3185862**

A3 : Price schedule for Solar plant PM (Package-A)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	PM OF 11 KV HT PANELS 7 VERTICAL (TO BE DONE AFTER 17:30 HOURS)	NOS	2	3070	6140
2	PM OF 66 KV LINE- CONTROL & RELAY PANEL 2 VERTICAL (TO BE DONE AFTER 17:30 HOURS)	NOS	2	666	1332
3	PM OF RTCC PANEL (TO BE DONE AFTER 17:30 HOURS)	NOS	2	438	876
4	PM OF 6.6 MVA, 66/11KV TRANSFORMER CONTROL & RELAY PANEL (TO BE DONE AFTER 17:30 HOURS)	NOS	2	588	1176
5	PM OF 110V BATTERY CHARGER (TO BE DONE AFTER 17:30 HOURS)	NOS	2	438	876
6	PM OF 110 V BATTERY BANK (IN NORMAL HOURS)	NOS	12	584	7008
7	PM OF ACDB (TO BE DONE AFTER 17:30 HOURS)	NOS	2	666	1332
8	PM OF 1000 KVA T/R (TO BE DONE AFTER 17:30 HOURS)	NOS	20	1175	23500
9	PM OF INVERTER PANELS (TO BE DONE AFTER 17:30 HOURS)	NOS	60	881	52860
10	PM OF INVERTER BREAKER PANELS (TO BE DONE AFTER 17:30 HOURS)	NOS	40	584	23360
11	INVERTER FILTER CLEANING ONLY BY BLOWER (IN NORMAL HOURS)	NOS	240	219	52560
12	PM OF 66 KV TRANSFORMER WITH MARSHALLING BOX (TO BE DONE AFTER 17:30 HOURS)	NOS	4	1759	7036
13	PM OF 66 KV LINE BAY WITH BREAKER (TO BE DONE AFTER 17:30 HOURS)	NOS	4	1463	5852
14	SJB POLYTHENE COVERING WORK (IN NORMAL HOURS)	KG	20	72	1440
A3	**Total estimate value forSola plant PM for two year without escalation**				**185348**

A4 : Price schedule for Main plant Electrical SLPP-1& 2 defect attending & Trouble shooting (Package-A)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1.1	CHECKING & ATTENDING GENERAL DEFECT OF LIMITSWITCH/ PUSH BUTTON/POWER SUPPLY FOR BOILER LIFT	NOS	20	272	5440
1.2	CHECKING & ATTENDING GENERAL DEFECT OF LIMITSWITCH/ PUSH BUTTON/POWER SUPPLY FOR SERVICE BUILDING /TG LIFT	NOS	4	272	1088
2A	SUMP PUMP - REMOVAL OF POWER CABLE CONNECTION & RECONECTION WITH STARTER	NOS	30	272	8160
2 B	CHECKING OF SUMP PUMP FOR NOT TAKING START /ATTENDING SAME	NOS	20	272	5440
2 C	CHECKING / CONNECTION /REMOVAL OF 20HP MUD PUMP AT BODHAN / PATANA	NOS	4	544	2176
3A	CHECKING OF LOWER CAPACITY HOIST FOR NOT OPERATING & RECTIFICATION	NOS	40	272	10880
3 B	MOTOR REPLACEMENT OF HOIST	NOS	8	544	4352
3 C	CHECKING OF WARE HOUSE/WORK SHOP/CWPH/TG BUILDING EOT CRANE FOR NOT WORKING & ATTENDING SAME.	NOS	10	544	5440
3 D	THRUSTER MOTOR REPLACEMENT OF 175/40 TON EOT CRANE	NOS	16	544	8704
3 E	BRAKE COIL REPLACEMENT OF 175/30 TON EOT CRANE	NOS	2	544	1088
3 F	CHECKING OF HOIST WITH SAFETY DEPT.	NOS	20	137	2740
3 G	HOIST CONTROL WIRING MODIFICATION WORK	NOS	4	544	2176
3 H	PENDENT REPLACEMENT OF HOIST	NOS	4	272	1088
4A	TRANSDUCER/ **ENERY METER** REMOVAL & REFIXING FOR REPAIR/CALIBRATION	NOS	10	272	2720
4 B	CHECKING/REPLACEMENT OF TRANSDUCER/ INDICATING FOR NOT SHOWING O/P ON DCS/METER	NOS	30	272	8160
5A	POWER,SPACE HEATER AND EARTHING CABLE REMOVAL/RECONNECTION OF HT MOTOR	NOS	4	544	2176
5 B	FAN COVER REMOVAL & FIXING OF HT MOTORS	NOS	60	544	32640
5 C	GREASING OF HT MOTOR BEARINGS PER INCIDENT (OTHER THAN GREASING DURING PM)	NOS	40	136	5440
5 D	CHECKING OF HT MOTOR FOR HIGH VIBRATION	NOS	20	272	5440
5 E	AIR COOLER/COOLING FAN MOUNTING/ FILTER CLEANING OF ID FANS MOTOR	NOS	30	272	8160
5 F	SPARE HT MOTOR SPACE HEATER CURRENT MEASUREMENT AT WORKSHOP / ware house	NOS	20	109	2180

5 G	SPACE HEATER CABLE CONNECTION OF HT/LT MOTORS AT WORKSHOP / ware house	NOS	20	136	2720
5 H	CHECKING OF HT MOTOR FOR TRIPPING / NOT TAKING START/ UNBALANCE CURRENT -SHALL INCLUDE MEGGER/WR MEASUREMENT ALSO	NOS	24	544	13056
6	CHECKING OF 6.6 KV BREAKER FOR NOT CLOSING/TRIPPING/WORKING/ATTENDING SAME	NOS	50	272	13600
7	CHECKING OF ESP FIELD FOR POWER SUPPLY NOT COMING, TRIPPING, OCC, BDV CONTROLLER NOT WORKING, NEW CONTROLER CHECKING & ATTENDING SAME	NOS	60	272	16320
8A	SILICA GEL REPLACEMENT AT GT BUSDUCT UAT/ST/GT (OTHER THAN PM)	NOS	30	136	4080
8 B	LT TRANSFORMERS/ESP FIELD TRANSFORMER SILICAGEL REPLACEMENT (OTHER THAN PM)	NOS	20	203	4060
8 C	OIL TOPPING IN CONSERVATOR TANK OF X'MER	NOS	30	136	4080
8 D	OIL LEAKAGE ATTENDING - GT ,ST , UAT	NOS	6	544	3264
8 E	OIL LEAKAGE ATTENDING UST,ST,SST,ESP FIELD X'MERS	NOS	12	272	3264
8 F	OIL SAMPLE TAKING OF TRANSFORMER PER INCIDENT	NOS	70	272	19040
9.1 A	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR OF FRACTIONAL KW	NOS	100	272	27200
9.1 B	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >1KW & <=7.5KW	NOS	30	272	8160
9.1 C	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >7.5 KW & <=15KW	NOS	14	544	7616
9.1 D	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >15KW & <=30KW	NOS	2	544	1088
9..1 E	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >30KW & < =75KW	NOS	10	825	8250
9.1 F	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >75 KW & <= 125 KW	NOS	2	1650	3300
9.1 G	BOTH SIDE (DE & NDE) BEARING REPLACEMENT FOR MOTOR >125 KW & <=175	NOS	2	1650	3300
9.2	CHECKING OF ABNORMAL SOUND FROM PUMP /LOAD/MOTOR & GREASING IN DE & NDE BOTH SIDE FOR MOTORS	NOS	40	272	10880
9.3	IR, WR CHECKING OF SPARE/ REPAIRED MOTOR RECEIVED AFTER REPAIR AT WORKSHOP	NOS	30	272	8160
9.4 A	MAKING SPARE MODULE READY FOR MOTOR OF UP TO 50KW, 125A	NOS	12	272	3264
9.4 B	MAKING SPARE MODULE READY FOR MOTOR >50KW & <= 125 KW, 400A	NOS	6	544	3264
9.5 A	CHECKING OF LT MOTOR FOR TRIPPING ON BMR/ POWER FUSE BLOWN/ NOT TAKING START/ UNBALANCE CURRENT -SHALL INCLUDE MEGGER/WR MEASUREMENT ALSO FOR MOTOR UP TO 15 KW	NOS	300	136	40800
9.5 B	CHECKING OF LT MOTOR FOR TRIPPING ON BMR/ POWER FUSE BLOWN/ NOT TAKING START/ UNBALANCE CURRENT -SHALL INCLUDE	NOS	40	272	10880

	MEGGER/WR MEASUREMENT ALSO FOR MOTOR >15KW & <=75KW				
9.5 C	CHECKING OF LT MOTOR FOR TRIPPING ON BMR/ POWER FUSE BLOWN/ NOT TAKING START/ UNBALANCE CURRENT -SHALL INCLUDE MEGGER/WR MEASUREMENT ALSO FOR MOTOR >75 KW & <=175	NOS	20	544	10880
9.6	NO LOAD TRIAL OF LT MOTORS- DOR/CURRENT/VIBRATION MEASUREMENTS FOR MOTORS	NOS	50	218	10900
9.7 A	POWER CABLE, EARTHING CABLE REMOVAL AND RECONNECTION FOR MOTOR OF FRACTIONAL KW	NOS	40	136	5440
9.7 B	POWER CABLE, EARTHING CABLE REMOVAL AND RECONNECTION FOR MOTOR >1KW & <=7.5KW	NOS	20	218	4360
9.7 C	POWER CABLE, EARTHING CABLE REMOVAL AND RECONNECTION FOR MOTOR >7.5 KW & <=30KW	NOS	20	272	5440
9.7 D	POWER CABLE, EARTHING CABLE REMOVAL AND RECONNECTION FOR MOTOR >30KW & <=75KW	NOS	20	435	8700
9.7 E	POWER CABLE, EARTHING CABLE REMOVAL AND RECONNECTION FOR MOTOR >75 KW & <= 175 KW	NOS	10	544	5440
9.8 A	NEW COOLING FAN REPLACEMENT FOR MOTOR OF FRACTIONAL KW	NOS	10	135	1350
9.8 B	NEW COOLING FAN REPLACEMENT FOR MOTOR >1KW & <=7.5KW	NOS	8	218	1744
9.8 C	NEW COOLING FAN REPLACEMENT FOR MOTOR >7.5 KW & <=30KW	NOS	6	272	1632
9.8 D	NEW COOLING FAN REPLACEMENT FOR >30KW & <=75KW	NOS	4	327	1308
9.8 E	NEW COOLING FAN REPLACEMENT FOR MOTOR >75 KW & <= 175 KW	NOS	4	544	2176
9.9 A	FOR INSPECTION -DISMANTALING /ASSEMBLEY OF MOTOR OF FRACTIONAL KW	NOS	8	137	1096
9.9 B	FOR INSPECTION -DISMANTALING /ASSEMBLEY OF MOTOR >1KW & <=7.5KW	NOS	6	272	1632
9.9 C	FOR INSPECTION -DISMANTALING /ASSEMBLEY OF MOTOR >7.5 KW & <=30KW	NOS	4	544	2176
9.9 D	FOR INSPECTION -DISMANTALING /ASSEMBLEY OF MOTOR >30KW & <=75KW	NOS	2	825	1650
9.9 E	FOR INSPECTION -DISMANTALING /ASSEMBLEY OF MOTOR >75KW & < =175KW	NOS	2	1094	2188
9.10 A	REMOVAL/REPLACEMENT/REFIXING,SHIFTING FROM LOCATION TO WORKSHOP OR CONTAINER, & FROM WORKSHOP TO MOTOR LOCATION FOR MOTOR OF FRACTIONAL KW	NOS	60	136	8160
9.10B	REMOVAL/REPLACEMENT/REFIXING,SHIFTING FROM LOCATION TO WORKSHOP OR CONTAINER, & FROM WORKSHOP TO MOTOR LOCATION FOR MOTOR >1KW & <=7.5KW	NOS	40	272	10880
9.10C	REMOVAL/REPLACEMENT/REFIXING,SHIFTING FROM LOCATION TO WORKSHOP OR CONTAINER, & FROM WORKSHOP TO MOTOR LOCATION FOR MOTOR >7.5 KW & <=30KW	NOS	40	544	21760

9.10D	REMOVAL/REPLACEMENT/REFIXING,SHIFTING FROM LOCATION TO WORKSHOP OR CONTAINER, & FROM WORKSHOP TO MOTOR LOCATION FOR MOTOR >30KW & <=75KW	NOS	8	544	4352
9.10E	REMOVAL/REPLACEMENT/REFIXING,SHIFTING FROM LOCATION TO WORKSHOP OR CONTAINER, & FROM WORKSHOP TO MOTOR LOCATION FOR MOTOR >75KW & < =175KW	NOS	16	825	13200
9.11A	LOADING AND UNLOADING AT WORKSHOP OF MOTOR OF FRACTIONAL KW	NOS	30	109	3270
9.11B	LOADING AND UNLOADING AT WORKSHOP OF MOTOR >1KW & <=7.5KW	NOS	6	120	720
9.11C	LOADING AND UNLOADING AT WORKSHOP OF MOTOR >7.5KW & <=30KW	NOS	2	136	272
9.11D	LOADING AND UNLOADING AT WORKSHOP OF MOTOR >30KW & <=75KW	NOS	2	218	436
9.11E	LOADING AND UNLOADING AT WORKSHOP OF MOTOR >75KW & < =175KW	NOS	2	272	544
9.12A	REPLACEMENT OF FAN COVER FOR MOTOR OF FRACTIONAL KW	NOS	8	69	552
9.12B	REPLACEMENT OF FAN COVER FOR MOTOR >1KW & <=7.5KW	NOS	4	136	544
9.12C	REPLACEMENT OF FAN COVER FOR MOTOR >7.5 KW & <=30KW	NOS	6	218	1308
9.12D	REPLACEMENT OF FAN COVER FOR MOTOR >30KW & <=75KW	NOS	2	272	544
9.12E	REPLACEMENT OF FAN COVER FOR MOTOR >75KW & < =175KW	NOS	2	272	544
10	CHECKING OF LT MOTOR FOR TRIPPING ON BMR/ POWER FUSE BLOWN/ NOT TAKING START/ UNBALANCE CURRENT /FEEDBACK PROBLEM/TAKING HIGH CURRENT/PUSHBUTTON PROBLEM	NOS	720	544	391680
11	INDICATION LAMP REPLACEMENT IN ANY FEEDER / EQUIPMENT (OTHER THAN PM)	NOS	240	272	65280
12.1	CONTACTOR REMOVAL /REPLACEMENT (OTHER THAN PM) UP TO 32 AMP	NOS	16	272	4352
12.2	CONTACTOR REMOVAL /REPLACEMENT (OTHER THAN PM) > 32 AMP <=100 AMP	NOS	12	435	5220
12.3	CONTACTOR REMOVAL /REPLACEMENT (OTHER THAN PM) >100 <=400 AMP	NOS	8	544	4352
13	CABLE SHIFTING FROM STORE TO LOCATION AND LAYING (KG BASIS)	Kg	18000	33	594000
14	REMOVING AND REFIXING OF CARBON BRUSH AFTER CLEANING IN GENERATOR EXCITER	NOS	12	544	6528
16	MK PANEL/RELAY PANEL CLEANING/TIGHTNESS	NOS	2	544	1088
17	PUSH BUTTON REPLACEMENT FOR ANY EQUIPMENT	NOS	70	272	19040
18	VARIAC REMOVAL,CHECKING AND SHIFTING FROM WAREHOUSE AND REMOUNTING OF STATION CHARGER	NOS	2	544	1088
19	FUSE BASE REPLACEMENT	NOS	6	272	1632
20.1A	GLANDING OF CONTROL CABLE OF UP TO 5C	NOS	30	136	4080

20.1B	GLANDING OF CONTROL CABLE OF 7C, 10C, 14C	NOS	24	272	6528
20.2A	GLANDING OF ARMOURED POWER CABLE UP TO 6 SQ MM	NOS	40	136	5440
20.2B	GLANDING OF ARMOURED POWER CABLE OF 10 TO 35 SQMM	NOS	20	272	5440
20.2C	GLANDING OF ARMOURED POWER CABLE OF 50 TO 120 SQ MM	NOS	80	272	21760
20.2D	GLANDING OF ARMOURED POWER CABLE OF 150 TO 240 SQ MM	NOS	60	272	16320
20.2E	GLANDING OF ARMOURED POWER CABLE OF 300 TO 400 SQ MM	NOS	8	544	4352
20.2F	GLANDING OF ARMOURED POWER CABLE OF, 500 TO 1000 SQ MM	NOS	2	544	1088
21.1A	TERMINATION OF CONTROL CABLES OF UP TO 5C	NOS	30	272	8160
21.1B	TERMINATION OF CONTROL CABLES OF 7C, 10C, 14C	NOS	24	544	13056
21.2A	TERMINATION OF POWER 3C OR 4C CABLES UP TO 6 SQ MM	NOS	40	272	10880
21.2B	TERMINATION OF POWER 3C OR 4C CABLES OF 10 SQ MM, 35 SQMM	NOS	20	272	5440
21.2C	TERMINATION OF POWER 3C OR 4C CABLES OF 50 TO 120 SQ MM	NOS	80	272	21760
21.2D	TERMINATION OF POWER 3C OR 4C CABLES OF 150 TO 240 SQ MM	NOS	60	272	16320
21.2E	TERMINATION OF POWER 3C OR 4C CABLES OF 300 TO 400 SQ MM	NOS	8	544	4352
21.2F	TERMINATION OF POWER 1C CABLES OF 500 TO 1000 SQ MM	NOS	2	825	1650
22.1	UP TO 350 AH BATTERY CELL CONTAINER REPLACEMENT	NOS	8	544	4352
22.2	UP TO 350 AH AH BATTERY CELL REPLACEMENT (SHIFTING FROM WARE HOUSE TO LOCATION , REPLACEMENT, SCRAP CELL RETURN)	NOS	10	544	5440
22.3	FROM 350 AH TO 2000 AH BATTERY CELL REPLACEMENT (SHIFTING FROM WARE HOUSE TO LOCATION , REPLACEMENT, SCRAP CELL RETURN)	NOS	10	1650	16500
22.4	EARTH FAULT FINDING IN 220 V DC AND 415 AC CIRCUIT	NOS	8	544	4352
22.5	DM WATER TOPPING IN BATTERY SET PER CELL (OTHER THAN PM)	NOS	120	136	16320
22.6	ATTENDING OF BATTERY CELL LEAKAGE PER INCIDENT	NOS	30	272	8160
22.7	BLACK PAINT APPLICATION TO BOTTOM STAND OF BATTERY	NOS	4	544	2176
23.1	MECHANICAL ALIGNMENT OF 220 KV ISOLATORS / EARTH SWITH NOT REALEASE	NOS	48	272	13056
23.2A	CHECKING OF 220 KV BREAKER / ISOLATORS FOR NOT CLOSING / OPENING	NOS	20	272	5440
23.3	CHECKING OF 220KV BREAKER COMPRESSOR FOR NOT STARTING	NOS	8	544	4352
23.4	LA COUNTER REPLACEMENT	NOS	12	544	6528
23.5	HOT SPOT/TIGHTNESS ATTENDING AT GT-1 & GT-2, ZL-2, BUSCOUPLER BAY,GV-1 & OTHER LINE AT	NOS	80	544	43520

	HIEGHT 6 MTR				
23.6	Oil leakage arresting from 220KV CT / CVT /EMVT	NOS	2	544	1088
24	CHECKING OF ACTUATOR FOR NOT WORKING/ CONTROL FUSE BLOWN /RUN TIME FAULT/ LIMIT & TORQUE SWITCH SETTING/FEEDBACK PROBLEM.	NOS	1200	272	326400
25A	MAIN FUEL TRIP(MFT) ONLY ACTUATOR REMOVAL & REFIXING	NOS	10	435	4350
25B	MAIN FUEL TRIP(MFT) ACTUATOR AND STEM NUT REMOVAL & REFIXING ATER ATTENDING STEM NUT ASSEMBLY PROBLEM	NOS	24	544	13056
26	SPIESS VALVE ACTUATOR REMOVAL & RE-FIXING & LIMIT SWITCH SETING	NOS	80	544	43520
27	CHECKING & REPLACEMENT OF PULL ROD ASSEMBLY/ CLUTCH RING/CLUTCH FORK ASSMBLY/	NOS	50	544	27200
28.1	REMOVAL AND REFIXING OF ACTUATOR< 5 KW RATING INCLUDING LIMIT/TORQUE SWITCH SETTING AND TRAIL FROM CONTROL ROOM	NOS	160	412	65920
28.2	REMOVAL AND REFIXING OF ACTUATOR > 5 KW RATING INCLUDING LIMIT/TORQUE SWITCH SETTING AND TRAIL FROM CONTROL ROOM	NOS	20	685	13700
29	CHECKING FOR POWER CABLE BURNT	NOS	22	272	5984
30	175 , 40 AND 10 TON EOT CRANE CAPACITY TEST-CURRENT MEASUREMENT	NOS	4	272	1088
31	GREASING PIPE THREADING AT WORKSHOP	NOS	4	272	1088
32	GREASING PIPE FIXING ON HT/LT MOTORS	NOS	10	544	5440
33	CHECKING OF LT BREAKER FOR NOT OPERATING IN TEST AND SERVICE POSITION	NOS	24	544	13056
34	CHECKING OF M/C AT WORKSHOP FOR NOT WORKING/ATTENDING SAME	NOS	6	272	1632
35a	REPLACEMENT OF DEFECTIVE DRAW OUT TYPE RELAYS	NOS	60	272	16320
35b	REPLACEMENT OF DEFECTIVE RELAYS WHICH REQUIRED REMOVING & RE-FIXING OF WIRES	NOS	40	272	10880
36	CHECKING OF PANEL SPACE HEATER OF LT PANELS	NOS	6	544	3264
37	CABLE CONNECTION & REMOVAL FOR MISCALLNEOUS WORKS	NOS	8	544	4352
38	WELDING M/C POWER CONNECTION & REMOVAL	NOS	20	272	5440
39	CABLE CONNECTION & REMOVAL FOR CONDENSER CLEANING SYSTEM MACHINE & BOILER	NOS	16	272	4352
40	Generator transformer cooling fan removal & re-instalation /replacement	NOS	12	1088	13056
41	PAINTING OF ACTUATOR	NOS	16	544	8704
42	PAINTING OF LT MOTOR	NOS	2	544	1088
43	PAINTING OF HT MOTOR	NOS	2	544	1088
44	PAINTING OF TRANSFORMER	NOS	2	544	1088
45	PAINTING OF LT PANEL/DISTRIBUTION BOARD	NOS	2	544	1088
46	ERECTION OF STEEL FOR PANEL/DB/JB ETC MOUNTING	KG	100	136	13600
47	ERECTION OF DB/JB/PANELS	kg	2000	33	66000

48	VARIOUS SELECTOR SWITCH REPLACMENT (OTHER THAN PM)	NOS	40	272	10880
49.1A	REMOVAL AND RE-TERMINATION OF CONTROL CABLES (OTHER THAN AT 9.7) 2C,3C, 4C	NOS	100	272	27200
49.1B	REMOVAL AND RE-TERMINATION OF CONTROL CABLES (OTHER THAN AT 9.7) 7C, 10C	NOS	15	272	4080
49.1C	REMOVAL AND RE-TERMINATION OF CONTROL CABLES (OTHER THAN AT 9.7) 14 C	NOS	12	544	6528
49.2A	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) UP TO 6 SQ MM	NOS	6	272	1632
49.2B	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 10 SQ MM, 16 SQMM	NOS	14	272	3808
49.2C	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 25 SQ MM, 35 SQ MM, 50 SQ MM	NOS	40	272	10880
49.2D	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 70 SQ MM, 120 SQ MM	NOS	4	272	1088
49.2D	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 150 SQ MM, 185 SQ MM	NOS	4	272	1088
49.2E	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 240 SQ MM, 300 SQ MM	NOS	4	544	2176
49.2F	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 400 SQ MM, 500 SQ MM	NOS	2	544	1088
49.2G	REMOVAL AND RE-TERMINATION OF ARMOURED POWER CABLES (OTHER THAN AT 9.7) 1000 SQ MM	NOS	2	544	1088
50	Sliding contact checking & adjustment for modules for non operation of motors /feeders/feedback etc. (other than PM)	NOS	80	272	21760
51	Panel Cooling fans checking & replacement	NOS	40	272	10880
52	LT Bus/line PT checking & replacement	NOS	4	544	2176
53	Providing assistance for balancing of HT/LT motors	NOS	10	544	5440
54	Wiring modification in modules / panels	NOS	10	544	5440
55	Vertical Bus bas replacemnet in LT panels (all three phase)	nos	40	1094	43760
56	arrenging filled oxygen and acytelene gas cylinders for battery overhauling job	nos	40	1000	40000
A4	**Total estimate value for main plant defect for two year without escalation**				**2726448**

A5 : Price schedule for Solar plant defect & trouble shooting(Package-A)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	DEFECT CHECKING IN SOLAR PLANT ARRARY. (in Normal day hrs)	NOS	10	146	1460
2	12A BOTTEL FUSE CHECKING & REPLACMENT IN ARRARY SJB. (after 17:30 hrs)	NOS	20	72	1440
3	1C X 6SQ MM CU FLXIBLE CABLE LAYING,JOINTING & LUGGING.(WITHOUT EXCAVATION)	Mtr	200	36	7200
4	1C X 70SQ MM CU FLXIBLE CABLE LAYING,JOINTING & LUGGING. (WITHOUT EXCAVATION)(in Normal day hrs)	Mtr	100	72	7200
5	PV CELL MALE -FEMALE CONNECTOR REPALCEMENT WORK. (after 17:30 hrs)	NOS	14	111	1554
6	INVERTER FAN 3-PH SUPPLY PROVIDING WORK. (in Normal day hrs)	NOS	24	72	1728
7	INVERTER CARD REPLACEMENT WORK.(after 17:30)	NOS	20	146	2920
8	400A DC FUSE REPLACEMENT WORK. (in Normal day hrs)	NOS	4	146	584
9	INVERTER POWER & CONTROL CONTECTOR REPLACEMENT WORK (after 17:30 hrs)	NOS	4	146	584
10	SFU HANDEL REPLACEMENT WORK. (after 17:30 hrs)	NOS	4	146	584
11	SFU HANDLE WITH IT'S ROD REPLACEMENT WORK. (after 17:30 hrs)	NOS	4	146	584
12	11KV JYOTI MAKE VCB CONTROL WIRING DEFECT CHECKING WORK. (after 17:30 hrs)	NOS	4	300	1200
13	110AH BATTERY BANK WATER TOP-UP WORK, OTHER THAN PM (in Normal day hrs)	NOS	4	288	1152
14	11KV LINE & X'MER PNL CONTROL WIRING CHECKING WORK. (after 17:30 hrs)	NOS	4	150	600
15	SWITCHYARD BRK PNL & ISOLATOR PNL CONTROL WIRING CHECKING WORK. (after 17:30 hrs)	NOS	4	150	600
16	OIL TOP-UP & SILICE GEL REPLACEMENT WORK OF 1KVA X'MER OTHER THAN PM (in Normal day hrs)	NOS	4	292	1168
17	OIL TOP-UP & SILICE GEL REPLACEMENT WORK OF 6KVA X'MER OTHER THAN PM (in Normal day hrs)	NOS	4	292	1168

18	ABB LT BRK CONTROL WIRING CHECKING & DEFECT RECTIFICATION WORK. (after 17:30 hrs)	NOS	4	292	1168
19	PV CELL REPLACEMENT WORK. (after 17:30 hrs)	NOS	10	292	2920
20	95 SQMM HT CABLE REMOVAL & RE-TERMINATION WORK AT PNL& X'MER SIDE. (after 17:30 hrs)	NOS	2	444	888
21	SWITCHYARD ISOALTOR ALIGMENT WORK. (after 17:30 hrs)	NOS	4	292	1168
22	CABLE EARTH FAULT CHECKING WORK. (after 17:30 hrs)	NOS	4	292	1168
A5	**Total estimate value for Solar plant defect for two year without escalation**				**39038**

A6 : Price schedule for UNFORSEEN JOBS (Package-A)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	Supervisor (BE) - Normal 8 hour duty	day	2	500	1000
2	Sr Technician (DEE) - Normal 8 hour duty	day	80	391	31280
3	Jr Technician (ITI)- Normal 8 hour duty	day	80	381	30480
4	Helper /Wireman - Normal 8 hour duty	day	200	370	74000
5	Sr Technician (DEE) - OT per hour after normal 8 hrs duty	Hrs	100	76	7600
6	Jr Technician (ITI) - OT per hour after normal 8 hrs duty	Hrs	100	74	7400
7	Helper/Wireman - OT per hour after normal 8 hrs duty	Hrs	240	72	17280
A6	**Total estimate value for main plant unforseen for two year without escalation**				**169040**

B1. PRICE SCHEDULE FOR PREVENTIVE MAINTENANCE PACKAGE-B (LIGNITE,LIMESTONE & ASH HANDLING SYSTEMS AND EXTERNAL LIGNITE HANDLING SYSTEM AT MANGROL MINES END)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	P.M. OF CONVEYOR MOTOR 200 KW(6.6 KV)	NO	40	1359	54360
2	P.M. OF MILL ID FAN MOTOR 200 KW(6.6 KV)	NO	18	1359	24462
3	P.M. OF CRUSHER MOTOR 250 KW(6.6 KV)	NO	22	1359	29898
4	P.M. OF CONVEYOR MOTOR 300 KW(6.6 KV)	NO	12	1359	16308
5	P.M. OF MILL-D I.D. FAN MOTOR 300 KW(6.6 KV)	NO	6	1359	8154
6	P.M. OF TRANSPORT AIR COMPRESSOR MOTOR 310KW(6.6 KV)	NO	24	1585	38040
7	P.M. OF CONVEYOR MOTOR 410KW(6.6 KV)	NO	6	1585	9510
8	P.M. OF CRUSHER MOTOR 410 KW(6.6 KV)	NO	22	1585	34870
9	P.M. OF BALL MILL MOTOR 440 KW(6.6 KV)	NO	18	1585	28530
10	P.M. OF CONVEYOR MOTOR 450KW(6.6 KV)	NO	6	1585	9510
11	P.M. OF MILL-D BALL MILL MOTOR 600 K.W.(6.6 KV)	NO	6	1812	10872
12	P.M. OF NEW SECONDARY CRUSHER MOTOR 650 K.W.(6.6 KV)	NO	12	1812	21744
13	P.M. OF CONVEYOR MOTOR 680 KW(6.6 KV)	NO	6	1812	10872
14	TRANSPORT AIR COMPRESSOR MOTOR 400KW	NO	6	1208	7248
15	CLEANING OF HT MOTOR (6.6 KV)	NO	12	299	3588
16	P.M. OF LT MOTORS UP TO 3.0 KW (63 TO 100 FRAME)	NO	1260	181	228060
17	P.M. OF LT MOTORS 3.1 KW TO 3.7 KW (112 FRAME)	NO	200	181	36200
18	P.M. OF LT MOTORS 3.8 KW TO 9.3 KW (132 FRAME)	NO	350	302	105700
19	P.M. OF LT MOTORS 9.4 KW TO 15 KW (160 FRAME)	NO	168	302	50736
20	P.M. OF LT MOTORS 15.1 KW TO 22 KW (180 FRAME)	NO	200	302	60400
21	P.M. OF LT MOTORS 22.1 KW TO 30 KW (200 FRAME)	NO	80	302	24160
22	P.M. OF LT MOTORS 30.1 KW TO 45 KW (225 FRAME)	NO	20	305	6100
23	P.M. OF LT MOTORS 45.1 KW TO 60 KW (250 FRAME)	NO	74	305	22570
24	P.M. OF LT MOTORS 60.1 KW TO 90 KW (280	NO	130	610	79300

	FRAME)				
25	P.M. OF LT MOTORS 90.1 KW TO 200 KW (315 FRAME)	NO	190	610	115900
26	P.M. OF VIBRATING FEEDER MOTOR RATING 1.4 HP/2.27 HP	NO	36	181	6516
27	P.M. OF MOTORIZED ACTUATORS < 1 KW	NO	180	181	32580
28	P.M. OF MOTORIZED ACTUATORS >1 <=5 KW	NO	10	181	1810
29	P.M. OF 5.5 KW DC MOTORS	NO	18	302	5436
30	P.M. OF 9 KW DC MOTORS	NO	36	302	10872
31	P.M. OF 6.3 NM STALL TORQUE MOTOR	NO	18	183	3294
32	P.M. OF THRUSTER BRAKE MOTORS 0.18 to 2KW, 415V	NO	400	181	72400
33	P.M. OF HOIST MOTOR (UP & DOWN)	NO	80	305	24400
34	P.M. OF HOIST TRAVEL MOTOR(LEFT & RIGHT)	NO	80	305	24400
35	P.M. OF LT MODULES UP TO 10 KW	NO	919	305	280295
36	P.M. OF LT MODULES 10.1 - 37 KW	NO	500	305	152500
37	P.M. OF LT MODULES 37.1 - 125 KW	NO	170	305	51850
38	P.M. OF LT MODULES ABOVE 125 KW	NO	124	610	75640
39	P.M. OF SWITCH FUSE UNIT UP TO 32 A	NO	350	181	63350
40	P.M. OF SWITCH FUSE UNIT > 32 A UP TO 125A	NO	180	181	32580
41	P.M. OF SWITCH FUSE UNIT > 125 A UP TO 630 A	NO	140	181	25340
42	P.M. OF BREAKER PANEL FOR 2X132 KW MOTOR WITH CONTROL & SOFT STARTER PANEL	NO	6	610	3660
43	P.M. OF MODULE WITH LT BREAKER PANEL	NO	24	610	14640
44	P.M. OF HT PANEL JYOTI MAKE VACUUM CIRCUIT BREAKERS/VACUUM CONTACTOR	NO	260	457	118820
45	P.M. OF HT PANEL BHEL MAKE VACUUM CIRCUIT BREAKERS.	NO	60	457	27420
46	P.M. OF HT PANEL ABB MAKE VACUUM CIRCUIT BREAKERS/VACUUM CONTACTOR	NO	60	457	27420
47	P.M. OF HT BUS-A 19 VERTICALS IN LIG. HANDLING SWGR. (JYOTI MAKE)	NO	3	10493	31479
48	P.M. OF HT BUS-B 18 VERTICALS IN LIG. HANDLING SWGR (JYOTI MAKE)	NO	3	10493	31479
49	P.M. OF HT BUS-A 11 VERTICALS IN LIG. MINING SWGR (JYOTI MAKE)	NO	3	5214	15642
50	P.M. OF HT BUS-B 10 VERTICALS IN LIG. MINING SWGR(JYOTI MAKE)	NO	3	5214	15642
51	P.M. OF HT PANEL-1 VERTICAL WITH BREAKER AT STACKER MACHINE/BUCKET WHEEL RECLAIMER (1 EACH AT 4 MACHINES)(JYOTI MAKE)	NO	16	610	9760
52	P.M. OF HT PANEL OF LOAD BREAK SWITCH-1 VERTICAL	NO	12	610	7320
53	P.M. OF HT PANEL-1 VERTICAL WITH BREAKER AT FEEDER BREAKER - KIRLOSKAR MAKE	NO	4	610	2440

54	P.M. OF HT BUS-A 7 VERTICALS IN ASH HANDLING SWGR.(JYOTI MAKE)	NO	3	5187	15561
55	P.M. OF HT BUS-B 8 VERTICALS IN ASH HANDLING SWGR(JYOTI MAKE)	NO	3	5187	15561
56	P.M. OF HT BUS-A 5 VERTICALS IN ASH WATER RECOVERY SWGR(JYOTI MAKE)	NO	3	3623	10869
57	P.M. OF HT BUS-B 4 VERTICALS IN ASH WATER RECOVERY SWGR(JYOTI MAKE)	NO	3	3623	10869
58	P.M. OF HT BUS-A 7 VERTICALS IN PLANT END ELHS SWGR(ABB MAKE)	NO	3	4820	14460
59	P.M. OF HT BUS-B 6 VERTICALS IN PLANT END ELHS SWGR(ABB MAKE)	NO	3	4820	14460
60	P.M. OF HT BUS-A 11 VERTICALS IN LIGNITE OCC SWGR (ABB/BHEL MAKE)	NO	3	4990	14970
61	P.M. OF HT BUS-B 11 VERTICALS IN LIGNITE OCC SWGR (ABB/BHEL MAKE)	NO	3	4990	14970
62	P.M. OF HT BUS-A 10 VERTICALS IN MINES END ELHS SWGR(ABB MAKE)	NO	2	4990	9980
63	P.M. OF HT BUS-B 9 VERTICALS IN MINES END ELHS SWGR(ABB MAKE)	NO	2	4990	9980
64	P.M. OF LT BUS SECTION LLH MCC A -25 VERT. DOUBLE FRONT(SIEMENS)	NO	3	11229	33687
65	P.M. OF LT BUS SECTION LLH MCC B- 24 VERT. DOUBLE FRONT(SIEMENS)	NO	3	11229	33687
66	P.M. OF LT BUS SECTION OLD PCH MCC A - 9 VERT. DOUBLE FRONT(SIEMENS)	NO	3	4977	14931
67	P.M. OF LT BUS SECTION OLD PCH MCC B - 8 VERT. DOUBLE FRONT(SIEMENS)	NO	3	4977	14931
68	P.M. OF LT BUS SECTION OLD BUNKER MCC A -7 VERT. DOUBLE FRONT(SIEMENS)	NO	3	4375	13125
69	P.M. OF LT BUS SECTION OLD BUNKER MCC B -6 VERT. DOUBLE FRONT(SIEMENS)	NO	3	4375	13125
70	P.M. OF LT BUS SECTION MINING MCC A -4 VERT. DOUBLE FRONT(SIEMENS)	NO	3	3031	9093
71	P.M. OF LT BUS SECTION MINING MCC B -3 VERT. DOUBLE FRONT(SIEMENS)	NO	3	3031	9093
72	P.M. OF LT BUS SECTION STACKER MCC-7 VERT. SINGLE FRONT FIXED TYPE(C&S / SIEMENS)	NO	16	3623	57968
73	P.M. OF FEEDER BREAKER MCC-8 VERT. SINGLE FRONT FIXED TYPE(L&T)	NO	4	2427	9708
74	P.M. OF LT BUS SECTION MCC-5 VERTICAL SINGLE FRONT FIXED TYPE FOR DSS COMP	NO	2	1812	3624
75	P.M. OF LT BUS SECTION MCC-2 VERTICAL SINGLE FRONT FIXED TYPE FOR 25 DIA CLARIFIER POND	NO	2	1812	3624

76	P.M. OF LT BUS SECTION A -15 VERT. DOUBLE FRONT ASH HANDLING SWGR.(SIEMENS)	NO	3	6926	20778
77	P.M. OF LT BUS SECTION B-13 VERT. DOUBLE FRONT ASH HANDLING SWGR.(SIEMENS)	NO	3	6926	20778
78	P.M. OF LT BUS SECTION-A AWR MCC-7 ASH WATER RECV. SWGR.(SIEMENS)	NO	3	3771	11313
79	P.M. OF LT BUS SECTION-B AWR MCC-7 ASH WATER RECV. SWGR.(SIEMENS)	NO	3	3771	11313
80	P.M. OF LT BUS-A 9 VERTICALS IN PLANT END ELHS SWGR (L&T MAKE)	NO	3	5274	15822
81	P.M. OF LT BUS-B 9 VERTICALS IN PLANT END ELHS SWGR (L&T MAKE)	NO	3	5274	15822
82	P.M. OF LT BUS-A 9 VERTICALS IN NEW SCH MCC SWGR (C&S MAKE)	NO	3	5274	15822
83	P.M. OF LT BUS-B 8 VERTICALS IN NEW SCH MCC SWGR (C&S MAKE)	NO	3	5274	15822
84	P.M. OF LT BUS-A 5 VERTICALS IN NEW FLY ASH MCC SWGR (C&S MAKE)	NO	3	3623	10869
85	P.M. OF LT BUS-B 6 VERTICALS IN NEW FLY ASH MCC SWGR (C&S MAKE)	NO	3	3623	10869
86	P.M. OF LT BUS-A 5 VERTICALS IN NEW BED ASH MCC SWGR (C&S MAKE)	NO	3	3623	10869
87	P.M. OF LT BUS-B 6 VERTICALS IN NEW BED ASH MCC SWGR (C&S MAKE)	NO	3	3623	10869
88	P.M. OF LT BUS-A 7 VERTICALS IN NEW BUNKER MCC SWGR (C&S MAKE)	NO	3	3771	11313
89	P.M. OF LT BUS-B 6 VERTICALS IN NEW BUNKER MCC SWGR (C&S MAKE)	NO	3	3771	11313
90	P.M. OF LT BUS-A 8 VERTICALS IN MINES END ELHS SWGR (L&T MAKE)PMCC-1	NO	2	4731	9462
91	P.M. OF LT BUS-B 8 VERTICALS IN MINES END ELHS SWGR (L&T MAKE) PMCC-01	NO	2	4731	9462
92	P.M. OF LT BUS-A 8 VERTICALS IN MINES END ELHS SWGR (L&T MAKE) PMCC-2	NO	2	4731	9462
93	P.M. OF LT BUS-B 7 VERTICALS IN MINES END ELHS SWGR (L&T MAKE) PMCC-2	NO	2	4731	9462
94	P.M. OF LT BUS -A 12 VERTICAL IN NEW LIME MILL-D MCC .(C&S)	NO	3	6100	18300
95	P.M. OF LT BUS -B 9 VERTICAL IN NEW LIME MILL-D MCC .(C&S)	NO	3	6100	18300
96	P.M. OF NEW STACKER RECLAIMER MCC SINGLE FRONT VERTICALS	NO	4	3623	14492
97	P.M. OF LT BUS OF LIGNITE RUN OF POND 04 VERTICAL.	NO	4	2404	9616

98	P.M. OF L.T. BUS MINES SITE OFFICE	NO	4	3623	14492
99	HT /LT MCC OUTSIDE CLEANING & DOOR TIGHTNESS	NO	50	453	22650
100	P.M. OF LT OIL FILLED TRANSFORMERS 1 MVA & ABOVE UP TO 2 MVA	NO	52	2114	109928
101	P.M. OF LT OIL FILLED TRANSFORMERS 500 KVA	NO	20	1800	36000
102	P.M. OF LT DRY TYPE CAST RESIN TRANSFORMER FROM 400 TO 630 KVA	NO	30	1208	36240
103	P.M. OF LT DRY TYPE CAST RESIN TRANSFORMER BELOW 125 KVA	NO	128	604	77312
104	P.M. OF NEUTRAL GROUNDING RESISTOR	NO	64	302	19328
105	P.M. OF 20 KVA TRANSFORMER DRY TYPE FOR ILMS	NO	24	449	10776
106	P.M. OF MAGNET FOR IN LINE MAGNETIC SEPARATOR HAVING OIL CAP. APROX. 4500 LTR. & RATING 220V	NO	24	906	21744
107	PREVENTIVE MAINTENANCE OF NON SEGREGATED PHASE BUS DUCT 1.1KV (2000A - 3200A)	NO	36	906	32616
108	P.M. OF SCOOP COUPLING PANEL	NO	130	453	58890
109	P.M. OF SUMP PUMP PANEL	NO	30	305	9150
110	P.M. OF VENTILATION SYSTEM PANEL	NO	6	305	1830
111	P.M. OF SERVICE WATER PANEL	NO	2	305	610
112	P.M. OF DUST EXTRACTION PANEL	NO	4	239	956
113	P.M. OF RAIL CLAMP PANEL	NO	2	302	604
114	P.M. OF SLEW LUBRICATION PANEL	NO	2	302	604
115	P.M. OF HOOTER PANEL	NO	60	242	14520
116	P.M. OF ON LINE HEAT TRACING PANEL	NO	20	242	4840
117	P.M. OF ON LINE (HAG) HEATER PANEL	NO	20	366	7320
118	P.M. OF HOPPER HEATER PANEL - MILL D	NO	8	302	2416
119	P.M. OF DUST SUPPRESSION PANEL	NO	12	610	7320
120	P.M. OF TRAVELING TRIPPER PANEL(LS)	NO	6	604	3624
121	P.M. OF TABLE FEEDER (LS MILLING) LOCAL PANEL	NO	16	121	1936
122	P.M. OF TABLE FEEDER (LS MILLING) THYRISTOR PANEL.	NO	16	453	7248
123	P.M. OF LIGNITE SAMPLING PANEL	NO	2	604	1208
124	P.M. OF BOOM HOIST & LOWERING PANEL AT RECLAIMER & STACKER M/C	NO	24	302	7248
125	P.M. OF RACK & PINION GATE PANEL AT SCH	NO	12	610	7320
126	P.M. OF ELECTRIC CONTROL PANEL AT DIFFERENT SWITCHGEAR ROOM	NO	12	610	7320
127	P.M. OF IN LINE MAGNETIC SEPARATOR PANEL	NO	24	366	8784
128	P.M. OF VARIABLE FREQUENCY DRIVE PANEL AT SCREEN HOUSE	NO	2	302	604
129	P.M. OF VARIABLE FREQUENCY DRIVE PANEL FOR 2X 15 KW	NO	6	302	1812
130	P.M. OF PLATEN HEATERS OF BELT VULCANIZING MACHINE	NO	10	302	3020

131	P.M. OF CONTROL PANEL FOR BELT VULCANIZING MACHINE	NO	16	302	4832
132	P.M. OF CURRENT TRANSDUCER PANEL	NO	8	239	1912
133	P.M. OF SOFT START PANEL AT RECLAIMER & STACKER M/C	NO	18	610	10980
134	P.M. OF THYRISTOR PANEL AT RECLAIMER & STACKER M/C	NO	18	610	10980
135	P.M. OF FIRE WATER BOOSTER PUMP PANEL GATE-4	NO	6	302	1812
136	P.M. OF SOLAR WATER PUMP PANEL AT GATE-4	NO	4	302	1208
137	P.M. OF LIQUID RESISTANCE STARTER (LS MILLING) PANEL	NO	18	453	8154
138	P.M. OF VARIABLE VOLTAGE VARIABLE FREQUENCY DRIVE PANEL FOR 2X132 KW MOTOR AT FEEDER BREAKER	NO	6	610	3660
139	P.M. OF DRY FOG PANEL	NO	18	604	10872
140	P.M. OF STATIONARY VACUUM CLEANING PANEL	NO	10	604	6040
141	P.M. OF STACKER MACHINE PCRD SLIP RING	NO	24	457	10968
142	P.M. OF STACKER MACHINE CENTER PIT POWER JB	NO	24	457	10968
143	P.M. OF CONTROL PANEL FOR PACKAGE AIR CONDITIONING UNITS	NO	60	242	14520
144	P.M. OF RELAY CUM FAULT INDICATION PANEL	NO	18	302	5436
145	P.M. OF CONTROL PANEL FOR ZERO DISCHARGE SUMP PUMP MOTOR	NO	12	453	5436
146	P.M. OF VFD PANEL OF NEW STACKER RECLAIMER FOR TRAVEL DRIVE	NO	6	604	3624
147	P.M. OF TRAVELING TRIPPER PANEL(Lignite)	NO	12	610	7320
148	P.M. OF HYD. DOOR OPENING PANEL	NO	14	302	4228
149	P.M. OF NEW EDS PANEL(single front 16nos 3.7 k.w. starter)	NO	6	1812	10872
150	P.M. OF Local Panel For 55/170kW Star-Delta Starter	NO	12	610	7320
151	P.M. OF FIELD MARSHALLING PANEL	NO	160	239	38240
152	P.M. OF POWER JUNCTION BOXES	NO	120	299	35880
153	P.M. OF 415 V ACDBs	NO	66	604	39864
154	P.M. OF 220V DCDBs	NO	32	302	9664
155	P.M. OF CHANGE OVER SWITCHES (63 TO 250A)	NO	10	242	2420
156	P.M. OF 110V & 230V AC HOOTERS	NO	70	242	16940
157	P.M. OF ALL CAPACITY HOIST & CONTROL PANEL(1 to 15 ton)	NO	80	604	48320
158	P.M. OF INTEGRAL TYPE SV/MV/MH LIGHTING FIXTURES	NO	504	179	90216
159	P.M. OF NON-INTEGRAL TYPE SV/MV/MH LIGHTING FIXTURES	NO	140	209	29260
160	CLEANING OF LOCAL CONTROL PANEL / LP / MLDB / ACDB ETC..	NO	150	302	45300
161	P.M. OF 3-PH LIGHTING PANELS	NO	180	302	54360
162	P.M. OF DC EMERGENCY LAMPS 40W/60W/100W	NO	24	60	1440

163	P.M. OF DC EMERGENCY LIGHTING PANELS	NO	14	299	4186
164	P.M. OF LIGHTING FIXTURES & PANELS AT TOWERS	NO	12	2265	27180
165	P.M. OF Lighting JBs	NO	40	74	2960
166	P.M. OF MAIN LIGHTING DISTRIBUTION BOARDS	NO	80	302	24160
167	P.M. OF STREET LIGHTING TRANSFORMERS	NO	15	302	4530
168	P.M. OF 1-PH, 16A RECEPTACLE	NO	181	181	32761
169	P.M. OF 3-PH , 63A RECEPTACLE	NO	180	302	54360
170	P.M. OF EXHAUST FANS 0.18 KW, 415V & STARTERS	NO	100	181	18100
171	P.M. OF SUPPLY AIR FANS 0.37 KW, 415V	NO	20	181	3620
172	P.M. OF Ventilation fans, 1- phase, 230 V	NO	30	181	5430
173	P.M. OF HEAVY DUTY LIMIT SWITCHES	NO	22	91	2002
174	P.M. OF TRAVEL END LIMIT SWITCHES	NO	200	91	18200
175	PREVENTIVE MAINTENANCE OF 200AH, 220V DC BATTERY BANK (LEAD-ACID)	NO	48	1359	65232
176	PREVENTIVE MAINTENANCE OF 180AH, 24V DC BATTERY BANK (LEAD-ACID) (2X12 V BATTERY)	NO	48	302	14496
177	CLEANING OF 20A, 237V DC FLOAT CHARGER	NO	60	305	18300
178	CLEANING OF 23A, 295V DC BOOST CHARGER	NO	60	305	18300
179	CLEANING OF 24V CHARGER PANEL	NO	12	244	2928
180	PREVENTIVE MAINTENANCE OF 340/200AH, 220V DC BATTERY BANK VRLA TYPE	NO	30	1219	36570
181	CLEANING OF 70A, 243V DC FLOT CUM 253 VDC BOOST CHARGER	NO	24	305	7320
182	CLEANING OF BATTERY BANK	NO	20	305	6100
183	CLEANING OF UPS BATTERY BANK	NO	32	305	9760
184	DM WATER TOPPING UP OF BATTERY BANK	NO	20	299	5980
185	P.M. OF EARTH PITS(TREATED)/(UNTREATED)	NO	200	299	59800
186	P.M. OF LCS/ PUSH BUTTON STATIONS	NO	1640	179	293560
187	POLYTHENE SHEET COVERING OF EQUIPMENTS BEFORE MONSOON	KG	152	60	9120
188	P.M. OF 3-PH, 415V 20 KW AIR HEATER	NO	32	453	14496
189	P.M. OF 3-PH, 415V 12 KW AIR HEATER	NO	32	453	14496
190	P.M. OF HEATER OF 3 PHASE HEATER BANK LIME MILL -1.5 K.W,	NO	24	453	10872
191	ASSISTING OF RELAY TESTING OF HT INCOMERS/ TRANSFORMERS / OUT GOING / BUS COUPLERS FEEDERS (INCLUDING RELAYS OF BUS/LINE PTs)	NO	100	302	30200
192	ASSISTING OF RELAY TESTING OF LT BREAKERS OF INCOMERS / OUT GOING / BUS COUPLERS FEEDERS (INCLUDING RELAYS OF BUS/LINE PTs)	NO	100	302	30200
193	ASSISTING OF RELAY TESTING OF HT / LT MOTORS	NO	140	302	42280
194	ASSISTING FOR JOBS WITH EXTERNAL AGENCY LIKE HT/LT BREAKER SERVICING, BATTERY CAPACITY TEST ETC.	MAN DAYS	20	592	11840
B1	**Total estimate value for LLHS/AHS/LIME area PM for two year without escalation**				**4839136**

B2.	PRIFCE SCHEDULE FOR DEFECT MAINTENANCE PACKAGE-B(LIGNITE,LIMESTONE & ASH HANDLING SYSTEMS AND EXTERNAL LIGNITE HANDLING SYSTEM AT MANGROL MINES END)				
Sr. No.	**Item Description**	**UoM**	**Qty for Two year**	**Unit SOR rate w/o service tax for first year in Rs.**	**Total SOR Price w/o service tax for two year (W/o escalation) in Rs.**
1	DRAINING OF LRS TANK FOR ELECTROLYTE. VOLUME: 450 LITERS.	NO	2	63	126
2	CLEANING OF LIQUID RESISTANCE STARTER TANK, DIMENSION: 1000 MM X 900 MM X 900 MM	NO	2	621	1242
3	PAINTING OF LRS TANK INTERNAL SURFACE WITH BLACK MATT PAINT. SURFACE AREA: 2.0-SQ. MTR.	NO	2	621	1242
4	REFILLING OF ELECTROLYTE. VOLUME: 450 LITERS. OF LRS	NO	2	63	126
5	REMOVAL OF SPARE CURRENT TRANSDUCER FROM PANEL AND FIXING THE SAME AND TAKING INTO SERVICE IN OTHER PANEL AGAINST DEFECTIVE ONE.	NO	8	127	1016
6	WIRING MODIFICATIONS OF CONTROL CIRCUITRY IN LOCAL PANELS, MCC, HT PANEL ETC.	NO	40	775	31000
7	REVIVAL AND COMMISSIONING OF LT PANEL, WHICH HAS BECOME OUT OF ORDER WITH SEVERAL COMPONENTS GETTING DAMAGED AND NEED REPLACEMENT.	NO	3	633	1899
8	COMPLETE REWIRING OF CONTROL PANEL & HOIST PANEL OF ALL CAPACITY	NO	4	1265	5060
9	COMPLETE DRY-OUT OF LOCAL CONTROL PANEL/MARSHALLING PANEL/LIGHTING PANEL AND OTHER FIELD PANELS DUE TO INGRESS OF WATER WHILE WATER WASHING OR FIRE FIGHTING.	NO	4	633	2532
10	PANEL SHIFTING (height varies from 0 to 60 meters) per KG.	KG	1600	10	16000
11	PANEL ERECTION AT ITS LOCATION PER KG	KG	1600	7	11200
12	RECTIFICATION & TROUBLESHOOTING IN LOCAL CONTROL PANEL i.e. REPLACEMENT OF BMR/ POWER-CONTROL CONTACTOR/ SFU ETC..	NO	48	366	17568
13	RECTIFICATION & TROUBLESHOOTING IN LOCAL CONTROL PANEL i.e. REPLACEMENT OF FUSES/INDICATION LAMP/PBS/RE-300 RELAYS ETC	NO	48	251	12048

14	RECTIFICATION & TROUBLESHOOTING IN LOCAL CONTROL PANEL i.e. CHECKING/CLEANING OF RELAY/ CONTACTOR/FUSES/INDICATION LAMP/PBS ETC	NO	48	389	18672
15	SCRAPING AND ONE COAT OF RED OXIDE AND ONE COAT OF PAINT OF ELECTRICAL EQUIPMENT PER SQUARE FOOT.	square foot	40	31	1240
16	DISCONNECTION OF POWER CABLE FROM MOTOR END OF HT MOTORS RANGE 200KW- 680KW	NO	8	313	2504
17	DISCONNECTION OF SPACE HEATING CABLE FROM MOTOR END OF HT MOTORS RANGE 200KW-680KW	NO	8	125	1000
18	Removal & Replacement of cooling fan / FAN COVER of HT MOTORS RANGE 200KW- 680KW	NO	2	470	940
19	REMOVAL / REPLACEMENT OF DE / NDE END SHIELD COVER OF HT MOTORS, RANGE 200KW - 680 KW	NO	4	579	2316
20	REMOVAL / REPLACEMENT OF DE / NDE BEARING OF HT MOTORS, RANGE 200KW - 680 KW (INCLUDING REMOVAL OF COOLING FAN & END SHIELD COVER)	NO	4	1090	4360
21	CHECKING & MAINTAINING HEALTHINESS OF SPACE HEATER OF HT MOTORS RANGE 200KW- 680KW	NO	4	125	500
22	CONNECTION OF POWER CABLE AT MOTOR END OF HT MOTORS RANGE 200KW- 680KW	NO	8	466	3728
23	GLANDING AND TERMINATION OF SPACE HEATING CABLE AT MOTOR END OF HT MOTORS RANGE 200KW- 680KW	NO	8	124	992
24	DRYING OUT FOR IMPROVING IR VALUE OF HT MOTORS RANGE 200KW- 680KW (INCL. OF DISMENTLING & RE-ASSEMBLING OF MOTOR)	NO	2	2350	4700
25	REMOVING / RECONNECTING EARTHING CONNECTION OF HT MOTORS RANGE 200KW-680KW	NO	16	124	1984
26	RE-ERECTION OF HT MOTORS RANGE 200KW-680KW	NO	6	1088	6528
27	RUNNING OF MOTOR BY BYPASSING CERTAIN INTERLOCKS AS FELT NECESSARY BY OPERATION DEPARTMENT OF HT MOTORS RANGE 200KW-680KW	NO	6	80	480
28	CONNECTION REMOVAL / RECONNECTION / CHANGING FOR DIRECTION OF ROTATION OF POWER CABLE FROM HT PANEL MODULE - ANY SIZE	NO	8	77	616
29	HT MOTOR TERMINAL BOX DIRECTION REPLACEMENT FROM LHS TO RHS OR VICE VERSA (INCL. OF REMOVING OF END COVER, FAN ETC.) OF HT MOTORS RANGE 200KW- 680KW	NO	6	1880	11280
30	SHIFTING OF HT MOTOR FROM LOCATION TO WORKSHOP OR VICE VERSA OF HT MOTORS RANGE 200KW- 680KW	NO	15	3083	46245

31	DISCONNECTION OF POWER CONNECTIONS FROM LT MOTORS / MODULE				
a	UP TO 11 KW	NO	72	155	11160
b	11.1 KW TO 75 KW	NO	24	310	7440
c	75.1 KW TO 175 KW	NO	8	310	2480
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	2	155	310
32	SHIFTING OF MOTOR FROM LOCATION TO ELECTRICAL WORKSHOP / VICE VERSA OF LT MOTORS				
a	UP TO 11 KW	NO	90	227	20430
b	11.1 KW TO 75 KW	NO	12	447	5364
c	75.1 KW TO 175 KW	NO	4	540	2160
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	4	155	620
33	OVERHAULING OF LT MOTORS INCL. BEARINGS, END SHIELDS, FAN- FAN COVER, VARNISH ETC.				
a	UP TO 11 KW	NO	30	621	18630
b	11.1 KW TO 75 KW	NO	24	1880	45120
c	75.1 KW TO 175 KW	NO	8	2507	20056
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	6	621	3726
34	REPLACEMENT OF DE & NDE BEARING OF MOTORS OF RATING (INCLUSIVE OF DISMENTALING & RE-ASSEMBLING OF MOTOR)				
a	UP TO 11 KW	NO	30	466	13980
b	11.1 KW TO 75 KW	NO	10	621	6210
c	75.1 KW TO 175 KW	NO	4	931	3724
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	4	621	2484
35	REMOVAL & REPLACEMENT OF COOLING FAN &/ FAN COVER OF LT MOTORS				
a	UP TO 11 KW	NO	10	155	1550
b	11.1 KW TO 75 KW	NO	6	310	1860
c	75.1 KW TO 175 KW	NO	6	621	3726
36	REMOVAL &/ REPLACEMENT OF END SHIELD OF LT MOTORS				
a	UP TO 11 KW	NO	16	310	4960
b	11.1 KW TO 75 KW	NO	4	310	1240
c	75.1 KW TO 175 KW	NO	2	621	1242
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	2	310	620
37	REMOVING & RECONNECTING EARTHING OF LT MOTORS				
a	UP TO 11 KW	NO	40	77	3080
b	11.1 KW TO 75 KW	NO	20	77	1540
c	75.1 KW TO 175 KW	NO	10	77	770
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	4	62	248
38	RE-ERECTION OF MOTOR RATING OF LT MOTORS				
a	UP TO 11 KW	NO	45	229	10305

b	11.1 KW TO 75 KW	NO	20	260	5200
c	75.1 KW TO 175 KW	NO	6	454	2724
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	4	155	620
39	GLANDING AND TERMINATION OF POWER CABLE AT MOTOR / MODULE END OF LT MOTORS				
a	UP TO 11 KW	NO	30	155	4650
b	11.1 KW TO 75 KW	NO	12	310	3720
c	75.1 KW TO 175 KW	NO	6	382	2292
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	4	155	620
40	VARNISHING & DRYING OUT OF MOTOR FOR IMPROVING IR VALUE OF LT MOTORS (INCL. OF DISMENTLING & RE-ASSEMBLING OF MOTOR)				
a	UP TO 11 KW	NO	10	931	9310
b	11.1 KW TO 75 KW	NO	4	1087	4348
c	75.1 KW TO 175 KW	NO	1	1242	1242
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	1	621	621
41	RUNNING OF MOTOR IN WORKSHOP/ MCC OR AT ITS LOCATION BY PASSING CERTAIN INTERLOCKS AS FELT NECESSARY BY OPERATION DEPARTMENT OF LT MOTORS				
a	UP TO 11 KW	NO	16	80	1280
b	11.1 KW TO 75 KW	NO	4	80	320
c	75.1 KW TO 175 KW	NO	4	80	320
d	1.5 HP/2.27 HP UNBALANCE MOTOR	NO	2	80	160
42	REPLACEMENT OF MOTOR TERMINAL BLOCK / TERMINAL BOX FOR LT MOTORS OF ANY RATING	NO	12	310	3720
43	REMOVAL / RECONNECTION OF SPACE HEATING CABLE OF LT MOTORS				
a	37.1 KW TO 75 KW	NO	12	77	924
b	75.1 KW TO 175 KW	NO	12	77	924
44	REPLACEMENT OF FAULTY TACHO-GENERATOR WITH/WITHOUT COUPLING TO MOTOR SHAFT AND RECONNECTING THE CABLES OF LT MOTORS	NO	10	155	1550
45	CHECKING / CLEANING OF DIFFERENT PARTS OF DC MOTORS LIKE BRUSH HOLDERS, ROCKER ARM ASSEMBLY, COMMUTATOR ETC.	NO	10	382	3820
46	DISCONNECTION OF POWER CABLE FROM MOTOR END, AND MECHANICALLY LIFTING THE LEVER TO BYPASS THE BRAKE LIMIT SWITCH OF THRUSTER BRAKES	NO	32	155	4960
47	SHIFTING OF THRUSTER BRAKES FROM LOCATION TO WORKSHOP / VICE VERSA.	NO	50	124	6200
48	OVERHAULING OF THRUSTER BRAKES COMPLETE AND REPLACEMENT OF DAMAGED SPARES INCLUDING BEARINGS, OIL SEALS, TERMINAL PLATE ETC.	NO	50	313	15650

49	RE-ERECTION OF THRUSTER BRAKES	NO	50	157	7850
50	POWER CABLE GLANDING, TERMINATION AND REMOVING THE BYPASS ARRANGEMENT OF BRAKE LIMIT SWITCH TO TAKE IT INTO SERVICE.	NO	40	188	7520
51	ARRESTING OF OIL LEAKAGE IN THRUSTER BRAKES BY APPLYING M-SEAL OR ANY OTHER SEALANT & OIL TOP -UP AFTER ARRESTING OF OIL LEAKAGE	NO	8	155	1240
52	SHIFTING OF OIL DRUMS TO / FROM LOCATION / WORKSHOP	NO	20	310	6200
53	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS IN 6.6KV HT JYOTI/BHEL/ABB PANEL FOR MOTOR FEEDER (INCLUSIVE OF CHECKING & RECTIFICATION OF COMMAND AND FEEDBACK SIGNALS WITH PLC)	NO	40	466	18640
54	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS, REPLACEMENT OF CONTROL FUSE/ INDICATION LAMPS IN 6.6KV HT JYOTI/BHEL/ABB PANEL FOR TRANSFORMER FEEDERS	NO	24	403	9672
55	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING & INTERLOCKING CABLES FOR UPSTREAM & DOWNSTREAM BREAKERS/ INTER PANEL WIRING DEFECTS, REPLACEMENT OF CONTROL FUSE/ INDICATION LAMPS IN 6.6KV HT JYOTI/BHEL/ABB PANEL FOR INCOMER	NO	20	455	9100
56	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS, REPLACEMENT OF CONTROL FUSE/ INDICATION LAMPS IN 6.6KV HT JYOTI/BHEL/ABB PANEL PT PANEL	NO	20	158	3160
57	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING & INTERLOCKING CABLES FOR THE STATUS OF EITHER OF THE INCOMER DEFECTS, REPLACEMENT OF CONTROL FUSE/ INDICATION LAMPS IN 6.6KV HT JYOTI/BHEL/ABB PANEL FOR BUS-COUPLER	NO	20	403	8060
58	REMOVAL OF FAULTY COMPONENTS & REPLACEMENT OF COMPONENTS LIKE- HT FUSES/ AUXILIARY CONTACTORS/ RELAYS/ TIMERS ETC. IN 6.6KV HT INCOMER/ BUS-COUPLER/ TRANSFORMER/ MOTOR FEEDERS.	NO	30	403	12090
59	CURRENT MEASUREMENT OF EQUIPMENT	NO	72	80	5760
60	MOTOR GREASING	NO	20	31	620
61	CHECKING / REPAIRING OF HT / LT BREAKER FOR PROPER OPERATION	NO	36	390	14040
62	MODULE ALIGNMENT / SLIDING CONTACTS CHECKING FOR FEEDBACKS / INPUTS	NO	60	80	4800

63	MAKING "ON" OF MCB/ELCB/RCCB/MPCB/SFU/ISOLATOR/MODULE FOUND OFF WHILE CHECKING FOR NOT WORKING OF EQUIPMENTS	NO	60	80	4800
64	Trouble shooting and needful rectification for any defects and replacement of RELAY/ CONTACTOR/ SFU ETC.. in 415 V LT MCC Siemens/ Control Switchgear/L&T Make for Motor feeder.	NO	40	390	15600
65	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR ANY DEFECTS AND REPLACEMENT OF FUSES/INDICATION LAMP/PBS ETC. IN 415 V LT MCC SIEMENS/ CONTROL SWITCHGEAR/L&T MAKE FOR LT MOTOR FEEDER.	NO	40	158	6320
66	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR ANY DEFECTS i.e. CHECKING/CLEANING OF RELAY/ CONTACTOR/FUSES/INDICATION LAMP/PBS ETC. IN 415 V LT MCC SIEMENS/ CONTROL SWITCHGEAR/L&T MAKE FOR MOTOR FEEDER. (INCLUSIVE OF CHECKING & RECTIFICATION OF COMMAND AND FEEDBACK SIGNALS WITH PLC)	NO	52	232	12064
67	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING & INTERLOCKING CABLES FOR UPSTREAM & DOWNSTREAM BREAKERS/ INTER PANEL WIRING DEFECTS AND REPLACEMENT OF CONTROL/ POWER FUSE IN 415 V LT MCC SIEMENS/ CONTROLS SWITCHGEAR/L&T MAKE FOR INCOMER	NO	40	466	18640
68	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS AND REPLACEMENT OF CONTROL/ POWER FUSE IN 415 V LT MCC SIEMENS/ CONTROLS SWITCHGEAR/L&T MAKE PT PANEL	NO	20	251	5020
69	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING & INTERLOCKING CABLES FOR THE STATUS OF EITHER OF THE INCOMER BREAKERS/ INTER PANEL WIRING DEFECTS AND REPLACEMENT OF CONTROL/ POWER FUSE IN 415 V LT MCC SIEMENS/ CONTROLS SWITCHGEAR MAKE FOR BUS-COUPLER	NO	12	327	3924
70	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS AND REPLACEMENT OF FAULTY COMPONENTS IN 415 V LT MCC SIEMENS/ CONTROLS SWITCHGEAR/L&T MAKE FOR CONTROL TRANSFORMER / SPACE HEATING / WINDING HEATING /ALARM BUS / SWITCH FUSE UNIT MODULE	NO	15	313	4695
71	REMOVAL OF DAMAGED (BECAUSE OF FLASHOVER) SET OF VERTICAL CONNECTORS (R, Y & B PHASES).	NO	4	1384	5536
72	REPLACEMENT OF NEW SET OF VERTICAL CONNECTORS(R, Y & B PHASES).	NO	4	1619	6476

73	REMOVAL OF FAULTY ELECTRICAL ACTUATOR BY DISCONNECTING ACTUATING LEVERS, DISCONNECTION OF POWER & CONTROL WIRING	NO	12	461	5532
74	SHIFTING OF ACTUATOR TO LOCATION FROM WORKSHOP / VICE VERSA	NO	12	458	5496
75	ERECTION OF ACTUATOR & CABLE CONNECTION (POWER & CONTROL) AND FIXING OF ACTUATING LEVER.	NO	12	461	5532
76	SETTING OF LIMIT & TORQUE SWITCHES IN THE ACTUATOR.	NO	16	128	2048
77	TRIAL OF ACTUATOR FOR CHECKING OF SETTINGS AND FEEDBACK SIGNALS TO PLC.	NO	12	80	960
78	SERVICING OF ACTUATOR INCLUDING REPLACEMENT OF WORN OUT COMPONENTS AND TRIAL RUN IN WORKSHOP/ MCC ROOM.	NO	12	313	3756
79	FIXING OF 63 AMP INDUSTRIAL TYPE PLUG RECEPTACLE AND GLANDING - TERMINATION OF POWER CABLE	NO	12	313	3756
80	REPLACEMENT OF BLOWN POWER FUSE IN 63 AMP INDUSTRIAL TYPE PLUG RECEPTACLE	NO	12	125	1500
81	FIXING OF 16 AMP INDUSTRIAL TYPE PLUG RECEPTACLE AND TERMINATION OF CABLE	NO	10	313	3130
82	1 PHASE RECEPTACLES REPLACEMENT OF FAULTY PARTS	NO	26	157	4082
83	3 PHASE RECEPTACLES REPLACEMENT OF FAULTY PARTS	NO	20	157	3140
84	SHIFTING OF 1 PHASE FROM WAREHOUSE TO CONTAINER/LOCATION AND VISE VERSA	NO	12	124	1488
85	SHIFTING OF 3 PHASE RECEPTACLES FROM WAREHOUSE TO CONTAINER/LOCATION AND VISE VERSA	NO	10	124	1240
86	TROUBLE SHOOTING OF LCS AND REPLACEMENT OF LOCAL/ REMOTE SELECTOR SWITCH/ CONTACT ELEMENTS/ ACTUATING MECHANISM.	NO	20	157	3140
87	REPLACEMENT OF MUSHROOM HEAD (LOCKABLE/ ROTATE TO FREE)	NO	20	125	2500
88	CLEANING/ SETTING/ REPLACEMENT OF SWITCH AND REPLACEMENT OF FIELD/ LIMIT SWITCHES.	NO	60	125	7500
89	LOADING & UNLOADING OF CABLE.(PER KG WEIGHT- WEIGHT TO DERIVED FROM STANDARD CABLE CATALOGUE) IN KG	KG	16002	6	96012
90	LAYING OF CABLE INCLUDING SHIFTING FROM STORES,DRESSING & CLAMPING.(PER KG WEIGHT-WEIGHT TO DERIVED FROM STANDARD CABLE CATALOGUE) IN KG	KG	12000	9	108000
91	REMOVING AND SHIFTING OF HT/LT CABLES OF ALL SIZES (PER KG WEIGHT- WEIGHT TO DERIVED FROM STANDARD CABLE CATALOGUE) IN KG	KG	4006	5	20030

92	ERECTION OF CABLE TRAY WITH NECESSARY SUPPORTS	MTR	400	124	49600
93	DRESSING OF CABLE (PER KM LENGTH)	KM	4	1242	4968
94	CLAMPING OF CABLE (PER KM LENGTH)	KM	4	2484	9936
95	GLANDING & TERMINATION OF LT POWER CABLE				
a	SIZE :-FROM 3CX2.5 SQ MM TO 3CX16 SQ MM	NO	80	310	24800
b	SIZE :-FROM 3CX25 SQ MM TO 3CX95 SQ.MM	NO	40	313	12520
c	SIZE :-FROM 3CX120 SQ MM TO 3CX300 SQ.MM	NO	24	542	13008
96	GLANDING & TERMINATION OF CONTROL CABLES				
a	UP TO 12 CORES	NO	16	253	4048
b	14 TO 32 CORES	NO	16	316	5056
97	ASSISTING FOR END TERMINATION / STRAIGHT THROUGH TERMINATION OF HT POWER CABLE(ALL SIZES)	NO	16	395	6320
98	STRAIGHT THROUGH TERMINATION OF LT POWER CABLE(ALL SIZES)				
a	SIZE :-FROM 3CX2.5 SQ MM TO 3CX16 SQ MM	NO	14	316	4424
b	SIZE :-FROM 3CX25 SQ MM TO 3CX95 SQ.MM	NO	14	466	6524
c	SIZE :-FROM 3CX120 SQ MM TO 3CX300 SQ.MM	NO	10	624	6240
99	UNARMOURED / TEMPERORY LT POWER CABLE JOINT (ALL SIZES)	NO	10	466	4660
100	UNARMOURED / TEMPERORY LT CONTROL CABLE JOINT (ALL SIZES)	NO	10	390	3900
101	WRAP AROUND SLEEVING OF HT & LT CABLES (LENGTH IN MTR.)	NO	10	251	2510
102	DRAINING OF OIL (PER LTR.) OF TRANSFORMER/IN LINE MAGNETIC SEPARATOR (ILMS)	LTR	800	6	4800
103	ARRESTING OF OIL LEAKAGE FROM RADIATOR/ BUSHINGS/ DRAIN VALVES OF TRANSFORMER/IN LINE MAGNETIC SEPARATOR (ILMS)	NO	8	621	4968
104	OIL MAKE UP IN TRANSFORMER/ ILMS (PER LTR.)	LTR	1600	6	9600
105	CLEANING/REPLACEMENT OF NO/NC CONTACTS IN PENDANT SWITCH OF HOIST	NO	24	155	3720
106	REMOVAL & REPLACEMENT OF FAULTY COMPONENT LIKE- BRAKE SHOE, FRICTION DISC, LINER ETC FOR HOIST	NO	14	235	3290
107	TROUBLE SHOOTING & RECTIFICATION IN HOIST CONTROL PANEL AND REPLACEMENTS OF FAULTY COMPONENTS AS REQUIRED	NO	24	456	10944
108	BRAKE COIL SETTING FOR HOIST	NO	10	458	4580
109	REMOVAL & RE-ERECTION OF FESTOONER TROLLEY ON THE MONORAIL FOR FLEXIBLE CABLES OF HOIST.	NO	20	157	3140
110	CHECKING OF HEALTHINESS OF HEATER. MEGGERING AND RESISTANCE MEASUREMENT.	NO	4	64	256

111	RELUGGING/ GLANDING AND TERMINATION OF CABLE AT HEATER TB.	NO	4	157	628
112	REMOVAL & REPLACEMENT OF FAULTY / DAMAGED HEATER COIL	NO	6	157	942
113	REMOVAL OF 2V BATTERY FROM THE BATTERY BANK OF 220V NOTICED ANY LEAKAGE/ LOW GRAVITY/ VOLTAGE.	NO	10	313	3130
114	BOOST CHARGING OF THE SINGLE CELL OF 2V AND IMPROVING THE SPECIFIC GRAVITY AND VOLTAGE.	NO	2	621	1242
115	REPLACEMENT WITH NEW CELL AFTER CHANGING THE CONTAINER OBSERVED WITH LEAKAGE	NO	2	310	620
116	REPLACEMENT OF 2V BATTERY TO THE BATTERY BANK OF 220V AFTER IMPROVING THE SPECIFIC GRAVITY AND VOLTAGE.	NO	2	248	496
117	REPLACEMENT OF COMPLETE BATTERY STAND INCLUSIVE OF DISMANTLING OF BATTERY SET & RE-ERECTION.	NO	1	6244	6244
118	TROUBLE SHOOTING AND NEEDFUL RECTIFICATION FOR CONTROL WIRING DEFECTS AND REPLACEMENT OF FAULTY COMPONENT IN FLOAT & BOOST CHARGER	NO	20	316	6320
119	SETTING OF PENDULUM SWITCH FOR SLACKNESS PROTECTION OF CCRD/ PCRD CABLE REELING/ UNREELING MECHANISM OF STACKER MACHINE	NO	10	627	6270
120	SETTING OF PENDULUM SWITCH FOR 10-DEGREE/ 20 DEGREE/ 30-DEGREE/ OVER-TENSION PROTECTION OF CCRD/ PCRD CABLE REELING/ UNREELING MECHANISM OF STACKER MACHINE	NO	6	157	942
121	SETTING OF PENDULUM SWITCH FOR 3RD LAST WINDING PROTECTION OF CCRD/ PCRD CABLE REELING/ UNREELING MECHANISM OF STACKER MACHINE	NO	4	157	628
122	CHECKING OF INPUTS FROM THE FIELD BACKUP EMERGENCY SWITCHES TO INCOMER BREAKER PANEL AND BYPASSING ANY ONE IN CONSULTATION WITH OPERATION DEPT. OF STACKER MACHINE	NO	6	157	942
123	NORMALISATION OF FAULTY FIELD BACKUP EMERGENCY SWITCHES AND TAKING IT INTO SERVICE OF STACKER MACHINE	NO	6	80	480
124	REMOVAL & RE-ERECTION OF NEW FESTOONER TROLLEY IN UNDER CARRIAGE OF STACKER RECLAIMER/ BUCKET WHEEL RECLAIMER OF STACKER MACHINE	NO	1	621	621
125	RE-ERECTION / RECTIFICATION OF FESTOONER TROLLEY THAT HAS SLIPPED FROM THE RAIL FROM UNDER CARRIAGE OF STACKER RECLAIMER/ BUCKET WHEEL RECLAIMER.	NO	1	310	310

126	CHECKING COMPATIBILITY OF SPARES (LIKE ELECTRONIC CARDS, TACHO-GENERATOR /HT & LT MOTORS/ HT& LT PANELS ETC.) RECEIVED WITH THAT INSTALLED AT SITE (PER ITEM)	NO	20	128	2560
127	CHECKING HEALTHINESS OF POWER CABLE BY MEGGERING.	NO	34	63	2142
128	CHECKING HEALTHINESS OF CONTROL CABLE BY MEGGERING.	NO	34	78	2652
129	MEGGER OF MOTOR OF ALL RATINGS (HT & LT)	NO	60	80	4800
130	CHECKING & RESTORATION OF PLATEN HEATERS FOR HEALTHINESS OF BELT VULCANIZING MACHINE	NO	10	157	1570
131	CHECKING & RECTIFICATION OF CONTROL PANELS FOR HEATERS OF BELT VULCANIZING MACHINE	NO	20	157	3140
132	INTERCONNECTION OF CABLES BETWEEN CONTROL PANEL AND HEATERS. (POWER & CONTROL) AND MANNING TILL COMPLETION OF BELT JOINTING WORK AS REQUIRED BY MECHANICAL MAINTENANCE.	NO	24	124	2976
133	CHECKING & RESTORATION OF WELDING MACHINE FOR HEALTHINESS.	NO	5	64	320
134	INTERCONNECTION OF CABLES BETWEEN WELDING MACHINES TO WELDING RECEPTACLE.	NO	1230	99	121770
135	REMOVAL OF TEMP CONNECTION GIVEN TO WELDING M/C, VULCANIZING M/C ETC.	NO	500	63	31500
136	CHECKING OF AREA LIGHTING CIRCUITS FOR HEALTHINESS (PER PHASE)	NO	300	155	46500
137	REPLACEMENT OF SPARES e.g. LAMP/ BALLAST/ IGNITOR/ CHOKE/ STARTER/ HOLDER/ STARTER SEAT/ CONTROL GEARBOX COMPLETE/ CAPACITOR/ TERMINALS ETC. IN LIGHTING FIXTURES ALL TYPES (UP TO 10 METER HEIGHT)	NO	1200	124	148800
138	REPLACEMENT OF SPARES e.g. LAMP/ BALLAST/ IGNITOR/ CHOKE/ STARTER/ HOLDER/ STARTER SEAT/ CONTROL GEARBOX COMPLETE/ CAPACITOR/ TERMINALS ETC. IN LIGHTING FIXTURES ALL TYPES (ABOVE 10 METER HEIGHT)	NO	400	155	62000
139	TROUBLE SHOOTING & RECTIFICATION OF SINGLE PHASE LIGHTING CIRCUIT FOR ANY SHORT CIRCUIT / OPEN CIRCUIT/ EARTHED CIRCUITS	NO	800	186	148800
140	LIGHTING TIMER SETTING, MCB/ELCB/RCCB ETC.. MAKING ON	NO	200	62	12400
141	REMOVAL OF BURNT OUT LIGHTING WIRES FROM METALLIC CONDUIT (PER MTR.)	MTR	400	12	4800
142	PULLING OF FRESH LIGHTING WIRE FOR NORMALIZING THE CIRCUIT (PER MTR.)	MTR	400	12	4800
143	REMOVAL OF GI LIGHTING CONDUIT 20MM/25MM DIA INCLUDING LIGHTING WIRE PER METER	MTR	200	31	6200

144	ERECTION OF GI LIGHTING CONDUIT 20/25MM DIA ALONG WITH EARTHING WIRE 8 SWG PER METER	MTR	100	62	6200
145	ERECTION OF GI CIRCULAR JB (3WAY/4WAY)/GI BENDS OF 20MM/25MM SIZE	NO	24	31	744
146	CLEANING OF MCB/RCCB/ELCB BY SUITABLE CLEANSER	NO	30	62	1860
147	REPLACEMENT / MOUNTING OF DOOR FIXING ARRANGEMENTS / HINGES / PANEL LOCKS, PANEL EARTHING, ETC., MISC. JOBS	NO	140	124	17360
148	CLEANING OF TERMINAL BLOCKS	NO	6	63	378
149	REPLACEMENT OF TERMINAL BLOCKS	NO	10	78	780
150	INSTALLATION / REPLACEMENT OF MCB	NO	20	64	1280
151	INSTALLATION / REPLACEMENT OF RCCB/ ELCB	NO	70	125	8750
152	REPLACEMENT OF ISOLATOR/MODULE ON-OFF, SFU HANDLE / TNC / SELECTOR SWITCH ETC. HANDLE	NO	50	157	7850
153	CLEANING OF ENTIRE LIGHTING PANEL, DRYING OUT AND RESTORATION OF ALL THE OUTGOING CIRCUITS	NO	2	633	1266
154	REPLACEMENT OF TIMER IN LIGHTING CIRCUIT	NO	40	124	4960
155	TROUBLESHOOTING & REPLACEMENT OF FAULTY COMPONENTS IN LIGHTING PANEL	NO	30	248	7440
156	TROUBLESHOOTING & RECTIFICATION FOR 1-PH SWITCH / BOARDS / POWER STRIP ETC (5-16 AMP)	NO	30	124	3720
157	REMOVAL OF LIGHTING FIXTURES OF ALL TYPES, CEILING FAN ETC. FROM LOCATIONS & SHIFTING TO DEFINED PLACE	NO	100	124	12400
158	PREPARING / MAKING READY OF LIGHTING FIXTURES OF ALL TYPES FOR INSTALLATION	NO	80	99	7920
159	LOOPING OF LIGHTING CABLE FROM FIXTURE TO FIXTURE & TERMINATION	NO	80	124	9920
160	INSTALLATION OF LIGHTING FIXTURES ALL TYPES UP TO AN ELEVATION OF 10 MTR. FROM THE WORKING FLOOR	NO	180	155	27900
161	INSTALLATION OF LIGHTING FIXTURES ALL TYPES ABOVE AN ELEVATION OF 10 MTR. FROM THE WORKING FLOOR	NO	50	248	12400
162	INSTALLATION OF TEMPORARY FIXTURE FOR AREA ILLUMINATION (ALL TYPES) ALONG WITH REQUIRED FLEXIBLE CABLE AND ITS CONNECTION TO THE NEAREST POWER POINT	NO	50	125	6250
163	REPLACEMENT OF 400A, A.B. SWITCH OF 6.6 KV OVERHEAD LINE	NO	2	1892	3784
164	IDENTIFICATION & REPLACEMENT OF FAULTY PIN INSULATOR BY HEALTHY ONE OF 6.6 KV OVERHEAD LINE	NO	2	922	1844
165	IDENTIFICATION & REPLACEMENT OF FAULTY DISC INSULATOR BY HEALTHY ONE OF 6.6 KV OVERHEAD LINE	NO	2	922	1844

166	HOOTER REMOVAL & REPLACEMENT	NO	20	310	6200
167	CARBON BRUSH REPLACEMENT OF HOOTER	NO	20	78	1560
168	ARMATURE REPLACEMENT OF HOOTER	NO	10	155	1550
169	BEARINGS (DE & NDE) REPLACEMENT OF HOOTER	NO	10	155	1550
B2.	**Total estimate value for LLHS/AHS/LIME area defect for two year without escalation**				**1949090**

B3.	**PRICE SCHEDULE SHIFT MAINTENANCE PACKAGE-B(LIGNITE,LIMESTONE & ASH HANDLING SYSTEMS AND EXTERNAL LIGNITE HANDLING SYSTEM AT MANGROL MINES END)**				
SR. NO.	**ITEM DESCRIPTION**	**UNIT**	**TOTAL JOBS FOR TWO YEARS**	**Unit SOR rate w/o service tax for first year in Rs.**	**Total SOR Price w/o service tax for two year (W/o escalation) in Rs.**
1	Engineer per shift(total B & C shift PER DAY)	shift	**1460**	**639**	932940
2	Skilled Technician per shift (total B & C shift PER DAY)	shift	**1460**	**639**	932940
B3.	**Total estimate value for LLHS/AHS/LIME area Shift maint. for two year without escalation**				**1865880**

B4.	**PRICE SCHEDULE UNFORSEEN JOBS PACKAGE-B ((LIGNITE,LIMESTONE & ASH HANDLING SYSTEMS AND EXTERNAL LIGNITE HANDLING SYSTEM AT MANGROL MINES END)**				
SR. NO.	**ITEM DESCRIPTION**	**UNIT**	**TOTAL JOBS FOR TWO YEARS**	**Unit SOR rate w/o service tax for first year in Rs.**	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	Engineer for unforeseen job for normal hours	hour	108	49	5292
2	Skilled Technician for unforeseen job for normal hours	hour	240	49	11760
3	Semi Skilled Worker for unforeseen job for normal hours	hour	1500	48	72000
4	Helper for unforeseen job for normal hours	hour	1500	46	69000
5	Engineer for unforeseen job for OT hours	hour	28	76	2128
6	Skilled Technician for unforeseen job for OT hours	hour	60	76	4560
7	Semi Skilled Worker for unforeseen job for OT hours	hour	260	74	19240
8	Helper for unforeseen job for OT hours	hour	306	72	22032
B4.	**Total estimate value for LLHS/AHS/LIME Unforseen job for two year without escalation**				**206012**

C1 : Price schedule for Main plant Lighting system colony & SLPP-1 (Package-C)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	**Attending Defects of lighting fixtures including cleaning, wire tightness, component checking including CG box, JB's rectifications/ replacement of component if required etc.**				
1.1	All type of Fluorescent tube light fittings. Excl false ceiling areas	Nos	1800	124	223200
1.2	Fluorescent light fittings in all false ceiling area.	Nos	150	124	18600
1.3	All type of incandescent/CFL light fittings	Nos	600	61	36600
1.4	All HPSV/HPMV light fittings at height up to 6.0M.	Nos	1800	248	446400
1.5	All HPSV/HPMV high bay/medium bay light fittings at height 6.00 to 12.00mtr.	Nos	250	250	62500
1.6	Light fitting mounted in the TG hall	Nos	25	187	4675
1.7	Area light fittings (HPMV/HPSV/SON/ HALOGEN) mounted on flood light tower, watch towers, roof tops.	Nos	180	251	45180
1.8	Post top lantern fitting	Nos	150	124	18600
1.9	All type Street lights fittings.	Nos	200	377	75400
1.10	Aviation light fitting (twin) on 120 mtr. high chimney.	Nos	6	503	3018
2	**Maintenance of following items including cleaning, wire tightness, component checking, rectifications/ replacement of component if required etc.**				
2.1	5A/15A/32A decorative socket/receptacle with switch & fan regulator, box	Nos	1300	98	127400
2.2	10A/20A/32 A, 230v/24v metal clad industrial/flame proof type receptacle/power plug/ switch//MCB/ELCB/timers/spike guard	Nos	150	98	14700
2.3	32A,415v industrial type receptacle	Nos	10	126	1260
2.4	63A,415v industrial type receptacle	Nos	25	126	3150
2.5	Complete distribution board(wooden/metallic) of max. size 1X1feet including internal wiring termination.	Nos	100	123	12300
2.6	Water heater / gyser	Nos	200	246	49200
2.7	All type of ceiling fan	Nos	200	246	49200
2.8	All type of Wall mounted / pedestal Fan	Nos	40	123	4920
2.9	Exhaust fan light duty(1 PH)	Nos	40	123	4920

2.10	PM of 1 ph ac lighting panels- 9ckt	Nos	150	123	18450
2.11	PM of 1 ph ac lighting panels- 6ckt/3ckt (105+6)	Nos	160	123	19680
2.12	PM of 3 ph lighting panel	Nos	80	246	19680
2.13	PM of DC lighting panels- 3 ckt /6ckt	Nos	30	246	7380
2.14	PM of 25KVA dry type lighting transformer with DB	Nos	20	503	10060
2.15	PM of 100 /50KVA dry type lighting transformer (12+13) along with DB	Nos	120	503	60360
2.16	PM of 24v ac, 5 kva supply Distribution Board	Nos	18	251	4518
2.17	PM of JB /DB/ CHANGE OVER SWITCH up to 300X 300 size	Nos	80	123	9840
2.18	PM of JB/ DB/CHANGE OVER SWITCH more than 300X 300 size	Nos	60	123	7380
2.19	PM of MCB distribution board having 14no TP MCB in colony	Nos	180	246	44280
2.20	PM of DB having 4no Energy meters with MCB in colony	Nos	150	123	18450
2.21	PM of LT motors up to 15 KW	Nos	7	251	1757
2.22	PM of HT panel with breaker (one vertical)	Nos	16	503	8048
2.23	PM of LT panel (one Vertical with all modules) / Welding Supply DB/ 9 no energy meter panel	Nos	150	503	75450
2.24	PM of 100 to 500 KVA oil filled transformer	Nos	8	1508	12064
2.25	Ceiling Fan oiling / greasing of any type and make including exhaust fan / pedestal fan etc.	Nos.	300	123	36900
2.26	Capacitor replacement for ceiling fan, exhaust fan, pedestal fan etc.	Nos.	600	123	73800
3	**Removal /& Erection of following type of lighting fittings including erection/ removal of all component / accessories.**				
3.1	Fluorescent light fittings (1x40w, 2x40w, 1x20w & 4x 20w etc.) excluding false ceiling area installed at normal (3 to 5 mtr) height.	Nos	200	123	24600
3.2	Fluorescent light fittings in all false ceiling area.	Nos	40	123	4920
3.3	All type of incandescent/CFL light fittings 230v ac/dc up to 200w lamp in all area.	Nos	150	123	18450
3.4	All HPSV/HPMV light fittings including CG box igniter etc at normal height up to 6.0mtr.	Nos	150	246	36900
3.5	All HPSV/HPMV high bay/medium bay light fittings including CG box igniter etc. at height 6.00 to 12.00mtr.	Nos	40	374	14960
3.6	Light fitting mounted in the TG hall	Nos	5	371	1855
3.7	Area light fittings (HPMV/HPSV/SON/ HALOGEN) mounted on flood light tower, watch towers, roof tops.	Nos	50	374	18700
3.8	Post top lantern fitting	Nos	40	246	9840
3.9	All type Street lights fittings.	Nos	40	494	19760
3.10	Aviation light fitting (twin) on 120 mtr. high	Nos	6	503	3018

	chimney.				
4	**Removal /& Erection of following items including all accessories.**				
4.1	5A/15A/32A decorative socket/receptacle with switch & box, fan regulator/MCB/ELCB etc	Nos	350	123	43050
4.2	10A/20A/32 A, 230v/24v metal clad industrial/flame proof type receptacle/power plug/ switch//MCB/ELCB/timers/spike guard	Nos	250	123	30750
4.3	32A,415v industrial type receptacle	Nos	1	246	246
4.4	63A,415v industrial type receptacle	Nos	2	246	492
4.5	Complete distribution board(wooden/metalic) of max. size 1X1feet including internal wiring termination.	Nos	70	184	12880
4.6	3 ph switch box / changeover box up to 250A	Nos	6	503	3018
4.7	All type of ceiling fan	Nos	400	246	98400
4.8	All type of Wall mounted / PEDASTAL Fan	Nos	50	123	6150
4.9	Exhaust fan light duty(1 PH)	Nos	20	123	2460
4.10	1 ph ac lighting panels- 9ckt	Nos	2	251	502
4.11	1 ph ac lighting panels- 3ckt/6ckt	Nos	2	251	502
4.12	3 ph lighting panel	Nos	5	503	2515
4.13	DC lighting panels- 3ckt/6ckt	Nos	1	503	503
4.14	100KVA /50KVA Lighting Distribution Board(LDB) without transformer	Nos	1	748	748
4.15	100KVA / 50KVA dry type lighting transformer	Nos	1	1251	1251
4.16	25KVA Street Lighting Distribution Board (SLDB) without transformer	Nos	1	999	999
4.17	25KVA dry type lighting transformer	Nos	1	999	999
4.18	24v ac, 5 kva supply Distribution Board	Nos	1	999	999
4.19	JB / CHANGE OVER SWITCH up to 300X 300 size	Nos	20	246	4920
4.20	JB/ CHANGE OVER SWITCH more than 300X 300 size	Nos	10	371	3710
4.21	3ph /1 ph energy meters	Nos	40	246	9840
4.22	LT panel / welding supply distribution panel (one vertical)	Nos	2	1251	2502
5	**Erection / Dismantling of following including welding / cutting & painting**				
5.1	50X6 to 75x8 MS angle	mtr.	60	248	14880
5.2	25X3 to 40x6 ms angle	mtr.	50	248	12400
5.3	50mm to 100mm channel(ISMC)	mtr.	20	371	7420
5.4	All type MS/ GI flats	mtr.	40	248	9920
6	**Miscellaneous works**				
6.1	Fault finding/rectification like earth leakage/ fault in lighting ckts etc.	Nos	1320	251	331320

6.2	Erection of 20mm /40mm dia GI conduit on metal structure, wall etc. including spacers, saddles, GI earthing wire, JBs, tees etc.	mtr.	50	123	6150
6.3	Dismantling/removal of conduit described at 6b above.	mtr.	50	61	3050
6.4	Erection of casing capping including, tees, elbows etc.	mtr.	200	61	12200
6.5	Dismantling/removal of casing capping incl. tees, elbows, wires etc.	mtr.	150	31	4650
6.6	Laying/pulling of PVC insulated copper wire (3 nos 1.5&4.0 sq mm) in conduits/casing-capping	mtr.	1200	62	74400
6.7	Erection of rigid PVC conduit including all required accessories.	mtr.	400	61	24400
6.8	Dismantling/removal of rigid PVC conduit including all required accessories.	mtr.	75	31	2325
6.9	Removal of PVC wires already laid in conduits/casing-capping(3 nos 1.5&4.0 sq mm).	mtr.	600	15	9000
6.10	Providing temporary lighting fixtures during shutdown / festivals along with flexible cable etc	nos	200	187	37400
6.11	Power supply connection & removal for different work of other agency like for welding M/c, grinding M/c, lighting fixtures etc	nos	350	187	65450
6.12	Laying of power cable through walls, structures, cable trays/tranches etc up to 16 sqmm size	mtr.	3600	31	111600
6.13	Laying of power cable through walls, structures, cable trays/tranches etc from 16sqmm to 70 sqmm size	mtr.	500	46	23000
6.14	Laying of power cable through walls, structures, cable trays/tranches etc from 95sqmm to 185 sqmm size	mtr.	500	77	38500
6.15	Excavation (750mm depth, 300 mm wide), brick & sand bedding, backfilling for laying of cables in ground (sand & bricks shall be supplied by GIPCL)	mtr.	120	123	14760
6.16	Glanding & termination of power cable up to 16 sqmm size (gland & lugs shall be supplied by GIPCL) one end	nos	200	126	25200
6.17	Glanding & termination of power cable from 25 to 70 sqmm size (gland & lugs shall be supplied by GIPCL) one end	nos	40	126	5040
6.18	Glanding & termination of power cable from 95 to 185 sqmm size (gland & lugs shall be supplied by GIPCL) one end	Nos	30	251	7530
6.19	Timer setting / Gyser thermostat re-setting	Nos	250	61	15250
6.20	Per day charges for deputing one technician & one helper for any lighting work at BODHAN PUMP HOUSE	Nos	12	1005	12060
6.21	Per day charges for deputing one technician & TWO helper for any lighting work at BODHAN PUMP	Nos	5	1496	7480

	HOUSE				
7	**Providing additional man power for Unit Shut down (round the clock), presence during function & other unforseen jobs etc.**				
7.1	Supervisor (DEE) - Normal 8 hour duty	day	5	514	2570
7.2	Sr. Technician - Normal 8 hour duty	day	80	514	41120
7.3	ITI Technician - Normal 8 hour duty	day	80	503	40240
7.4	Helper - Normal 8 hour duty	day	160	491	78560
7.5	Supervisor (DEE) - OT after normal 8 hrs duty	Hrs	5	76	380
7.6	Sr. Technician - OT after normal 8 hrs duty	Hrs	80	76	6080
7.7	ITI Technician - OT after normal 8 hrs duty	Hrs	80	74	5920
7.8	Helper - OT after normal 8 hrs duty	Hrs	280	72	20160
7.9	Polythene covering for JB / Changeover switch / lighting panels etc.	Kg	200	61	12200
7.10	Cleaing of LP / LDB / WDB / C/O switch etc. located in various areas by air blower only	Nos.	236	123	29028
C1	**Total estimate value for SLPP1, solar & colony lighting for two year without escalation**				**3121402**

C2 : Price schedule for Main plant Lighting system SLPP-2 (Package-C)

Sr. No.	Item Description	UoM	Qty for Two year	Unit SOR rate w/o service tax for first year in Rs.	Total SOR Price w/o service tax for two year (W/o escalation) in Rs.
1	**Attending Deffects of lighting fixtures including cleaning, wire tightness, component checking including CG box, JB's rectifications/ replacement of component if required etc.**				
1.1	All type of Fluorescent tube light fittings. Excl false ceiling areas	Nos	350	124	43400
1.2	Fluorescent light fittings in all false ceiling area.	Nos	150	124	18600
1.3	All type of incandescent/CFL light fittings	Nos	100	61	6100
1.4	All HPSV/HPMV light fittings at height up to 6.0M.	Nos	1000	248	248000
1.5	All HPSV/HPMV high bay/medium bay light fittings at height 6.00 to 12.00mtr.	Nos	180	250	45000
1.6	Light fitting mounted in the TG hall	Nos	25	187	4675
1.7	Area light fittings (HPMV/HPSV/SON/ HALOGEN) mounted on flood light tower, watch towers, roof tops.	Nos	25	251	6275
1.8	Post top lantern fitting	Nos	15	124	1860

1.9	All type Street lights fittings.	Nos	50	377	18850
1.10	Aviation light fitting (twin) on 120 mtr. high chimney.	Nos	8	503	4024
2	**Maintenance of following items including cleaning, wire tightness, component checking, rectifications/ replacement of component if required etc.**				
2.1	5A/15A/32A decorative socket/receptacle with switch & fan regulator, box,CAPACITOR	Nos	150	98	14700
2.2	10A/20A/32 A, 230v/24v metal clad industrial/flame proof type receptacle/power plug/ switch//MCB/ELCB/timers/spike guard	Nos	180	98	17640
2.3	32A,415v industrial type receptacle	Nos	2	126	252
2.4	63A,415v industrial type receptacle	Nos	60	126	7560
2.5	Complete distribution board(wooden/metalic) of max. size 1X1feet including internal wiring termination.	Nos	25	123	3075
2.6	Water heater / gyser	Nos	5	246	1230
2.7	All type of ceiling fan	Nos	25	246	6150
2.8	All type of Wall mounted / pedastal Fan	Nos	20	123	2460
2.9	Exhaust fan light duty(1 PH)	Nos	5	123	615
2.10	PM of 1 ph ac lighting panels- 9ckt	Nos	5	123	615
2.11	PM of 1 ph ac lighting panels- 6ckt/3ckt	Nos	2	123	246
2.12	PM of 3 ph lighting panel	Nos	150	246	36900
2.13	PM of DC lighting panels- 3 ckt /6ckt	Nos	30	246	7380
2.14	PM of 25KVA dry type lighting transformer with DB	Nos	2	503	1006
2.15	PM of 100/50KVA dry type lighting transformer (12+13) along with DB	Nos	60	503	30180
2.16	PM of 24v ac, 5 kva supply Distribution Board with transformer	Nos	6	251	1506
2.17	PM of JB / CHANGE OVER SWITCH up to 300X 300 size	Nos	30	123	3690
2.18	PM of JB/ CHANGE OVER SWITCH more than 300X 300 size	Nos	20	123	2460
2.19	PM of LT panel (one Vertical with all modules) / Welding Supply DB/ 9 energy meter panel	Nos	60	503	30180
2.20	PM of DC Lighting distribution board - 6 ckt / 9 ckt	Nos.	30	503	15090
2.21	PM of LT motors up to 15 KW	Nos	10	251	2510
2.22	PM of 100 to 500 KVA oil filled transformer	Nos	2	1508	3016
2.23	Ceiling Fan oiling / greasing of any type and make including exhaust fan / pedestal fan etc.	Nos.	100	123	12300
2.24	Capacitor replacement for ceiling fan, exhaust fan, pedestal fan etc.	Nos.	100	123	12300
3	**Removal /& Erection of following type of lighting fittings including erection/ removal of all component / accessories.**				

3.1	Fluorescent light fittings (1x40w, 2x40w, 1x20w & 4x 20w etc.) excluding false ceiling area installed at normal (3 to 5 mtr) height.	Nos	75	123	9225
3.2	Fluorescent light fittings in all false ceiling area.	Nos	15	123	1845
3.3	All type of incandescent/CFL light fittings 230v ac/dc up to 200w lamp in all area.	Nos	25	123	3075
3.4	All HPSV/HPMV light fittings including CG box igniter etc at normal height up to 6.0mtr.	Nos	150	246	36900
3.5	All HPSV/HPMV high bay/mediam bay light fittings including CG box igniter etc.at height 6.00 to 12.00mtr.	Nos	25	374	9350
3.6	Light fitting mounted in the TG hall	Nos	5	371	1855
3.7	Area light fittings (HPMV/HPSV/SON/ HALOGEN) mounted on flood light tower, watch towers, roof tops.	Nos	25	374	9350
3.8	Post top lantern fitting	Nos	2	246	492
3.9	All type Street lights fittings.	Nos	10	494	4940
3.10	Aviation light fitting (twin) on 120 mtr. high chimney.	Nos	5	503	2515
4	**Removal /& Erection of following items including all accessories.**				
4.1	5A/15A/32A decorative socket/receptacle with switch & box, fan regulator/MCB/ELCB etc	Nos	120	123	14760
4.2	10A/20A/32 A, 230v/24v metal clad industrial/flame proof type receptacle/power plug/ switch//MCB/ELCB/timers/spike guard	Nos	100	123	12300
4.3	32A,415v industrial type receptacle	Nos	5	246	1230
4.4	63A,415v industrial type receptacle	Nos	10	246	2460
4.5	Complete distribution board(wooden/metalic) of max. size 1X1feet including internal wiring termination.	Nos	80	184	14720
4.6	3 ph switch box / changeover box up to 250A	Nos	5	503	2515
4.7	All type of ceiling fan	Nos	50	246	12300
4.8	All type of Wall mounted / PEDASTAL Fan	Nos	20	123	2460
4.9	Exhaust fan light duty(1 PH)	Nos	4	123	492
4.10	1 ph ac lighting panels- 9ckt	Nos	2	251	502
4.11	1 ph ac lighting panels- 3ckt/6ckt	Nos	2	251	502
4.12	3 ph lighting panel	Nos	5	503	2515
4.13	DC lighting panels- 3ckt/6ckt	Nos	2	503	1006
4.14	100KVA /50KVA Lighting Distribution Board(LDB) W/O transformer	Nos	1	748	748
4.15	100KVA / 50KVA dry type lighting transformer	Nos	2	1251	2502
4.16	25KVA Street Lighting Distribution Board (SLDB)W/O transformer	Nos	1	999	999
4.17	25KVA dry type lighting transformer	Nos	1	999	999
4.18	24v ac, 5 kva supply Distribution Board	Nos	1	999	999

4.19	JB / CHANGE OVER SWITCH up to 300X 300 size	Nos	8	246	1968
4.20	JB/ CHANGE OVER SWITCH more than 300X 300 size	Nos	8	371	2968
4.21	3ph /1 ph energy meters	Nos	5	246	1230
4.22	LT panel / welding supply distribution panel (one vertical)	Nos	5	1251	6255
5	**Erection / Dismantling of following including welding / cutting & painting**				
5.1	50X6 to 75x8 MS angle	mtr.	50	248	12400
5.2	25X3 to 40x6 ms angle	mtr.	50	248	12400
5.3	50mm to 100mm channel(ISMC)	mtr.	10	371	3710
5.4	All type MS/ GI flats	mtr.	100	248	24800
6	**Miscellaneous works**				
6.1	Fault finding/rectification like earth leakage/ earth fault in lighting ckts etc.	Nos	800	251	200800
6.2	Erection of 20mm /40mm dia GI conduit on metal structure, wall etc. including spacers, saddles, GI earthing wire, JBs, tees etc.	mtr.	100	123	12300
6.3	Dismentling/removal of conduit discribed at 6b above.	mtr.	100	61	6100
6.4	Erection of casing capping including, tees, elbows etc.	mtr.	100	61	6100
6.5	Dismantling/removal of casing capping including, tees, elbows, wires etc.	mtr.	25	31	775
6.6	Laying/pulling of PVC insulated copper wire (3 nos 1.5&4.0 sq mm) in conduits/casing-capping	mtr.	800	62	49600
6.7	Erection of rigid PVC conduit including all required accessories.	mtr.	100	61	6100
6.8	Dismantling/removal of rigid PVC conduit including all required accessories.	mtr.	50	31	1550
6.9	Removal of PVC wires already laid in conduits/casing-capping(3 nos 1.5&4.0 sq mm).	mtr.	200	15	3000
6.10	Providing temporary lighting fixtures during shutdown / festivals along with flexible cable etc	nos	100	251	25100
6.11	Power supply connection & removal for different work of other agency like for welding M/c, grinding M/c, lighting fixtures etc	nos	250	126	31500
6.12	Laying of power cable through walls, structures, cable trays/tranches etc up to 16 sqmm size	mtr.	2600	31	80600
6.13	Laying of power cable through walls, structures, cable trays/tranches etc from 16sqmm to 70 sqmm size	mtr.	500	46	23000
6.14	Laying of power cable through walls, structures, cable trays/tranches etc from 95sqmm to 185 sqmm size	mtr.	500	77	38500

6.15	Excavation (750mm depth, 300 mm wide), brick & sand bedding, backfilling for laying of cables in ground (sand & bricks shall be supplied by GIPCL)	mtr.	120	123	14760
6.16	Glanding & termination of power cable up to 16 sqmm size (gland & lugs shall be supplied by GIPCL) one end	nos	120	126	15120
6.17	Glanding & termination of power cable from 25 to 70 sqmm size (gland & lugs shall be supplied by GIPCL) one end	nos	20	126	2520
6.18	Glanding & termination of power cable from 95 to 185 sqmm size (gland & lugs shall be supplied by GIPCL) one end	Nos	20	251	5020
6.19	Timer setting / Gyser thermostat re-setting	Nos	260	61	15860
6.20	Per day charges for deputing one technicain & one helper for any lighting work at SOLAR PLANT and PATNA PUMP HOUSE	Nos	40	1005	40200
6.21	Per day charges for deputing one technicain & TWO helper for any lighting work at SOLAR PLANT and PATNA PUMP HOUSE	Nos	10	1496	14960
7	**Providing additional man power for Unit Shut down (round the clock), presence during function & other unforseen jobs etc.**				
7.1	Supervisor (DEE) - Normal 8 hour duty	day	2	514	1028
7.2	ITI Technician - Normal 8 hour duty	day	100	503	50300
7.3	Helper - Normal 8 hour duty	day	200	491	98200
7.4	Supervisor (DEE) - OT after normal 8 hrs duty	Hrs	5	76	380
7.5	ITI Technician - OT after normal 8 hrs duty	Hrs	160	74	11840
7.6	Helper - OT after normal 8 hrs duty	Hrs	162	72	11664
7.7	Polythene covering for JB / Changeover switch / lighting panels etc.	kg	198	61	12078
7.8	Cleaing of LP / LDB / WDB / C/O switch etc. located in various areas by air blower only	Nos.	250	123	30750
C2	**Total estimate value for mainplant SLPP2 lighting for two year without escalation**				**1638837**

Summary of price schedules

	Pakage A (Main plant & Solar)	Total in Rs.
A1	PRICE SCHEDULE A1 : TOTAL main plant SLPP-1 PM (two year w/o escalation)	3335114
A2	PRICE SCHEDULE A2 : TOTAL main plant SLPP-2 PM (two year w/o escalation)	3185862

A3	PRICE SCHEDULE A3 : TOTAL Solar plant PM (two year w/o escalation)	185348
A4	PRICE SCHEDULE A4 : TOTAL Main plant defect SLP1 & 2 (two year w/o escalation)	2726448
A5	PRICE SCHEDULE A5 : TOTAL Solar plant defect (two year w/o escalation)	39038
A6	PRICE SCHEDULE A6 : TOTAL main plant unforseen job (two year w/o escalation)	169040
A	**Total for package A (A1 to A6) for two year w/o escalation**	**9640850**
	Pakage B (LLHS, AHS, LIME and external lignite handling system at mines end)	
B1	PRICE SCHEDULE B1 : TOTAL LLHS, AHS, LIME PM (two year w/o escalation)	4839136
B2	PRICE SCHEDULE B2 : TOTAL LLHS, AHS, LIME defect (two year w/o escalation)	1949090
B3	PRICE SCHEDULE B3 : TOTAL LLHS, AHS, LIME shift maint. (two year w/o escalation)	1865880
B4	PRICE SCHEDULE B4 : TOTAL LLHS, AHS, LIME unforseen job(two year w/o escalation)	206012
B	**Total for package B (B1 to B4) for two year w/o escalation**	**8860118**
	Pakage C (Lighting system of Main plant, Solar plant & colony)	
C1	PRICE SCHEDULE C1 : TOTAL Main plant SLPP1, Solar & Colony (two year w/o escalation)	3121402
C1	PRICE SCHEDULE C2 : TOTAL Main plant SLPP2 (two year w/o escalation)	1638837
C	**Total for package C (C1 to C2) for two year w/o escalation**	**4760239**
D	Totat estimated price for two year (without service tax and without escalation.) A+B+C	**23261207**
E	Totat estimated price for first year (without service tax. (D /2)	**11630604**
F	Totat estimated price for second year withou escalation (without service tax. (D /2)	**11630604**
G	5% escalation value on second year estimated value (F * 0.05)	**581530.2**
H	Totat estimated price for second year with 5% escalation (without service tax. (F +G)	**12212134**
I	**Totat estimated price for FOR TWO year with 5% escalation in SECOND year (without service tax.) E+H**	**23842737**

Note: The above rates are inclusive of all labour cost, equipments, supervision, tools, tackles, all taxes (excluding Service Tax), VAT, royalties, duties, etc…

Note: The rates shall include all labour cost, equipments, supervision, consumables, tools, tackles, all taxes & duties (excluding service tax).

My rates are as under.

At estimated value

OR _____ %age above the estimated value

OR _____%age below the estimated value.

SECTION-F

LIST OF ANNEXURES & FORMS

1.0 ANNEXURE-A

CHECK LIST FOR PASSING THE BILLS
(ANNUAL MAINTENANCE CONTRACT)

For the month of_____

1. Work order/PO no. & contract value :_____
2. Nature of work :_____
3. Duration of work order : From _____ to _____
4. Maxi. No. of manpower per day deployed in the month : M_____ F _____ Total _____
5. Details of labour license : Valid up to _____ for _____ persons
6. Details of W.C. policy : Valid up to _____ for _____ persons
7. Documents attached for verification for the previous month : Wage & attendance sheets Yes/No
   : PF Challan Yes/No
8. Documents attached for verification (In case of final bill) : Bonus payment Register Yes/No
   : Leave wage Register Yes/No
9. Security deposit / Retention money lying with Co. : Yes/No. If yes, R. _____

Date:_____

Signature of the contractor
with official stamp.

2.0 ANNEXURE-B

PROFORMA OF BANK GUARANTEE FOR ORDER PERFORMANCE

(To be Stamped in accordance with Stamp Act)

Ref: ……. Bank Guarantee No…….

Date …….

Bank Guarantee Cover period from …….. to ……..

To
M/s. GUJARAT INDUSTRIES POWER COMPANY LTD.
At & Post Nani Naroli
Taluka Mangrol
Dist. Surat

Gujarat-394 110.

Dear Sir,

In consideration of the Gujarat Industries Power Company Limited (hereinafter referred to as the Purchaser which expression shall unless repugnant to the context/or meaning thereof include its successors, administrators, and assigns) having awarded to M/s…….having its Registered Office/Principal Office at (address) ……. (hereinafter referred to as the "CONTRACTOR" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns) a Order by issue of Purchaser's Letter of Intent No…….dated…….and same having been unequivocally accepted by the CONTRACTOR dated ……..valued at ……..for (scope of order) ……and the contractor having agreed to provide a Order Performance Guarantee for the faithful performance of the entire order including for the quality of the materials and/or workmanship, successful commissioning and satisfactory performance of the equipments/system and satisfactory services rendered during the guarantee/warrantee period of …….. Months under the said LOI/Order equivalent to…...*…... (Percent) of the said value of the order to the purchaser
(Name & address of Bank) ……..
having its Head Office at …… (hereinafter referred to as the "Bank" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors, assigns) do hereby irrevocably guarantee and undertake to pay the Purchaser, on written demand any and all moneys payable by the CONTRACTOR to the extent of (in figures) …….. (in words) …… as aforesaid at any time up to (days/months/year) **…….. without any demur, reservations, contest, recourse or protest and/or without any reference to the CONTRACTOR. Any such demand made by the Purchaser on the bank shall be conclusive and binding notwithstanding any difference between the Purchaser and CONTRACTOR of any dispute pending before any Court, Tribunal, Arbitrator or any other Authority.

….2

(2)

It shall be conclusive and enough for enforcement of the BANK GUARANTEE on the bank if GUJARAT INDUSTRIES POWER COMPANY LIMITED invokes the BANK GUARANTEE stating only that the default has been committed by the contractor, thus far and no further. The bank undertakes not to revoke this guarantee during its currency without previous written consent of the purchaser and continue to be enforceable till the Purchaser discharges this guarantee.

The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the Order by the CONTRACTOR. The Purchaser shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the CONTRACTOR, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied in the Order between the Purchaser and the CONTRACTOR or any other course of or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference to the matter aforesaid or any of them or by reason or any other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank. The Bank also agrees that the Purchaser at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that the Purchaser may have in relation to the CONTRACTOR's liabilities.

Notwithstanding anything contained herein above our liability under this Guarantee is restricted to Rs…….. and it shall remain in force up to the including ……unless a written demand to enforce any claim under this Guarantee is lodged with us before expiry date, the Bank will be discharged from its liabilities under this Guarantee. This Guarantee shall be extended from time to time for such period or period as may be desired by the ……..…….. on whose behalf this guarantee has been given.

Dates this……..……day of ……20……
at …….

……..
Signature

Banker's rubber stamp:

Name

Designation with
Bank stamp:

Attorney as per power of
Attorney No.

Dated:

3.0 ANNEXURE-C

PROFORMA FOR BANK GUARANTEE FOR EMD

(To be stamped in accordance with Stamp Act)

Ref …….. Bank Guarantee No……

Date ……..

Guarantee cover period: From ……..……To ……..

To
M/s. Gujarat Industries Power Company Limited
At & Post – Nani Naroli
Taluka: Mangrol
Dist.Surat-394 110

Dear Sirs,

In accordance with your "Invitation for Bids" under your Specification No……..……Dated……
M/s……. having its Registered/Head office at…… …… …… …… …… …… (Herein after called the Bidder) wish to participate in the said Bid for ……

As an irrevocable bank Guarantee against Bid guarantee for an amount of Rs…….. valid for one (1) year from …… is required to be submitted by the Bidder as a condition precedent for participation in the said Bid, which amount is liable to be forfeited on the happening of any contingencies mentioned in the Bid Documents.

We, the …… Bank at …….., having our Head Office at (local address) …….. Guarantee and undertake to pay immediately on written demand by Gujarat Industries Power Company Limited (hereinafter called the "Purchaser")
(In figures) …… (In words) ……. without any reservation, protest, demur and recourse. Any such demand made by said "Purchaser" shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder. It shall be conclusive and enough for enforcement of Bank Guarantee on the Bank if Purchaser invokes the Bank Guarantee stating only that the default has been committed by the Bidder, thus far and no further.

Contd….2

(2)

This Guarantee shall be irrevocable and shall remain valid up to …… if any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from …….. on whose behalf the guarantee is issued.

In witness there of Bank, through its authorized Officer, has set its hand and stamp on this …….. day of ……20 …… at ……

……
(Signature)

…….
(Name)

Designation with Bank

Stamp:

Attorney as per Power of
Attorney No.

Dated …….

4.0 ANNEXURE-D

PERFORMA CERTIFICATE
(No claim, No arbitration)

To,
Addl. General Manager (SLPP)
Gujarat Industries Power Company Limited,
Surat Lignite Power Plant,
Village: Nani Naroli, Ta. Mangrol,
Dist. Surat – 394110 (Gujarat).

Dear Sir,

Subject:_____

Ref: Work Order No.:_____Dated_____

We hereby confirm with free consent as under:-

1. The measurements certified in final bill is full and final. We accept all the certified measurements and no claim related to the measurement is left.
2. The payment certified in that or above referred LoI / contract is full and final. We accept this, and no claim related to payment is left.
3. The rates of the LoI / contract and its amendments are firm till completion of contract and extension period. We shall not claim any escalation against these rates.
4. Along with the contract referred, the ARBITRATION CLAUSE also perishes i.e. we will not resort to arbitration.
5. No extra items are left to be settled.
6. We do not have any claims against any item related to the LoI than those items certified in the bills.
7. We are accepting the recoveries or hold amount from our bills, if any, made by GIPCL against non compliance or as decided by GIPCL within terms & conditions of contract.
8. We have paid royalties, taxes for all the materials procured by us, for carrying out the works for above LoI and we indemnify GIPCL from any liability arising thereof.
9. In case of any disputes arising in future related to payment of royalties, all liabilities of settlement of dispute and its payment if any, will be borne by us.
10. We have paid wages to all the workmen who were deployed by us for carrying out above referred work as per prevailing Minimum wages act. We have also fulfilled all requirements of the P.F. Act. We have maintained all records necessary as per the statutory requirements. We hereby indemnify GIPCL from any disputes arising in future related to payment of labours, Provident Fund, etc.. and confirm that all liabilities of settlements of disputes and their payment is our responsibility.

The above confirmation will come into effect as soon as payment from final bill after due recoveries will be received by us.

For, M/S._____

Signature, Stamp and date.

5. Form-A

List of qualifying staff to be submitted with physical documents

Sr. No.	**Name of Supervisor**	Qualification	Experience

Contractor / Authorized Representative's
Signature, Company's / Organization's Seal & Date

Note: Form-A of Bid without price shall be submitted with Part-I

6. ANNEXURE-E

(Performa for daily work done report/measurement sheet)

Name of Work:

Name of Agency:

Work Order No.:

DAILY WORK DONE REPORT FOR DATE: _____

Name of Supervisor of Contractor: _____

Sign of Engineer-in-charge (to be taken at 08:30 AM to 08:45 AM):_____

_____
Sign of Contractor's site-in-charge

Total nos. of trips certified by me

_____
(Shift-in-charge, Main Control Room)

Name: _____

Date: _____

7. ANNEXURE – F

LIST OF MINIMUM TOOLS AND TACKLES TO BE PROVIDED BY THE CONTRACTOR (TENTATIVE) FOR EACH PACKAGE (A , B &C)

A. List of minimum tools and tackles for MAIN PLANT BMC (PACKAGE-A)

Sr. no	Items	UOM	Min. Qty
1	Standard tool box containing set of ring & D spanners, mechanical heavy screw drivers, tubular spanners, align keys, hammer, cutter, pliers set.	sets	12
2	Taparia make tester, screw driver set and pliers	nos	24
3	Hand drill Machine hammer /impact type with all size drill bits FOR METAL & CONCRETE	nos	1
4	heavy duty Hand drill Machine hammer /impact type with all size drill bits FOR METAL & CONCRETE	nos	1
5	3D/Jainson make Crimping tools for up to 10 sqmm cables	nos	2
6	3D/Jainson make Crimping tools for 16 to 70sqmm sqmm cables	nos	2
7	3D/Jainson make Crimping tools for 70 to 300sqmm sqmm cables	nos	2
8	Knife for cable insulation cutting	nos	12
9	Big size torch (Kisan torch) with spare cells.	nos.	4
10	Continuity tester	nos	6
11	Megger 500/1000Volts (Dual range) make MACO or RISHABH/Motwane make (Two hand operated & three electronic)	nos	5
12	Digital Multi meters-3½ Digit 1999 Count with Big Display, Audible Continuity, Diode & hFE Test Any reputed make	nos	4
13	Digital Clampmeters / Tongtesters 3¾ Digit 3999 Count 1000A AC Autoranging with Frequency	nos	4
14	Clip-on meter - DC up to 200 A	nos	1
15	Earth resistance measurement 0-100 ohm accuracy 5% reputed make	nos	1
16	Torque wrench large up to 120 N-M	nos	2
17	Hacksaw frame and high speed blade	set. each	4
18	3 Phase Welding machine with required poswer & welding cable (minimum 50mtr) and welding rod	nos	1
19	Measuring steel tapes (6 mtr & 30 mtr)	nos. each	2
20	Heavy duty Carry bag for tools & tacked for each	nos	15

	technician		
21	Soldering iron with temperature control 150 watt / 50 watt	nos	1
22	De soldering gun and pump	nos	1
23	Hot air blower	nos	2
24	Air Blower	nos	4
25	Box spanner (8 MM TO 32 MM) SET	nos	3
26	Tubular spanner set (4MM TO 32 MM) SET	nos	3
27	Set of Allen Key 1.5 mm -12 mm	nos	4
28	Set of Allen Key .5 inch -2 inch	nos	4
29	Set of nut driver 3mm - 12 mm	nos	4
30	hand lamp with extention board and cable 20 mtr each with spare bulbs	nos	4
31	500 W halogen lamp with wire of 50 Meter length each with spare halogen tubes	nos	4
32	Reputed make set of insulated screw drivers	nos	3
33	Reputed make set of insulated D spannars	nos	3
34	bearing puller set	nos	1

B. List of minimum tools and tackles for Lignite & Lime stone handling & milling, external Lignite handling system at Mangrol mines end, Ash handling system (Package-B)

Sr. No.	Measuring Instruments / Tools / Tackles	Qty.
1	Insulator tester 0 - 200M ohm, 500V DC.	3 Nos.
2	Insulation Testers 0 - 200M ohm, 1000V DC	1nos
3	Digital Multi meters-3½ Digit 1999 Count with Big Display, Audible Continuity, Diode Test Any reputed make	06 Nos.
4	Continuity Tester	4 Nos.
5	Line tester	25
6	Clip-on meter - DC up to 200 A	1 Nos.
7	Digital Clamp meters / Tong testers 3¾ Digit 3999 Count 1000A AC Auto ranging with Frequency	2 Nos.
8	Digital Clamp meters / Tong testers 3¾ Digit- 0 - 5 A AC / DC	1 Nos.
9	Multi meter with range up to max 200mA-20 mA	1 Nos.
10	Torque wrench large up to 120 N-M	1 Sets
11	Earth Megger 0-100 ohm accuracy 5% reputed make	1 No.
12	Soldering iron with temperature control 150 watt / 50 watt	1 No.
13	De soldering gun and pump	1 set
14	Hand drill machine14MM with drill bits 3mm to 16 mm (metal & concrete) of different sizes	1 Nos.
15	Grease gun small size and big size	2 Each
16	Bearing puller for bearing size up to NU 322	1 No.
17	Crimping Tool up to 16 sq. mm. Manual	2 No.
18	Crimping Tool 16-120 sq. mm. Manual	1 No.
19	Crimping Tool Above 120 sq. mm. Hydraulic	1 No.
20	Hot air blower	1 Nos.
21	Air Blower	4 Nos.
22	Box spanner (8 MM TO 32 MM) SET	2 set
23	Tubular spanner set (4MM TO 32 MM) SET	2 set
24	Hand lamps	2 Nos.
25	Torches (Large size)	4 Nos.
26	Hacksaw (Small & Big size)	2 Each
27	Safety gloves –Elect. Insulated 11 KV	2 Pair
28	Acid proof gloves, shoes for battery maintenance	2 Pair

29	Wire stripper	6 Nos.
30	Knife	13 Nos.
31	Circlip Pliers	2 Nos.
32	Set of Ring Spanners 5 mm- 27 mm	9set
33	Set of Fixed Spanners 5 mm- 27 mm	9 set
34	Set of Box Spanners 5 mm- 27 mm	2 set
35	Set of Allen Key 1.5 mm -12 mm	9 set
36	500 W halogen lamp with wire of 50 Meter length each	2 set
37	Wire brushes 12"	9no.
38	Paint brushes 2"	9 No.
39	Reputed make set of insulated screw drivers	9 No
40	Heavy duty insulated screw drivers	9 No.
41	Mechanical heavy duty screw drivers	9 No.
42	Set of nut driver 3mm - 12 mm	9 no.
43	Insulated cutting pliers	9 no.
44	Nose pliers & pliers	9 set
45	Hammer MS Metal	7 no.
46	Hammer Plastic	7 no.
47	Single way wire rope pulley capacity-2 ton	1 no.
48	Double way wire rope pulley capacity-5 ton	1 no.
49	Chain pulley Block 1 ton	2 no
50	Gas cutting set with trolley, torch & pies.	1set

C. List of minimum tools and tackles for MAIN PLANT LIGHTING (PACKAGE-C)

Sr. no	Items	Quantity
1.	Standard tool box containing set of ring & D spanners, mechanical heavy screw drivers, tubular spanners, align keys, hammer, cutter, pliers set.	5 sets
2.	Ta paria make tester, screw driver set and pliers	14 nos.
3.	Box spanner (4 MM TO 32 MM) SET	1 set
4.	Hand drill Machine hammer /impact type with all size drill bits FOR METAL & CONCRETE	2 nos.
5.	3D/Jainson make Crimping tools for up to 10 sq.mm cables	2 nos.
6.	3D/Jainson make Crimping tools for 16 to 70sqmm sq.mm cables	1 nos.
7.	Knife for cable insulation cutting	6 nos.
8.	Digital Multimeter – Maco /Philips/Rishabh make	3 nos.
9.	Clip-on meter for measuring AC/DC current up to 100A Maco /Rishabh make	3 nos.
10.	Continuity tester	4 nos.
11.	Megger 500/1000Volts (Dual range) make MACO or RISHABH/MEGGER make (one hand operated & TWO electronic)	3 nos.
12.	Heavy duty Trolley for material handling	1 nos.
13.	1 Phase Welding machine with required cable (minimum 50mtr) and welding rod	1 nos.
14.	Measuring steel tapes (6 Meter & 30 Meter)	1 nos. each
15.	Hacksaw frame and high speed	3 set. each
16.	Die set for bending 20/25mm GI conduits	1 set
17.	Vice with stand	1 set
18.	Good quality Blower with required cable	3 nos.
19.	Big size torch (Kisan torch) with spare cells.	4 nos.
20.	Grinding & cutting machine with spare wheels	1 nos.
21.	Holesaw cutter with each type of adopter – all size	1 set
22.	Hot air blower with required cable	1 no.
23.	Heavy duty Carry bag for tools & tacked for each technician	5 no.

8. ANNEXURE–G

SCHEDULE OF DEVIATION FROM GENERAL AND TECHNICAL SPECIFICATIONS

All the deviations from the general and technical specifications shall be filled by BIDDER clause by cluase in this schedule.

Sr. No	SECTION	CLAUSE NO	AS PER TENDER DOCUMENT	DEVIATION

The bidder here by certifies that the above mentioned are the only deviations from OWNER's General/ Technical Conditions of this enquiry. The bidder further confirms that in the events any other data and information presented in the BIDDER's proposal and accompanying documents are at variance with specific requirements laid out in the OWNER's General /Technical Specifications, then the latter shall govern and will be binding on the BIDDER for quoted price.

COMPANY SEAL

SIGNATURE ……

NAME ……

DESIGNATION ……..

COMPANY ……

DATE ……..