

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;

4X125 MW, Surat Lignite Power Plant, Unit # I to IV: Annual operation and maintenance contract of Phase-1 & Phase-2 Central AC plant, Package AC, Window/split AC and Ventilation System (Includes mechanical, electrical and C & I system) for two years 2017-19

Bid No.: SLPP/MECH/AC&V/AMC/2017-19



INSTRUCTIONS TO BIDDERS & CONDITIONS OF CONTRACT

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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/MECH/AC & V/AMC/2017-19

Name of work	4X125 MW, Surat Lignite Power Plant, Unit # I to IV: Annual Operation & Maintenance Contract for phase-1 & 2 AC & Ventilation system for two 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	02 years.		
EMD	Rs 60,000.00 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. 3000.00 by Demand Draft in favor of GIPCL payable at Motamiya-Mangrol or Nani Naroli.		
Pre Bid meeting	On 16.03.2017, 11:00 hrs. At office of GIPCL-Surat Lignite Power Plant, Village: Nani Naroli, Ta. Mangrol, Dist. Surat.		
Availability of online e- Tender document			
Last date of online submission of offer	31.03.2017 up to 17:30 hrs. on website: www.nprocure.com		
Submission of EMD, Tender fee and other supporting documents for technical Bid in physical form.	On or before 04.04.2017 during office hours at office of Surat Lignite Power Plant, Nani Naroli, Dist. Surat.		

NOTES:

- 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 or split the work among the Bidders 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 conditional tender will not be entertained and shall be liable for rejection.
- 5. The Bidders are required to submit their Bids online only through the website www.nprocure.com
- 6. 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 - 394110, Gujarat. Phone: (02629) 261063-72. E-Mail: opsharma@gipcl.com

SECTION-A INSTRUCTIONS TO BIDDERS

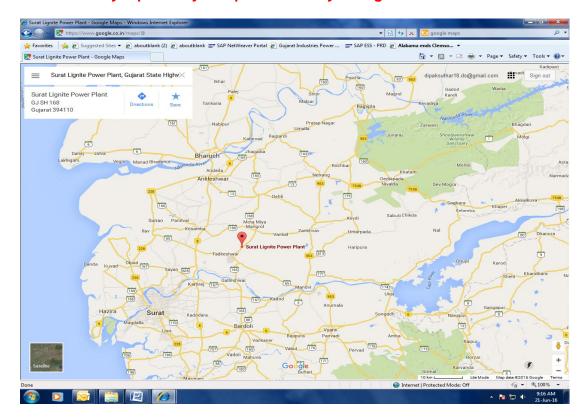
1. PLANT SYNOPSIS

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 capacity 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-Ahmedabad 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 annual Operation & Maintenance Contract for Unit # I to IV (Phase-1 & 2) Central AC plant, Package AC, Window/Split AC & Ventilation system for two years of contract period (2017-19) at SLPP and is therefore inviting open tenders online (www.nprocure.com) from experienced & resourceful contractors.

2. SCOPE OF WORK

2.1 The scope of work under this tender enquiry covers total operation & maintenance of mechanical, electrical and C & I system (preventive, breakdown and annual shut down job) of Phase-1 & 2 AC & Ventilation system at 4 x 125 MW Surat lignite power plant.

The detail of scope of work with technical activity & estimation is given in enclosed Section-E1 & E2 as under:

- 1. Package-1 (For Phase-1 UNIT # 1 & 2 AC & Ventilation System).
- 2. Package-2 (For Phase-2 UNIT # 3 & 4 AC & Ventilation system).
- 3. Package-3 (For supply of items required for Window AC & Split AC)
- 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.

 Detail scope of work shall be as per clause no. 1 of following Section-D.

3. GENERAL INSTRUCTIONS

The Bidders who are interested in participating in the tender must read and comply with the instructions and the Terms & Conditions contained in the tender documents.

- 3.1 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.
- 3.2 The Bidders are requested to make themselves fully conversant with the General Conditions of Contract, Special Conditions of Contract, Technical Specifications, Site conditions, Safety & 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.
- 3.3 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.
- 3.4 Bidder has to quote for both Phase-I (Unit-1 & Unit-2) and Phase-II (Unit-3 & Unit-4). Bids received for only one Phase shall not be considered. However, GIPCL reserves the rights to allot all the four units' work to a single Bidder or GIPCL may split the contract between two parties, Phase-1 and Phase-2 work separately as it may deem appropriate. In case of splitting of the contract between two parties, the L2 Bidder shall match the rate with L1 Bidder.

- 3.5 Bidder has to submit all the information as per required 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.
- 3.6 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.
- 3.7 The tender documents shall not be transferable.
- 3.8 The Bidders are expected to examine all instructions, forms, terms & 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.
- 3.9 Conditional offers shall not be considered and liable to be rejected.
- 3.10 The Company reserves the right to extend the deadlines for submission of the Bids by giving amendments.
- 3.11 A Pre-Bid meeting will be organized by the Company before the last date & time for submission of Bids 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
- 3.12 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.
- 3.13 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.
- 3.14 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.
- 3.15 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.
- 3.16 Timely and satisfactory completion of the work and strict adherence to the allotted time frames for jobs shall be the essence of the contract.
- 3.17 The Company reserves the right to qualify/disqualify any applicant without assigning any reason.
- 3.18 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: www.nprocure.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.

BIDDER shall inspect the site, examine and obtain all information required and satisfy himself regarding matters such as access to site, communication, transport, working condition including constraint of work place, confined area, quantum of dusting, running equipment, importance of work, round the clock working conditions, safety requirements, right of way, high flood level in River, flow of water during monsoon/dry season in the River/Nallah, the type and number of equipment and facilities required for the satisfactory completion of work, the quantity of various items of the work, the availability of local labour, availability and rates of material, local working conditions, uncertainties of weather, obstructions and hindrances that may arise, etc which may affect the work or cost thereof, before submission of his Bid. 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 will be adopted for qualifying the Bidders for consideration of the Bid for the further proceeding.

5.1 Bidder should possess minimum two years of experience in operation & maintenance of single machine of 100TR capacity of AC & Ventilation system out of last five years in power plants / process industries 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 and should enclose proof of the same. 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.

5.2 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 Government/Semi Government along with certified copies of documentary evidence preferably photo copies of work experience from Central/State Government/Semi Government. The experience should be either of the following:

One similar completed work costing not less than the amount equal to Rs. 18 lakh

a. Two similar completed works each costing not less than the amount equal to Rs.12 lakh

OR

b. Three similar completed works each costing not less than the amount equal to Rs. 9 lakh

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

- **5.3** Contractor has 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.
- **Tender fee:** The tender fee shall be accompanied in form of Demand Draft.
- **5.5 EMD:** To pay EMD in the form of DD or Bank Guarantee given by Bank as described in subsequent clause no. 8.
- **5.6** Bidder should have separate Employees Provident Fund code number towards registration of firm with RPF commissioner.
- 5.7 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.
- 5.8 Bidder should have annual turnover more than 30% of the annual estimate for last three financial years. 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.

Note:

- 1. 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.
- 2. The Net worth at the end of the last financial year should be positive.
- **5.9** The Bidder has to submit INCOME TAX Permanent Account Number (PAN), TIN/VAT no. of the firm. Copies of the same shall be submitted.
- **5.10** Bidder has to submit Service Tax registration number. Copy of the same shall be submitted.
- **5.11** In case Bidder is a joint venture company, the above requirements/credential of Joint Venture Company / Parent companies shall be considered.

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.

Hence every Bidder is require to understood the importance of timely completion of maintenance work, additional resource management, working during Sunday, holidays, odd hours etc... with respect to other hindrances which may come across during execution of work.

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 (EMD) and TENDER FEE

An EMD of Rs. 60,000.00 (Rupees Sixty thousand only) and Non refundable Tender fee Rs. 3,000/- (Rupees Three Thousand only) shall accompany with Bid. The EMD & Tender fee shall be in the form of a crossed bank Demand Draft in favour 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

- 8.1. 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.
- 8.2. 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
- 8.3. The EMD of the successful bidder will be returned after payment of Security Deposit by successful bidder.
- 8.4. 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.
- 8.5. 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 8.9.
- 8.6. No interest shall be payable on EMD.
- 8.7. 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.
- 8.8. 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 BIDS

A: MODE OF SUBMISSION

The bids shall be submitted online at 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-J) 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.
- Service tax registration number/certificate copy.

(b) Price Bid:

- 1. Price Bid shall be submitted only in soft form through www.nprocure.com.
 - Note: Estimate includes cost of all manpower, equipments, vehicles, consumables, tools & tackles, transportation, Safety statutory compliance, mobilization etc...
- 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 _____%age below the estimated value OR_____%age 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 ON 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 should also be typed or printed below the signature on each page.
- (ii) Bid by a 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 by the President, Managing Director or by the Secretary or other person or persons authorised to Bid on behalf of such Corporation/Company in the matter. 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 may be disqualified.

10. MODIFICATION AND WITHDRAWAL OF BIDS

- a. The Bidder may modify or withdraw its 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 specified by the Bidder on the Bid Form.

11. POLICY FOR BIDS UNDER CONSIDERATION

- a. Bid shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award/rejection will be 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 date set for opening 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 authorised 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 (Annexure-B), 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.

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 for phase 1 & 2 to properly complete the job in given/scheduled time as per requirement.
- (iii) The Contractor shall depute its own workmen/labour 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 labour 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/labour 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/labour 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. 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.
- (vii) During execution of the works, one or more jobs may be required to be done simultaneously and the Contractor shall mobilize additional resources accordingly.
- (viii) During emergency or similar situations the Contractor shall be required to mobilize resources as per need within the period of 12 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.
- (ix) Important Note: Whenever any of the Unit at SLPP remains under outage due to any reason, the contractor shall mobilize sufficient work force at site within a period of 12 hours from the time of intimation to the site-incharge or via mail to your office. Generation loss occurred due to unsufficient manpower as well as resources will be viewed very seriously and will invite appropriate punitive measures as decided by competent authority.
- (x) During working in high risk area like hot lines of steam/ water/ oil the workman must wear a suitable safety apron, safety belt, safety hand gloves and goggles. It is the contractor's/contractor's supervisor's responsibility to ensure it without fail.
- (xi) During any breakdown, the contractor has to enhance the site manpower as per the requirement to ensure the timely completion of work. The work during the overhauling period is to 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 more than 16 hours.

B: TOOLS & TACKLES

- (i) All tools and tackles required to execute the contract are in the scope of the contractor. The contractor should ensure that tools and tackles are in healthy & working condition. All consumable items i.e. cloth, cotton waste, kerosene oil, gases (Oxygen, D/A, Argon), welding electrode, etc. would be in the scope of the contractor. <u>GIPCL will provide only refrigerant & nitrogen for central AC plant only.</u>
- (ii) The tentative list of such tools & tackles is enclosed as **ANNEXURE-G.**The contractor should note that this list is not exhaustive and if any

additional tools and tackles are required for proper performance of the contract, the same shall also be arranged by the contractor immediately with no extra cost to GIPCL.

Note: If work is suffered due to want of sufficient manpower, tools & tackles, vehicles, equipments and/or required consumables then **25%** of the total job cost will be levied as a penalty for each and every instance.

- (iii) For proper execution of the scope of work, the contractor is required to maintain sufficient quantity of tools & tackles with tractors, hydra & hydraulic trolleys in good working condition at site as per day to day work load, transportation of material and emergency situations to complete the work in stipulated time.Tractor, hydra will be provided to contractor on chargable basis, based on availability with GIPCL. Contractor has to arrange the same if not available with GIPCL to avoid any delay during work. If work suffered due to unavailability of resources penalty will be levied as per tender.
- (iv) 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 Sunday / holidays & night hours the contractor should be in a position to mobilize the manpower immediately within minimum time
- (v) Arrangement for lighting at the work spot has to be made by the contractor. Contractor 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.
- (vi) Pin sockets of IS standards should be used for all electrical 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 **opsharma@gipcl.com** / **slppmech@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. <u>UNDERSTANDING AND CLARIFICATION ON DOCUMENTS AND SPECIFICATION</u>

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 tender.
- 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 nprocure 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-incharge 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.(to be reviewed with legal and to be incorporated in special conditions only)

SECTION-B INSTRUCTIONS TO BIDDERS FOR ONLINE TENDERING

Bidders who wish to participate in this tender will have to procure or should have legally valid Digital Certificate (Class III) as per Information Technology Act-2000, using which they can sign their electronic bids. Bidders can procure the same from any of the license certifying Authority of India or can contact (n)code solutions-a division of GNFC Limited, who are licensed Certifying Authority by Government of India at address mentioned below

Bidder may go through the e-tendering instruction for online Bid participation through nprocure platform for further details and guidance for participation in the tendering process through e-tendering. In case of any queries related to e-tendering system, Bidder may write/contact at following details:

(n) Code Solutions – A division of GNFC Ltd. 301, GNFC Info tower, Bodakdev, Ahmedabad – 380 054 (India)

Tel: +91 79 26857316 / 17 / 18

Fax: +91 79 26857321

E-mail: nprocure@gnvfc.net

www.nprocure.com

Toll Free: 1800-233-1010(Ext. 501,512,517)

Bidder may visit https://www.nprocure.com/html/faq.asp for information regarding etendering registration process

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 Ten percent (10%) of the "annualised contract value (without Service Tax)" 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 Cooperative bank Ltd, The Mehsana Urban Co-operative Bank Ltd, Nutan Nagrik Sahakari Bank Ltd in the format attached in SECTION-F (Annexure-B), 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.
- (iii) Party shall preserve the materials like pipes, bends, flanges, valves, piping fittings, bolts, paints, spares and lubricants of the auxiliaries etc. Issued for execution of the job & shall guard it properly against theft or pilferage. In case of theft of materials issued to the party, appropriate amount (equivalent to the cost of the pilferage material) will be recovered from their bill.

3. 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.

4. <u>TERMINATION OF CONTRACT BY GIPCL</u>

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.

5. 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 preventive / breakdown maintenance, 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.

6. 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

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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/- Lakh, a person having a position equivalent to a Retired District Judge shall be appointed; for the claim higher than Rs. 25/- Lakh and up to Rs. 100/- Lakh, the same shall be referred to a Retired High Court Judge and for a claim exceeding Rs. 100/- Lakh, 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.

7. 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.

8. <u>EMPLOYEE'S COMPENSATION INSURANCE</u>

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.

9. <u>STATUTORY REQUIREMENTS</u> a. <u>COMPLIANCE OF LABOUR LAWS</u>

- 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, Employees 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 Employees 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 Employees 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.
- 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 Employees 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 ECR 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 and make the payment as per the Minimum Wages Act to the workers employed by him. Payment should be deposited in Workers saving bank account on or before 7th of the month.
- 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
- 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.

10. 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.

11. 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.

12. LIGHTING

General area lighting will be provided by GIPCL. However works area specific lighting will be arranged by Contractor.

13. 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.

14. 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.

15. 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 registers 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. 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.
- 11. 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.

- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. Major AMC / ARC contractor (Where the man power strength is more than **40** 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.
- 18. No loose connection / joints allowed in electrical cables during performance of any kind of job.
- **19** Safety shoes to be issued to female employees also.
- **20** All the vehicles shall be fit as per RTO guidelines and valid fitness certificate is required as per RTO guidelines.
- 21 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.
- 22 The Contractor shall comply all the new requirements related with safety as informed by the HOD / Safety department from time to time.
- 23. 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:

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Category	Classification	Examples / Cases	Penalty
A	PPEs Related	Working without helmet, shoes, safety belt, gloves etc.	Rs. 100 /- per instant.
В	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. 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	 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.
С	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.

16. REJECTION OF WORK:

а result of inspection, examination or testing, the 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.

17. GENERAL TERMS AND CONDITIONS:

- a. All tools & tackles, labours, equipments, vehicles, tractors, 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. 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.
- e. Contractor shall strictly follow the existing work permit system of the GIPCL and any future revisions.
- f. 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.
- g. 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.
- h. 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.

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.

 j. 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.
- k. 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
- I. One or more jobs may be required to be penalty (Maximum of Rs. 1,000/- per incident per man-day) and/or termination of contract.done simultaneously and contractor shall mobilize additional resources accordingly.
- m. 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.
- n. 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.
- o. The contractor has to submit daily reports showing work carried out with details of available manpower, tractors etc.
- p. 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.
- q. 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.
- r. 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.

18. **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.

19. <u>CONTRACTOR TO REMOVE ALL OFFENSIVE MATTER IMMEDIATELY AND CLEAN-UP.</u>

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.

20. 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 without furniture & accessories shall be provided at site.
 - e. First aid facilities as available on chargeable basis.

Apart from the above, no other facilities shall be provided by GIPCL.

B. 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.

21. 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.

22. 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.

23. <u>BENEFIT PAYABLE IN CASE OF ACCIDENT OCCURRING OUTSIDE PREMISES OR BEYOND THE COURSE OF EMPLOYMENT</u>

The contractor shall provide off-duty insurance coverage (Medical + Death Benefit) sum of Rs. one Lac (Nagrik Suraksha Policy or Equallent) to all its workmen deployed at GIPCL-SLPP site for the accident taking place outside the Company premises anywhere in any capacity and in whatsoever may be the manner. Premium amount would be around Rs.95/- plus Service Tax per person per year.

24. UNIFORM

The contractor shall issue three pairs of stitched uniform to contract workmen (Pant-Shirt for men and Sari-Blouse to women workers). However brand of fabric will be MAFATLAL. The color of the uniform shall be as indicated by GIPCL. The uniform should be issued to workmen within one month from the date of commencement of the Contract, otherwise penalty will be imposed.

25. ADHOC ALLOWANCE

Considering the inflation and financial conditions prevailing in the market, to compensate the contractor towards the benefits of adhoc allowance. Contractor shall pay additional adhoc allowances to the specified workmen per month.

26. LEGAL MATTERS PENDING BEFORE THE COURT

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.

27. ANNUAL HEALTH CHECK-UP

As per Statutory requirement Contractor has to inform workmen deployed at Site for Annual health check-up as per schedule prepared by HR&A Dept .

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28. 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.

29. 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.

30. 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.

31. 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.

SECTION-D SPECIAL CONDITIONS OF CONTRACT

1. DETAIL SCOPE OF WORK

The scope work includes Annual operation and maintenance services for AC& Ventilation system. It mainly involves operation and maintenance of Phase-1 & Phase-2 central AC systems, Package AC systems, window/split AC system, Turbine-Generator building evaporative ventilation system & Unit Auxiliary Fan system. Also involves preventive maintenance work, Break down maintenance, annual shut down work of AC & Ventilation system equipments like Compressors. pumps, chillers. heat exchanger. Instrumentation part, Package ACs and window ACs etc, specifications, nomenclature of Schedule of Rates and as directed by Engineer in charge. Equipments are prescribed in Annexure-I1 & I2 for Phase-1 & 2 AC & Ventilation system.

The detail of scope of work with technical activity & estimation is given in enclosed Section-E as under:

- 1. Package-1 (For Phase-1 UNIT # 1 & 2 AC & Ventilation System).
- 2. Package-2 (For Phase-2 UNIT #3 & 4 AC & Ventilation system).
- 1.1 Operation of Central AC Plant: Contractor has to depute seven qualified operators for smooth and trouble free operation of the AC Plant for phase-1 & phase-2. In every shift, operator has to report to GIPCL'S Central control room shift in-charge /engineer. Operator has to monitor operation of all the equipments in the system efficiently and record all the parameters in the log book as per the EIC instruction. If any abnormalities noticed by the operator, same shall be informed to EIC .Operator should have thorough knowledge of all equipments connected to mechanical, electrical and instrumentation. They should ensure utmost safety during operating the equipments/during clearing equipments for permit/during putting equipments into operation after returning the maintenance permit.
- **1.2** <u>Maintenance of AC & Ventilation system</u>: contractor has to mobilize sufficient qualified and experienced man power of required category.

Contractor has to maintain required man power at site to ensure day to day operation and maintenance of plant. In case of major problem in the plant, contractor has to moralize sufficient man power within 12 hours to complete the job.

Contractor supervisor should co-ordinate with EIC for the day to day maintenance job starting from ensuring work permit, execution of job, clearing site and commissioning of equipment after returning the permit. Safety of men and machinery shall be given prime importance while executing the job. During any breakdown of equipment, work shall be carried out round the clock to restore the system with in minimum time. While executing preventive maintenance job supervisor has to submite equipment survey sheet to EIC and job is to be carried out as per the instruction and procedure laid down in the

equipment survey sheet. Equipment service sheet will be provided to contractor in soft form.

Contractor shall carryout the work as given in tender documents within provided time period for particular job and the works shall conform to high standards of workmanship, Contractor has to work with quality conscious, safety and time bound manner with proper quality plan and as directed by Engineer in charge.

The total contract price/ unit rate quoted will remain same during the period of contract. No escalation whatsoever shall be permitted. The frequency of preventive maintenance may vary as per the need of the plant. The breakdown schedule is only indicative and the quantity may vary.

1.3 BRIEF DESCRIPTION OF C & I SYSTEM:

(A) Phase-I AC & Ventilation System:

- **1.** Central Air Conditioning system with four (04) nos. of air compressors and Auxiliaries operated through OMRON make PLC's.
- **2.** Eleven (11) numbers of Package Air Compressor (PAC) Systems operated through VOLTAS make micro-controllers.
- **3.** Seven (07) numbers of Package Air Compressor (PAC) Systems operated through Blue star make micro-controllers.
- **4.** Ten nos. of Package Air Compressor (PAC) systems in LHS Control room.
- **5.** Three nos. of Package Air Compressor (PAC) systems in Limestone Control room.
- **6.** Three nos. of Package Air Compressor (PAC) systems in Ash Handling Control room.
- **7.** The field instruments contains Pressure Gauges & Switches, Level Switches, DP indicating switches, Solenoid valves, limit switches, Temperature Gauges, Thermostats, panel instruments such as annunciation windows, electrical switches, push buttons etc. The list of major field instruments, the required frequency per year for Calibration and Cleaning is enclosed herewith as part-H of Scope of work.

(B) Phase-II AC & Ventilation System:

- Central Air conditioning system with GE PLC (01 main PLC panel and 05 nos RIO panels) and HMI system. All the auxiliaries / compressors /chiller units are operated though GE PLC.
- 2. The field instruments contains Pressure Gauges, Pressure Switches, Temperature Gauges and Temperature sensors (RTDs), Pressure transmitters, Level and flow Switches, Solenoid valves, 3 way valve actuator, Humidity sensors, etc. Panel instruments such as annunciationwindows, electrical switches, push buttons etc. The list of major field instruments, the required frequency per year for Calibration and Cleaning is enclosed herewith as part-H of Scope of work.

1.4 SCOPE OF WORK FOR WINDOW & SPLIT ACs:

The scope of the work for the vendor/contractor is to maintain the following Control & Instrumentation System and Equipments by deploying skilled manpower

- a. Maintenance of PLC systems, PAC systems and Micro-controllers.
- b. Removal of Pressure, Flow, Level, DP, Temperature instruments, solenoid valves from the field, taking it to laboratory, Calibration, refixing of the same. Routine maintenance of the equipment e. g. cleaning, attending leakage of the impulse piping/tubing etc.
- c. Replacement and repair of faulty instruments

2. TERMS AND CONDITION OF THE C&I WORK:

- The contractor has to deploy minimum one (01) number of Instrumentation Supervisor/Technician for the Instrumentation maintenance activities. The supervisor/Technician shall be a Diploma/ITI (Instrumentation) qualification with a minimum of five (05) years of experience in Instrumentation maintenance.
- 2. The contractor shall have to submit daily reports showing details of the maintenance works (cleaning and calibration) carried out, spare parts replaced and consumables used etc. Payment for the preventive maintenance works will be made after submission of cleaning and calibration reports for the instruments as per GIPCL format.
- 3. The vendor/contractor shall submit their rates for CLEANING and CALIBRATION works in the part-H1 & H2 of scope of work.
- 4. The contractor has to keep a set of tools & tackles for instrumentation maintenance work. Tentative list of such instruments for instrument maintenance work is indicated in **Annexure-G** (Maintenance tools –tackles).

3. SCOPE OF WORK FOR WINDOW AC/SPLIT AC/WATER COOLER

Scope of work includes maintenance of all the machines on comprehensive basis including replacement of all required spares (as per OEM specification as far as possible or reputed make), electrical items (swing/fan motor, capacitor, selector switch, thermostat, fan, remote battery cell etc), electrodes, gas charging, condenser & cooling copper tube repair sealing etc. except compressor rewinding /repair, main body outer frame, front grill, base frame & Air filter.

Contractor shall carry out inspection and servicing of each unit once in fifteen days and maintain the record after taking signature of concerned user & engineer of our Electrical Maintenance Department. You shall carryout servicing of each unit once in fifteen days for all Machines and for Lignite handling area servicing shall be carried out twice in a week.(Total quantity indicated in the price schedule is for two years considering the frequency of servicing of each unit). Inspection of window/split AC / deep freezers, water coolers to be done by new contractor 15 days prior to commencement in presence of GIPCL & existing contractor.

As during summer the running of machines increases and nos. of defects increases hence Contractor has to depute sufficient technician during summer (from March to July) to trouble shoot the defects immediately.

4. RATE SCHEDULE FOR PART-I1, I2 & PART-L:

Rates shall be quoted as per attached part-I1 & I2 of scope of work only. The rates quoted for Part-L shall be inclusive of all applicable taxes and duties.

During contract period, few machines may be required to be included in scope of work for PM/servicing. After ensuring the healthiness of these extra machines, these machines shall be included in normal PM/servicing schedule and payment shall be make as per available rates in part-I1 & I2 on pro rata basis. If these extra machines are not healthy before taking in to regular PM/ servicing, contractor shall have to make them healthy by replacement of required components.

The % quoted for price bid shall be applicable to rates for supply & erection of spare/components for window & split AC as shown in part-L of scope of work. These rates shall be applicable for extra machines only, which may be required to be included in scope during contract period. The rates in part-L will not be applicable for the machines which are already indicated in this contract. No escalation will be applicable on supply items covered under Part-L.

5. PENALTY CLAUSE:

Contractor has to keep sufficient spares & filled gas cylinder for all type of machines at the site to attend defect immediately. A defect register shall be maintained separately by you for window/split AC, water cooler, deep freezer.

All the defects / trouble shooting/repairing should be completed within 24 hours. **A penalty** @Rs.400/- per day shall be applicable if the defect is not attended within 24 hours. Only for genuine case, penalty shall be waived off.

6. SCOPE OF CONTRACTOR:

- 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 consumable items like cloth, cotton waste, kerosene, Refrigerent gas, diesel, lubricants, etc will be in the scope of the contractor.
- 3. All safety/PPEs required during work at site are to be arranged by the contractor.
- The Contractor shall have to provide necessary facilities including accommodation for their labour at their own cost.
- 5. The contractor has to arrange JCB, Hydra, tractor with trolleys for lifting/shifting the materials of their own.
- 6. Contractor has to depute experienced supervisor 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.

7. 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.

8. 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.

9. 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.

In case activity/items is not mentioned in the package, Item Rate quoted by contactor for similar nature of works / system in any other package shall be applicable for all the packages.

Any Unforeseen / contingency works shall be executed by contractor as per instruction of engineer incharge. Payment for such works shall be as per Mapower rates given in Annexure-F.

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.

10. VARIATION IN MINIMUM WAGE RATE:

In case of any statutory variation in Minimum Wage Rates (MWR), the escalation on quoted rates shall be applicable subject to following consideration:-

- i. Prevailing Minimum Wage Rates (MWR) shall be considered as applicable on last date of bid submission (based on latest Government Notification) and all statutory payment like PF, Bonus and Leave, on prevailing rate notified by the Government of Gujarat as per Minimum Wages Act, 1948.
- ii. The labour component considered in SoR: 80% of quoted Rates.
- iii. No reimbursement shall be made up to 05% variation in prevailing minimum wage rate for first year of contract period.
- iv. No reimbursement shall be made up to 10% variation in prevailing minimum wage rate for second year of contract period.
- v. Any statutory variation in Prevailing wage rate beyond specified % variation in Minimum wage rate (i.e. to 05% variation in first year & 10% variation in second year), escalation on specified labour component of quoted rate of SoR shall be applicable for differential % increased in minimum wage rate during applicable balance contract period. Example: In case of more than 5% increase in MWR in first year, Escalation (%) = (%Increase in MWR 5%) x labor component as specified above.

11. TERMS OF PAYMENT

A. Conditions of Payment:

The contractor shall raise the package 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.

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- (ii) Security deposit 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. Variation in minimum wage rate shall be considered as per Section D clause no. 9 (price & Rates)

C. Deductions from Contract Price

All costs, charges or expenses payable by the Contractor under the terms of the contract or as per the applicable laws, in respect of which he makes default in payment, shall be the liability of the Contractor. Such amount or due may be paid by the Company and the Company shall be entitled to recover the same from the Contractor by deducting the said amounts from the Contractor's monthly RA bills.

12. 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:-

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

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

13. 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.

14. 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 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.

15. QUANTITY OF WORK

The estimated quantities of work required to be carried out by the contractor are as given in the Section-E1 (Schedule of Quantity) & Section -E2 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.

16. OTHER GENERAL CONDITIONS OF CONTRACT

1. Provision of scaffolding along with scaffolding material for maintenance work will be in the scope of the contractor for safety & completion of specified job. The scaffolding shall be with pipe and clamps, metallic jallies. No separate rate shall be provided for such scaffolding work.

- 2. If any equipment or part are found damaged due to negligent / faulty maintenance the equipment cost of such damages shall be recovered from the contractor's monthly bill/retention money/security deposit.
- 3. The contractor has to shift spares, lubricant etc in required quantity duly approved by GIPCL engineer whenever necessary from GIPCL store / warehouse to site or site store as per the instruction of engineer in charge. Contractor has 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's 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, and the losses will be recovered from contractor's bills.
- 4. In case of breakdown of equipment, the contractor should work round the clock for putting back the equipment in service immediately within minimum time. In case of any emergency arising during night hours/Sunday/PH the contractor should be in a position to mobilise the manpower immediately within minimum time.
- 5. All new replacements either spare parts or any other shall be inspected and approved by GIPCL engineer in charge before its actual use in work. It is the supervisor responsibility to ensure this without failure.
- 6. 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:
 - a. GIPCL shall give a notice to the contractor for demobilization.
 - b. Full payment shall be made for a period of first month and a pro rata payment to the extent of demobilisation staff should be made thereafter.
 - c. 15 days notice will be given to the contractor before the precommencement of the plant for remobilisation of the plant.
 - d. During the period of one month when the plant will be rendered idle, GIPCL will have right to utilise contractor services in any other manner as deemed fit by GIPCL.
 - e. Contractor shall not be eligible for any compensation for demobilisation and remobilisation.
- 7. In case of failure to adhere to the time schedule by the contractor penalty will be levied at the discretion of Engineer in charge considering extent of delay in particular job. LD of 1% of contract value per hour for the delayed job shall be deducted from the contractor's bill subject to a maximum of 5% of the value of that particular job.
- 8. The contractor has to do quality job. GIPCL shall not compromise in quality. In case of poor quality of work the contractor may be asked to rework the job at free of cost.
- 9. Immediately after completion of maintenance job, work area has to be cleaned by removing all the tools, scrap, cotton waste, oil, grease etc. All the scrap/waste oil generated 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.
- 10. Insulation scrap materials like glass wool, ceramic wool etc. should be collected in gunny bags with proper care and then disposed it at suitable location as per the instruction of engineer in charge.

- 11. 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.
- 12. If contractor fails to mobilize/keep the minimum no of supervisors as above or supervisor are absent for more than three days, Penalty of Rs. 750/- per supervisor per day will be deducted in RA bill.

If plant operator found absent without intimation to EIC for more than three days, penalty of Rs.500/- per opeartor per day shall be recovered from contractor's monthly bill. Permission to leave site is to be taken from EIC well in advance.

Power Industry runs round the clock for 365 days. In case of emergency during odd hours or on P.H. or Weekly off, party shall arrange the manpower within one hour after intimation. Loss of generation in case of delay in arranging the manpower will be viewed very seriously and penalty as decided by competent authority will be imposed and same shall remain binding to the contractor.

13. 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. Bidder to 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. Provide us 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.

GIPCL is an ISO 9001-2008, ISO 14001-2004, BS OHSAS 18001:2007 and ISO 50001:2011 certified company, and GIPCL gives extremely importance to maintain these global standards. Contractor has to follow these standards while working with GIPCL. Contractor should make awareness among their entire workman about these standards & maintain all records with utmost care.

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SECTION-E1 SCHEDULE OF QUANTITIES & RATES FOR OPERATION & MAINTENANCE

PACKAGE - I:- Surat Lignite Power Plant - 4X125 MW, Surat Lignite Power Plant, Unit # I & II: Operation & maintenance Contracts of Phase#1 AC &V AMC for two years 2017-19.

	AC COMPRESSOR & AUXILIARIES								
		PART#	A1						
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.			
1	PM of AC Compressor.	Decouple the compressor and motor. Check the alignment. Tighten the compressor assembly and foundation bolt. Align and couple the compressor. Check gas pressure if requied top up. Check the quality of the oil in lab, replace/top up oil as per the test report. Clean the equipment, base frame and surrounding area.Remove all the tools& tackles and waste material. Take successful trail run.	PM	8	1288.32	10306.56			
2	Gas leak test in AC compressor	Conduct gas leak test in AC compressor and liquid line with soap solution.	PM	40	429.44	17177.60			
3	Gas topping in AC Compressor.	Bring gas from store and topped up as per system requirement.	BD	5	429.44	2147.20			
4	Oil top up in AC Compressor	Bring oil from store and topped up to required level.	BD	2	429.44	858.88			
5	Servicing / Replacement of shaft seal or part thereof.	Pump down the gas. Isolate compressor. Remove coupling guard and coupling. Remove shaft seal. Replace the damaged part. Put the coupling. Charge the gas. Align and couple the compressor. Take successful trail run.	BD	3	1717.76	5153.28			
6	Checking of compressor By-pass valve.	Pump down the gas into condenser. Open the compressor cylinder head. Check the condition of by pass valves & if required repaire / replace. Box up the cylinder head. Charge the gas. Take sucessful trail run.	BD	1	858.88	858.88			

7	Replacement of oil in AC compressor.	Pump down the gas. Bring oil from store. Drain the oil. Change the paper filter. Fill the oil. Charge the gas. Take sucessful trail run.	BD	1	1288.32	1288.32
8	Pressure testing of complete AC system.	Pump down the gas in vacuummised cylnders. Charge N2 gas in the system up to 1.5 times. Check for lekages if any and attend the same. Open all refrigrant valves & check the condition of all internal parts. Replace / repaire the valves. Box up complete system. Charge N2 gas again upto 20 kg/cm2 and take gas leak test. Hold up the pressure for 24 hr. to check any leakages. Remove N2 gas if system is leakproof. Vacuumised complete system & chagre refrigerant. Clean the equipment. Take successful trail run.	BD	2	858.88	1717.76
9	Overhauling of AC Compressor	Shift material from stores. Pump down the gas, drain oil. Dismantle the AC compressor. Inspect all compressor part. Replace / Repair the damaged part if any.Record all the working clearance.if working clearances are more than the limit value replace such parts. Assembly the compressor. Replace oil. Charge the gas after gas leak test. Align and couple the compressor. Clean the equipment. Take successful trail run.	BD	2	5106.98	10213.96
10	Liquid line strainer cleaning	Open and clean the strainer with petrol and refit.	BD	2	429.44	858.88
11	Servicing of Expansion valve.	Open valve. Check internal parts. Repair / clean the parts. Assemble and Box up.	BD	2	429.44	858.88
12	Replacement of Expansion valve.	Remove the valve. Clean the flange surface. Fix new valve. Tighten the bolt.	BD	2	429.44	858.88
13	Replacement of Power element in Expansion valve.	Remove the element. Fix new one. Tighten the bolt.	BD	2	429.44	858.88
14	Gas drier core cleaning	Open and replace the core refit.	BD	2	429.44	858.88
	replacement.					

15	Attending leakages in refrigerant line.	After getting leakages in refrigerant line pump down the compressor. Attend the leakage. Check with soap solution to ensure no leakage.	BD	4	870.46	3481.82
16	Condenser / Chiller tube cleaning of AC Compressor	Open the condenser / chiller. Check the condenser / chiller tube. Clean the tube by mechanical / chemical method. Box up the equipment.	BD	4	2553.49	10213.96
17	Condenser / Chiller tube leakage / end cover leakage attending.	Open the Condenser / Chiller. Check the condenser / chiller tube. Attend the tube by plugging. Check the end cover gasket, if required replace. Box up the equipment.	BD	2	429.44	858.88
18	PM of AC Compressor head and valve assembly	Isolate the compressorand pump down the gas.Remove all the 12 cylinder head assembly and inspect for any defects and attend the same.Dismantle all the suction and delivery valves, service the valves and fit back.check the load and unload valve and NRV for any defects,attend the same if required.Check the lub-oil and replace if required. Check the lub-oil filter and clean/replace the same.Box up the valves and head assembly.Check the alignment. Tharoughly clean the equipment.Restore the system back.	PM	4	1717.76	6871.04
				•	Part Total	75442.52

	CONDENSER, CHILLED & CCW PUMP							
	PART # B1							
Sr. No	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.		

1	PM of Chilled water pump.	Decouple the pump and motor. Thoroughly clean the equipment. Check the alignment. Tighten / replace the gland. Check for Tightness of pump assembly and foundation bolt. Align and couple the pump. Clean the equipment. clean the suction filter of pump. In case damage of insulation, repair the same. Remove tools&tackles and waste mterial. Take successful trial run.	PM	8	1288.32	10306.56
2	PM of Condenser water pump.	-do-	PM	8	1288.32	10306.56
3	PM of CCW Pump	-do-	PM	12	1288.32	15459.84
4	Gland tightening of pump.	Adjust the gland by tightening to minimise leakages.	BD	8	110.25	882.03
5	Greasing in pump.	Issue grease from warehouse and supply grease with grease gun in bearings.	BD	4	110.25	441.02
6	Gland replacement of pump.	Remove the damaged gland completely and replace with new. Adjust the gland to minimise leakages. Take successful trial run.	BD	2	429.44	858.88
7	Decoupling, alignment and coupling of pump / Coupling replacement / coupling removal for motor work.	Remove coupling guard, decouple the pump and motor. Remove coupling or replaced coupling. Check the alignment. Correct the same. Couple and tighten the coupling bolt. Taketrial run for successful operation.	BD	2	858.88	1717.76
8	Overhauling of condenser water pump.	Shift material from stores. Decouple the pump. Dismantle the pump. Inspect all pump parts. Replace / repair the damaged parts if any. Assemble the pump. Fix the motor and coupling. Align and couple the pump. Clean the equipment. Take successful trial run.	BD	2	1717.76	3435.52
9	Overhauling of chilled water pump.	-do-	BD	1	1717.76	1717.76
10	Overhauling of CCW Pump	-do-	BD	1	1717.76	1717.76

11	Suction strainer cleaning of Pump.	Remove, filter element and clean with water / air. Refit the same.	BD	2	429.44	858.88
12	Replacement / Repaire of gland follwer & its bolt at site.		BD	2	429.44	858.88
					Part Total	48561.44

		AC COOLING	TOWE	ER		
		PART#		•		
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.
1	PM of cooling Tower ROTATING ASSEMBLY	Remove fan guard and belt. Tharoughly clean the equipment and surrounding parts. Check fan and motor pulley alignment, if required align the same. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put fan guard. Oil top up if required. Remove all the tools & tackles and waste material. Take successful trial run.	PM	12	858.88	10306.56
2	Cleaning of cooling tower fills & basin.	Remove fins cover & fills. Clean fills by manual or water jet. Clean basin with water and box up.	BD	2	1717.76	3435.52
3	Cleaning / replacement of nozzel per cooling tower.	Remove Top nozzel cover. Remove nozzel, check & clean / replace and fix the same. Box up top cover.	BD	2	858.88	1717.76
4	Oil top up in cooling tower.	Bring oil from store and topped up to required level.	BD	10	104.47	1044.66
5	Replacement of fills in cooling tower per cooling tower (set).	Issue from warehouse. Remove cover. Remove fills. Clean old fills. fix new fills. Box up.	BD	2	3864.96	7729.92
6	Removal/replac ement of belt, alignment and fixing of belt in cooling tower.	Remove fan guard. Check the alignment, if required corrects the same. Put belt and fan guard. Take trial successful trial run.	BD	2	429.44	858.88
7	Oil cup replacement in cooling tower.	Issue oil cup from store. Remove oil cup. Fix new one. Check for any leakages.	BD	1	429.44	429.44

8	Pulley replacement in cooling tower FAN	Issue pulley from store. Remove belt, pulley and fan hub. Fix the pulley. Align the pulley and shaft. Set the blade angle. Put belt and fan guard. Take successful trial run.	BD	1	1276.74	1276.74
9	Overhauling of cooling tower FAN rotating assembly.	Shift material from stores. Remove fan guard. Dismantle the fan assembly. Inspect all fan parts. Replace / Repair the damaged parts if any. Assemble the fan. Adjust the blade angle. Align and put belt and fan cover. Fill the oil. Clean the equipment. Take successful trial.	BD	1	2553.49	2553.49
10	Blade angle adjustment of cooling tower fan.	Remove blade cover. Check blade angle. Adjust blade angle if required. Fix fan cover. Take sucessful trail run.	BD	1	858.88	858.88
					Part Total	30211.85

	AIR HANDLING UNIT PART # D1							
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.		
1	PM of air handling unit (Control room)	Remove pulley guard and belt. Tharoughly clean the equipment and remove all the accumulated dust and rust. Check fan and motor pulley alignment, if required align the same. Check for any abnormal sound from the fan/ fan bearings attend the same, if required replace the bearing. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put the pulley guard. Grease the bearing .Ensure the proper draning of accumulated water from the AHU bOttom tray and clean the same, arrest any leakage from the tray. Take successful trial run.Remove all the waste from surrounding area and clean.	PM	18	858.88	15459.84		
2	PM of air handling unit	-do-	PM	12	858.88	10306.56		

	(ESP)					
3	PM of air handling unit (Service Building)	-do-	PM	6	858.88	5153.28
4	PM of air handling unit (Switch Yard)	-do-	PM	6	858.88	5153.28
5	PM of air handling unit (DM Plant)	-do-	PM	6	858.88	5153.28
6	Cleaning of suction air filters of air handling unit in set. (i.e Suction air filtes cleaning of one AHU)	Removal of all filters elements and clean with air and water and refit the same.	PM	144	429.44	61839.35
7	Cleaning of cooling coil in air handling unit.	Remove of all filter elements and clean coil with coil cleaner & water	PM	30	214.72	6441.60
8	Fresh air filter cleaning of AHU.	Remove course and fine filter. Clean with air / water. Refit the same.	PM	10	110.25	1102.54
9	Greasing of Bearing in one AHU	Issue grease from warehouse and apply grease with grease gun in bearings.	BD	2	214.72	429.44
10	Replacement of belt .	Issue belt from warehouse. Remove pulley guard. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt. Put the pulley guard.	BD	2	429.44	858.88
11	Replacement of pulley.	Issue from warehouse. Remove pulley guard. Remove belt & pully. Fix new pully. Check the alignment of pulley, if required corrects the same. Fix belt. Put the pulley guard.	BD	1	858.88	858.88
12	Removal of belt, alignment and fixing of belt.	Remove pulley guard. Check the alignment. If required correct the same. Put belt and pulley guard. Take trial successful trial run.	BD	1	429.44	429.44
13	Bearing replacement.	Issue bearing from store. Remove pulley guard and belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt and pulley guard. Take successful trial run.	BD	1	3864.96	3864.96

14	Replacement of flexible canvas joint.		BD	2	435.23	870.46
15	Overhauling of air handling unit.	Shift material from stores.Remove pulley guard & Belt. Open inspection door. Inspect fan. Replace/Repaire the damaged parts if any. Assemble the fan. Close inspection door. Put the pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take successful trial run.	BD	2	3864.96	7729.92
16	Suction strainer cleaning of AHU.	Remove, filter element and clean with water / air. Refit the same.	BD	2	435.23	870.46
17	Servicing of ventilation dampers	Ensuring freeness of dampers and opening and closing	BD	5	858.88	4294.40
18	Cleaning of supply & return air grill	Remove grill and clean with air and water and refit the same.	BD	80	214.72	17177.60
19	Removal & fitting of supply & return air grill.	Removal grill refit the same.	BD	5	214.72	1073.60

	AIR WASHER SYSTEM PART # E1								
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.			
1	PM of Air washer fan	Remove pulley guard and belt. Check fan and motor pulley alignment, if required align the same. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put the pulley guard. Grease the bearing. Take successful trial run.	PM	12	1288.32	15459.84			
2	Cleaning of suction air filter of air washer fan (1 Set = 312 Filter)	Remove of all filter elements and clean with air and water and refit the same.	PM	24	429.44	10306.56			
3	Suction air filter cleaning of supply air fan.	Remove course and fine filter. Clean with air / water. Refit the same.	PM	10	107.36	1073.60			
4	Greasing of Bearing.	Issue grease from warehouse and apply grease with grease gun in bearings.	BD	2	107.36	214.72			

Part

Total

149067.74

5	Replacement of belt In case of failure of belt or motor replacement.	Issue belt from warehouse. Remove pulley guard. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt. Put the pulley guard.	BD	2	429.44	858.88
6	Replacement of pully.	Issue from warehouse. Remove pulley guard. Remove belt & pully. Fix new pully. Check the alignment of pulley, if required corrects the same. Fix belt. Put the pulley guard.	BD	1	1288.32	1288.32
7	Bearing replacement.	Issue bearing from store. Remove pulley guard and belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt and pulley guard. Take successful trial run.	BD	1	1717.76	1717.76
8	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	1	2994.50	2994.50
9	Overhauling of Air Washer fan	Shift material from stores.Remove pulley guard & Belt. Open inspection door Inspect fan. Replace/Repaire the damaged parts if any. Assemble the fan. Close inspection door Put the pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take successful trial run.	BD	1	3864.96	3864.96
10	Adjustment of nozzels for water spilage out side planum chamber per air washer unit	Adjust the nozzel for water spilage out side planum chamber.	BD	4	858.88	3435.52
11	Cleaning / replacement / blanking of air washer nozzel.(one number)	Check the nozzel if required Clean / replace / blank the air washer nozzel.	BD	5	107.36	536.80
12	Servicing of ventilation dampers	Insuring freeness of dampers and opening and closing	BD	4	858.88	3435.52
13	Vibration measurement Assistance per fan.	Supply manpower for assisting vibration measurement to GIPCL EIC for all categories rotating equipment. Semiskilled labor shall be required.	BD	10	52.23	522.33

					Part Total	47427.07
	Fan	assisting balancing of fan, Pump & motor. This includes welding of trial / final weight. Correctness of alignment. Inspection of bearings Tightness of foundation bolt etc.				
14	•	Providing manpower for	BD	2	858.88	1717.76

	PACKAGE AC								
		PART#							
Sr. No.	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.			
1	PM of Package AC (UPS - U - I & II)	Tighten the compressor assembly and foundation bolt. Check & align the blower. Check belt condition if required replace. Grease the bearing. Gas top up if required. Clean suction filter / equipment. Take successful trial run.	PM	24	429.44	10306.56			
2	PM of Package AC (Lime Stone Milling Control Room)	-do-	PM	9	429.44	3864.96			
3	PM of Package AC (LHS Control Room)	-do-	PM	18	429.44	7729.92			
4	PM of Package AC (LHS Maintenace office)	-do-	PM	12	429.44	5153.28			
5	PM of Package AC (AHS Control Room)	-do-	PM	9	429.44	3864.96			
6	Cleaning of suction air filters of Package AC.	Removal of all filters elements and clean with air and water and refit the same.	PM	100	107.36	10736.00			
7	Cleaning of Condensor coil of Package AC	Cleaing of condensor coil with coil cleaner & than water washing on position. Air blowing after washing.	PM	105	107.36	11272.80			
8	Cleaning of Evaporator coil of Package AC	Cleaing of evaporator coil with coil cleaner & than water washing on position. Air blowing after washing	PM	105	107.36	11272.80			
9	Fresh air filter cleaning of PAC.(5 No. x 12)(rate for one no)	Remove course and fine filter. Clean with air / water. Refit the same.	PM	10	107.36	1073.60			

10	Gas topping in PAC Compressor	Bring gas from store and topped up as per system requirement.	BD	8	429.44	3435.52
11	Oil top up in PAC Compressor	Bring oil from store and topped up to required level.	BD	2	429.44	858.88
12	Greasing in bearings.	Issue grease from warehouse and apply grease with grease gun in bearings.	BD	2	107.36	214.72
13	Expansion valve servicing	Open and clean the expansion valve and refit.	BD	2	429.44	858.88
14	Gas drier replacement.	Open and replace the drier refit.	BD	2	429.44	858.88
15	Bearing replacement in package AC	Issue bearing from store. Remove belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt. Take successful trial run.	BD	2	858.88	1717.76
16	Replacement of belt in package AC	Issue belt from warehouse. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt.	BD	8	429.44	3435.52
17	Condenser tube cleaning of AC Compressor main plant	Open the condenser. Check the condenser tube. Clean the tube by mechanical / chemical method. Box up the condenser.	BD	4	1717.76	6871.04
18	Attending leakages in refrigerant line.	After getting leakages in refrigerant line pump down the compressor. Attend the leakage. Check with soap solution to ensure no leakage.	BD	3	858.88	2576.64
19	Overhauling of PAC Compressor	Shift material from stores. Pump down the gas, drain oil. Dismantle the AC compressor. Inspect all compressor part. Replace / Repair the damaged part if any. Assembly the compressor. Replace oil. Charge the gas after gas leak test. Align and couple the compressor. Clean the equipment. Take successful trail run.	BD	2	1717.76	3435.52
20	Replacement of compressor for PAC	Issue compressor from store. Remove compressor from package unit. Install new compressor. Align and put belt. Take successful trial run.	BD	4	1717.76	6871.04

21	Replacement of Air cooled condensor of PAC	Issue condensor from store. Remove condensor from package unit. Install new condensorr. Align and put belt. Take successful trial run.	BD	1	2576.64	2576.64
22	Replacement of water cooled condensor of PAC	Issue condensor from store. Remove condensor from package unit. Install new condensorr. Align and put belt. Take successful trial run.	BD	1	2576.64	2576.64
23	Removal and fitting of motor from blower for electrical work.	Remove motor from blower. Fit the same after electrical work.	BD	2	858.88	1717.76
24	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	1	858.88	858.88
					Part Total	104139.18

	VALVES, PIPING, DUCT & INSULATION										
	PART # G1										
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.					
1	Gland tightening in valve.	Adjust the gland by tightening to stop leakages.	BD	25	55.13	1378.17					
2	Greasing of valves.	Issue of grease from store. Apply on valve spindle after cleaning.	BD	6	107.36	644.16					
3	Servicing of NRV at site up to 125 NB.	Open NRV. Check seat, disc and other internal parts. Repair the seat. Lap seat and check the surface for blue match. Assemble and Box up.	BD	2	858.88	1717.76					
4	- do - 150 to 350 NB	- do -	BD	2	858.88	1717.76					
5	Servicing of Float Valve	Remove float valve from pipe. Dismental and service the same or replaced.	BD	2	429.44	858.88					
6	Replacement of gland packings in valve.	Remove the gland follower. Remove the damaged gland packing. Replace new. Box up.	BD	3	429.44	1288.32					
7	Attending flange leakage in pipe line upto 80 NB	Check the flange joint for any leakages. Loose the flange. Replace the gasket. Tighten the flange.	BD	6	429.44	2576.64					
8	- do - 100 to 350 NB	- do -	BD	1	429.44	429.44					

9	Replacement of gate, globe valve and NRV upto 125 NB.	Remove the valve. Clean the flange surface. Cut and put new gasket. Fix new valve. Tighten the bolt.	BD	5	858.88	4294.40
10	- do - 150 to 350 NB	- do -	BD	5	858.88	4294.40
11	Servicing of gate/globe valve upto 125NB	Remove the valve. Tharouhly clean and dismantle the valve. Check for any defects in parts and repair. Lap the seat and disc and ensure the color matching and box up. Hydrotest by putting water and fit the valve in position by new flange gasckets	BD	5	429.44	2147.20
12	Servicing of gate,globe valve and NRV upto 150 to 350NB	do	BD	1	429.44	429.44
13	Fabrication & Erection of G.I. Duct(Sq. Mt.)	Fabricate GI duct as per site requirement & Erect the same with anchor fasteners & support	BD	15	107.36	1610.40
14	Insulation of Pipe / Duct. (Sq. Mt.)	Remove old insulation. Apply glass wool. Wrap with chicken mesh. Apply POP,cement & Paint.	BD	15	107.36	1610.40
15	Freeness checking of various type & size of valves	Check the valve for jamming. Made free if required. Lubricate the spindle of valve. Assist trial run of valve by opening and closing of valve.	BD	5	107.36	536.80
16	Servicing of Level gauge.	Service the level indicator and insure visibility	BD	2	429.44	858.88
					Part Total	26393.05

	C & I EQUIPMENTS									
		PART#	H1							
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.				
1	PLC CONTROL PANEL	JOB INCLUDES, CONTACT CHECKING, AND REPLACEMENT OF FAULTY LAMPS AND PUSH BOTTON AND CONTACT OF PANEL.	PM	1	236.57	236.57				
2	MICRO CONTROLLER S	TESTING/REPLACEMENT OF CONTROLLER	PM	14	138.00	1862.95				
3	PRESSURE GUAGES	CALIBRATION/REPLACEM ENT	PM	68	139.97	9517.80				

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4	PRESSURE SWITCHES	CALIBRATION/REPLACEM ENT	PM	27	138.00	3725.90
5	DIFFERENTIAL PRESSURE SWITCHES	CALIBRATION/REPLACEM ENT	PM	14	138.00	1931.95
6	FLOW SWITCHES (DP TYPE)	CALIBRATION/REPLACEM ENT	PM	16	138.00	2207.94
7	SOLENOID VALVES	CALIBRATION/REPLACEM ENT	PM	23	138.00	3173.91
8	THERMOSTAT S	CALIBRATION/REPLACEM ENT	PM	39	147.85	5766.27
9	TEMPERATUR E GAUGES	CALIBRATION/REPLACEM ENT	PM	80	118.28	9462.60
10	LEVEL SWITCHES (MAGNETIC TYPE)	CALIBRATION/REPLACEM ENT	PM	4	128.14	512.56
11	RTDs	REPLACEMENT	PM	6	118.28	709.70
12	PLC CONTROL PANEL	JOB INCLUDES CLEANING OF PANEL/ EQUIPMENTS AND CONNECTION TIGHTNING	PM	2	157.71	315.42
13	MICRO CONTROLLER S	- do -	PM	63	98.57	6209.83
14	PRESSURE GUAGES	- do -	PM	204	98.57	20108.03
15	PRESSURE SWITCHES	- do -	PM	81	98.57	7984.07
16	DIFFERENTIAL PRESSURE SWITCHES	- do -	РМ	36	93.64	3371.05
17	FLOW SWITCHES (DP TYPE)	- do -	PM	24	93.64	2247.37
18	SOLENOID VALVES	- do -	PM	69	93.64	6461.18
19	THERMOSTAT S	- do -	PM	117	93.64	10955.92
20	TEMPERATUR E GAUGES	- do -	PM	148	93.64	13858.77
21	LEVEL SWITCHES (MAGNETIC TYPE)	- do -	PM	12	93.64	1123.68
22	RTDs	- do -	PM	63	93.64	5899.34
					Part Total	117642.83

	Window AC, Split AC & Water Coolers							
		Part #	<u> </u>					
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.		
1	PM of Window A.C. make Fedders Lloyd/Blue star/voltas/Carri er capacity up to 2 TR	PM / Servising includes maintenance /defect attending of all the machines on comprehensive basis including repair/supply of all required spares, electrical items (swing/fan	PM	1450	94.65	137248.42		
2	PM of Split A.C. with remote make LG/Blue star/voltas capacity up to 2.0 TR	motor,capacitor,switch, thermostate, remote battery cell etc), electrodes, gas charging, condenser & cooling copper tube repair, sealing etc. except	PM	1700	94.65	160911.94		
3	PM of Split A.C./ ductable with remote make LG/Blue star/voltas capacity 3.0TR	compressor rewinding /repair, main body outer frame, new condenser coil supply, front grill, base frame & Air filter . You shall carry out inspection and	PM	140	94.65	13251.57		
4	PM of Split A.C./ ductable with remote make LG/Blue star/voltas capacity 5.0TR	servicing of each unit once in fifteen days and and for Lignite handling area servicing shall be carried out twice in a week. Maintain the record after taking	PM	55	94.65	5205.97		
5	PM of Water Coolers make Voltas/Usha/kri ps cold/blue star capacity upto 250 ltr	signature of concerned. (Total quantity as indcated is for one years condering the frequency of servicing of each unit)	PM	540	94.65	51113.21		
6	PM of Deep freezer		PM	42	94.65	3975.47		
7	Rewinding of compressor of Window A.C. (any make) capacity up to 2 TR	Rewinding /repair of Compressors (including removal, re-erection, to & fro transporation and one year guarentee of rewinding /repair)	BD	4	3200.00	12800.00		
8	Rewinding of compressor of Split A.C. (any make) capacity up to 2 TR		BD	5	3200.00	16000.00		
9	Rewinding of compressor of Split A.C. (any make) capacity up to 3.0/5.0 TR		BD	2	3500.00	7000.00		

10	Rewinding of compressor of Water cooler (any make)		BD	6	3200.00	19200.00
11	Rewinding of compressor of Deep freezer (any make)		BD	1	3200.00	3200.00
12	Replacement of air filter of Window A.C.	Supply air filter to site as per OEM specification & replace the same.	BD	5	200.00	1000.00
13	Replacement of air filter of Split A.C.		BD	5	200.00	1000.00
14	Replacement of front Grill for window AC	Supply grill for window AC as per OEM specification to site & replace the same.	BD	1	1000.00	1000.00
15	Replacement of base frame for window AC	Make Fedders Lloyd/Blue star/voltas/Carrier.	BD	1	500.00	500.00
16	Replacement of MAIN BODY OUTER FRAME for window AC		BD	1	1000.00	1000.00
17	Replacement of damaged Al condecer coil with copper condencer coil		BD	4	3000.00	12000.00
					Part Total	446406.59

	OPERATION OF AC PLANT							
		Part # 、	J1					
Sr. No	Name of Activity (A)	Scope of Work (B)	Natur e of Mntc, (C)	Qty. per year	Estimated SOR in Rs.	Total Amount in Rs.		
1	Deputing one operaotor per shift (8hrs) for operation of Central / Package AC.	Operator should maintain logbook as instruction given by shift in charge and should report to shift in charge.	Opera tion	48	12548.92	602348.20		
		ı			Part Total	602348.20		

PACKAGE - II :- Surat Lignite Power Plant - 4X125 MW, Surat Lignite Power Plant, Unit # III & IV: Operation & maintenance Contracts of Phase#2 AC &V AMC for two years 2017-19.

	AC COMPRESSOR & AUXILIARIES								
	PART # A2								
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)			
1	PM of AC Compressor. (Screw Type)	Tighten the compressor assembly and foundation bolt. Check gas pressure if requied top up. Check the quality of the oil in lab, replace/top up oil as per the test report. Clean the equipment, base frame and surrounding area.Remove all the tools& tackles and waste material. Take successful trail run.	PM	9	1276.74	11490.70			
2	Gas leak test in AC compressor	Conduct gas leak test in AC compressor and liquid line with soap solution. Attend the same if any & recondusct the test.	PM	27	429.44	11594.88			
3	Gas topping in AC Compressor.	Bring gas from store and topped up as per system requirement.	BD	3	429.44	1288.32			
4	Oil top up in AC Compressor	Bring oil from store and topped up to required level.	BD	2	429.44	858.88			
5	Checking of compressor Bypass valve.	Pump down the gas into condenser. Open the compressor cylinder head. Check the condition of by pass valves & if required repaire / replace. Box up the cylinder head. Charge the gas. Take sucessful trail run.	BD	2	429.44	858.88			
6	Replacement of oil in AC compressor.	Pump down the gas. Bring oil from store. Drain the oil. Change the paper filter. Fill the oil. Charge the gas. Take sucessful trail run.	BD	3	858.88	2576.64			

7	Pressure testing of complete AC system.	Pump down the gas in vacuummised cylnders. Charge N2 gas in the system up to 1.5 times. Check for lekages if any and attend the same. Open all refrigrant valves & check the condition of all internal parts. Replace / repaire the valves. Box up complete system. Charge N2 gas again upto 20 kg/cm2 and take gas leak test. Hold up the pressure for 24 hr. to check any leakages. Remove N2 gas if system is leakproof. Vacuumised complete system & chagre refrigerant. Clean the	BD	2	858.88	1717.76
		equipment. Take successful trail run. Shift material from stores.				
8	Overhauling of AC Compressor	Pump down the gas, drain oil. Dismantle the AC compressor. Inspect all compressor part. Replace / Repair the damaged part if any.Record all the working clearance.if working clearances are more than the limit value replace such parts. Assembly the compressor. Replace oil. Charge the gas after gas leak test. Align and couple the compressor. Clean the equipment. Take successful trail run.	BD	1	3864.96	3864.96
9	Liquid line strainer cleaning	Open and clean the strainer with petrol and refit.	BD	2	429.44	858.88
10	Servicing of Expansion valve.	Open valve. Check internal parts. Repair / clean the parts. Assemble and Box up.	BD	2	429.44	858.88
11	Replacement of Expansion valve.	Remove the valve. Clean the flange surface. Fix new valve. Tighten the bolt.	BD	2	858.88	1717.76
12	Replacement of Power element in Expansion valve.	Remove the element. Fix new one. Tighten the bolt.	BD	1	429.44	429.44

13	Gas drier core cleaning / replacement.	Open and replace the core refit.	BD	2	429.44	858.88
14	Attending leakages in refrigerant line.	After getting leakages in refrigerant line pump down the compressor. Attend the leakage. Check with soap solution to ensure no leakage.	BD	2	858.88	1717.76
15	Condenser / Chiller tube cleaning of AC Compressor	*	BD	3	1276.74	3830.23
16	Condenser / Chiller tube leakage / end cover leakage attending.	Open the Condenser / Chiller. Check the condenser / chiller tube. Attend the tube by plugging. Check the end cover gasket, if required replace. Box up the equipment.	BD	1	429.44	429.44
					PART TOTAL	44952.29

	CONDENSER & CHILLED WATER PUMPS								
	PART # B2								
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)			
1	PM of Chilled water pump.	Decouple the pump and motor. Tharoughly clean the equipment. Check the alignment. Tighten / replace the gland. Check for Tightness of pump assembly and foundation bolt. Align and couple the pump. Clean the equipment. clean the suction filter of pump. In case damage of insulation, repair the same. Remove tools&tackles and waste mterial. Take successful trial run.	PM	12	1288.32	15459.84			
	PM of		PM	9	1288.32	11594.88			
2	Condenser water pump.	-do-							

3	Gland tightening of pump.	Adjust the gland by tightening to minimise leakages.	BD	10	110.25	1102.54
4	Greasing in pump.	Issue grease from warehouse and supply grease with grease gun in bearings.	BD	10	110.25	1102.54
5	Gland replacement of pump.	Remove the damaged gland completely and replace with new. Adjust the gland to minimise leakages. Take successful trial run.	BD	6	429.44	2576.64
6	Decoupling, alignment and coupling of pump / Coupling replacement	Remove coupling guard, decouple the pump and motor. Check the alignment. If required, correct the same. Couple and tighten the coupling bolt. Taketrial run for successful operation.	BD	2	858.88	1717.76
7	Overhauling of condenser water pump.	Shift material from stores. Decouple the pump. Dismantle the pump. Inspect all pump parts. Replace / repair the damaged parts if any. Assemble the pump. Fix the motor and coupling. Align and couple the pump. Clean the equipment. Take successful trial run.	BD	2	2576.64	5153.28
8	Overhauling of chilled water pump.	-do-	BD	1	2576.64	2576.64
9	Suction strainer cleaning of Pump.	Remove, filter element and clean with water / air. Refit the same.	BD	4	429.44	1717.76
10	Replacement / Repaire of gland follwer & its bolt at site.	Dismental gland follwer. Remove damaged part. Repair / replace the same. Assemble and Box up.	BD	2	429.44	858.88
					PART TOTAL	43860.75

	AC COOLING TOWER								
	PART # C2								
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)			

1	PM of cooling Tower ROTATING ASSEMBLY	Remove fan guard and belt. Tharoughly clean the equipment and surrounding parts. Check fan and motor pulley alignment, if required align the same. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put fan guard. Oil top up if required. Remove all the tools & tackles and waste material. Take successful trial run.	PM	12	1288.32	15459.84
2	Cleaning of cooling tower fills & basin.	Remove fins cover & fills. Clean fills by manual or water jet. clean basin with water and box up.	BD	3	858.88	2576.64
3	Cleaning / replacement of nozzel per cooling tower.	Remove Top nozzel cover. Remove nozzel, check & clean / replace and fix the same. Box up top cover.	BD	2	858.88	1717.76
4	Oil top up in cooling tower.	Bring oil from store and topped up to required level.	BD	15	110.25	1653.81
5	Replacement of fills in cooling tower per cooling tower (set).	Issue from warehouse. Remove cover. Remove fills. Clean old fills. fix new fills. Box up.	BD	3	3389.22	10167.66
6	Removal/repla cement of belt, alignment and fixing of belt in cooling tower.	Remove fan guard. Check the alignment, if required corrects the same. Put belt and fan guard. Take trial successful trial run.	BD	3	429.44	1288.32
7	Oil cup replacement in cooling tower.	Issue oil cup from store. Remove oil cup. Fix new one. Check for any leakages.	BD	3	429.44	1288.32
8	Pulley replacement in cooling tower FAN	Issue pulley from store. Remove belt, pulley and fan hub. Fix the pulley. Align the pulley and shaft. Set the blade angle. Put belt and fan guard. Take successful trial run.	BD	1	1717.76	1717.76
9	Overhauling of cooling tower FAN rotating assembly.	Shift material from stores. Remove fan guard. Dismantle the fan assembly. Inspect all fan parts. Replace / Repair the damaged parts if any. Assemble the fan. Adjust the blade angle. Align and	BD	2	1717.76	3435.52

		put belt and fan cover. Fill the oil. Clean the equipment. Take successful trial.				
10	Blade angle adjustment of cooling tower fan.	Remove blade cover. Check blade angle. Adjust blade angle if required. Fix fan cover. Take sucessful trail run.	BD	3	429.44	1288.32
					PART TOTAL	40593.94

	AIR HANDLING UNIT								
	PART # D2								
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)			
1	PM of air handling unit (Control room)	Remove pulley guard and belt. Tharoughly clean the equipment and remove all the accumulated dust and rust. Check fan and motor pulley alignment, if required align the same. Check for any abnormal sound from the fan/ fan bearings attend the same, if required replace the bearing. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put the pulley guard. Grease the bearing .Ensure the proper draning of accumulated water from the AHU bOttom tray and clean the same, arrest any leakage from the tray. Take successful trial run. Remove all the waste from surrounding area and clean.	PM	18	858.88	15459.84			
2	PM of air handling unit of unit-3 &4 (ESP)	-do-	PM	12	858.88	10306.56			
3	PM of air handling unit of unit-3 &4 (UPS)	-do-	PM	12	858.88	10306.56			

4	Cleaning of suction air filter of air handling unit in set	Removal of all filters elements and clean with air and water and refit the same.	PM	126	429.44	54109.43
5	Cleaning of coil in air handling unit.	Remove of all filter elements and clean coil with coil cleaner.	PM	42	429.44	18036.48
6	Greasing of Bearing in AHU	Issue grease from warehouse and apply grease with grease gun in bearings.	BD	2	110.25	220.51
7	Replacement of belt .	Issue belt from warehouse. Remove pulley guard. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt. Put the pulley guard.	BD	2	429.44	858.88
8	Replacement of motor pulley or fan pulley	Issue from warehouse. Remove pulley guard. Remove belt & pully. Fix new pully. Check the alignment of pulley, if required corrects the same. Fix belt. Put the pulley guard.	BD	1	1276.74	1276.74
9	Removal of belt, alignment and fixing of belt.	Remove pulley guard. Check the alignment. If required correct the same. Put belt and pulley guard. Take trial successful trial run.	BD	2	429.44	858.88
10	Bearing replacement.	Issue bearing from store. Remove pulley guard and belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt and pulley guard. Take successful trial run.	BD	1	1276.74	1276.74
11	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	1	1276.74	1276.74

12	Overhauling of air handling unit.	Shift material from stores.Remove pulley guard & Belt. Open inspection door Inspect fan. Replace/Repaire the damaged parts if any. Assemble the fan. Close inspection door. Put the pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take successful trial run.	BD	1	5118.55	5118.55
13	Servicing of ventilation dampers	Ensuring freeness of dampers and opening and closing	BD	2	442.46	884.92
14	Cleaning of supply & return air grill	Remove grills and cleans with air and water and refit the same.	BD	50	214.72	10736.00
15	Removal & fitting of supply or return air grill.	<u> </u>	BD	10	214.72	2147.20
					PART TOTAL	132874.04

	AIR WASHER SYSTEM							
	PART # E2							
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)		
1	PM of Air washer fan	Remove pulley guard and belt. Check fan and motor pulley alignment, if required align the same. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put the pulley guard. Grease the bearing . Take successful trial run.	PM	12	1288.32	15459.84		
2	Cleaning of suction air filter of air washer fan (1 Set = 288 Filter)	Remove of all filter elements and clean with air and water and refit the same.	PM	12	1694.61	20335.31		
3	Greasing of Bearing.	Issue grease from warehouse and apply grease	BD	2	214.72	429.44		

		with grease gun in bearings.				
4	Replacement of belt In case of failure of belt or motor replacement.	Issue belt from warehouse. Remove pulley guard. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt. Put the pulley guard.	BD	2	429.44	858.88
5	Replacement of fan or motor pully.	Issue from warehouse. Remove pulley guard. Remove belt & pully. Fix new pully. Check the alignment of pulley, if required corrects the same. Fix belt. Put the pulley guard.	BD	1	1717.76	1717.76
6	Bearing OR bearing housing replacement.	Issue bearing from store. Remove pulley guard and belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt and pulley guard. Take successful trial run.	BD	1	1717.76	1717.76
7	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	1	2553.49	2553.49
8	Overhauling of Air Washer fan	Shift material from stores.Remove pulley guard & Belt. Open inspection door Inspect fan. Replace/Repaire the damaged parts if any. Assemble the fan. Close inspection door. Put the pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take successful trial run.	BD	1	6824.74	6824.74
9	Adjustment of nozzel for water spilage out side planum chamber per unit	Adjust the nozzel for water spilage out side planum chamber.	BD	2	858.88	1717.76
10	Cleaning / replacement / blanking of air	Check the nozzel if required Clean / replace / blank the air washer nozzel.	BD	5	429.44	2147.20

	washer nozzel.(one number)					
11	Servicing of ventilation dampers	Insuring freeness of dampers and opening and closing	BD	3	858.88	2576.64
12	PM of Air washer cooling water pump.	Decouple the pump and motor. Thoroughly clean the equipment. Check the alignment. Tighten / replace the gland. Check for Tightness of pump assembly and foundation bolt. Align and couple the pump. Clean the equipment. clean the suction filter of pump. Remove tools&tackles and waste mterial. Take successful trial run.	РМ	12	1288.32	15459.84
13	Gland tightening of pump.	Adjust the gland by tightening to minimise leakages.	BD	4	214.72	858.88
14	Greasing in pump.	Issue grease from warehouse and supply grease with grease gun in bearings.	BD	2	214.72	429.44
15	Gland replacement of pump.	Remove the damaged gland completely and replace with new. Adjust the gland to minimise leakages. Take successful trial run.	BD	2	429.44	858.88
16	Decoupling, alignment and coupling of pump / Coupling replacement	Remove coupling guard, decouple the pump and motor. Check the alignment. If required, correct the same. Couple and tighten the coupling bolt. Taketrial run for successful operation.	BD	2	858.88	1717.76
17	Overhauling of airwasher cooling water pump.	Shift material from stores. Decouple the pump. Dismantle the pump. Inspect all pump parts. Replace / repair the damaged parts if any. Assemble the pump. Fix the motor and coupling. Align and couple the pump. Clean the equipment. Take successful trial run.	BD	1	2576.64	2576.64

18	Vibration measurement Assistance per fan.	Supply manpower for assisting vibration measurement to GIPCL EIC for all categories rotating equipment. Semiskilled labor shall be required.	BD	24	104.47	2507.19
19	Balancing of Pump, Impellar, Fan	Providing manpower for assisting balancing of fan, Pump & motor. This includes welding of trial / final weight. Correctness of alignment. Inspection of bearings Tightness of foundation bolt etc.	BD	2	1288.32	2576.64
					PART TOTAL	83324.08

	PACKAGE AC							
	PART # F2							
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)		
1	PM of Package AC (5.5 T for plant End ELHS MCC room)	Tighten the compressor assembly and foundation bolt. Check & align the blower. Check belt condition if required replace. Grease the bearing. Gas top up if required. Clean suction filter / equipment. Take successful trial run.	РМ	8	858.88	6871.04		
2	PM of Package AC (5.5 T pac for mines End ELHS MCC room)	-do-	PM	2	858.88	1717.76		
3	Cleaning of suction air filters of Package AC.	Removal of all filters elements and clean with air and water and refit the same.	PM	20	429.44	8588.80		
4	Cleaning of Condensor coil of Package AC	Cleaing of condensor coil with coil cleaner & than water washing on position. Air blowing after washing.	PM	20	429.44	8588.80		
5	Cleaning of Evaporator coil of Package AC	Cleaing of evaporator coil with coil cleaner & than water washing on position. Air blowing after washing	PM	20	429.44	8588.80		

		Bid No.: SLPP/MECH/AC&	-			
6	Gas topping in PAC Compressor	Bring gas from store and topped up as per system requirement.	BD	2	429.44	858.88
7	Oil top up in PAC Compressor	Bring oil from store and topped up to required level.	BD	2	429.44	858.88
8	Greasing in bearings.	Issue grease from warehouse and apply grease with grease gun in bearings.	BD	2	429.44	858.88
9	Expansion valve servicing/repla cement	Open and clean the expansion valve and refit.	BD	2	1288.32	2576.64
10	Gas drier replacement.	Open and replace the drier refit.	BD	2	1288.32	2576.64
11	Bearing replacement in package AC	Issue bearing from store. Remove belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt. Take successful trial run.	BD	1	858.88	858.88
12	Replacement of blower in package AC	Issue the blower from warehouse. Remove old and replace with new one if req. Check the alignment of pulley, if required corrects the same. Fix new belt.	BD	1	858.88	858.88
13	Replacement of belt in package AC	Issue belt from warehouse. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt.	BD	2	429.44	858.88
14	Attending leakages in refrigerant line.	After getting leakages in refrigerant line pump down the compressor. Attend the leakage. Check with soap solution to ensure no leakage.	BD	2	1288.32	2576.64
15	Replacement of compressor for PAC	Issue compressor from store. Remove compressor from package unit. Install new compressor. Align and put belt. Take successful trial run.	BD	2	1288.32	2576.64
16	Replacement of Air cooled condensor of PAC	Issue condensor from store. Remove condensor from package unit. Install new condensorr. Align and put	BD	1	2553.49	2553.49

belt. Take successful trial

					PART TOTAL	54945.16
18	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	2	858.88	1717.76
17	Removal and fitting of motor from blower for electrical work.	Remove motor from blower. Fit the same after electrical work.	BD	1	858.88	858.88
		run.				

	VALVES, PIPING, DUCT & INSULATION							
	PART # G2							
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)		
1	Gland tightening in valve.	Adjust the gland by tightening to stop leakages.	BD	15	214.72	3220.80		
2	Greasing of valves.	Issue of grease from store. Apply on valve spindle after cleaning.	BD	10	214.72	2147.20		
3	Servicing of NRV at site up to 125 NB.	Open NRV. Check seat, disc and other internal parts. Repair the seat. Lap seat and check the surface for blue match. Assemble and Box up.	BD	2	858.88	1717.76		
4	- do - 150 to 350 NB	- do -	BD	2	858.88	1717.76		
5	Servicing or replacement of Float Valve	Remove float valve from pipe. Dismental and service the same.	BD	2	429.44	858.88		
6	Replacement of gland packings in valve.	Remove the gland follower. Remove the damaged gland packing. Replace new. Box up.	BD	2	429.44	858.88		
7	Attending flange leakage in pipe line upto 80 NB	Check the flange joint for any leakages. Loose the flange. Replace the gasket. Tighten the flange.	BD	2	429.44	858.88		
8	- do - 100 to 350 NB	- do -	BD	2	429.44	858.88		
9	Replacement of gate, globe valve and NRV upto 125 NB.	Remove the valve. Clean the flange surface. Cut and put new gasket. Fix new valve. Tighten the bolt.	BD	2	1276.74	2553.49		
10	- do - 150 to	- do -	BD	2	1276.74	2553.49		

	350 NB					
11	Servicing of gate/globe valve upto 125NB	Remove the valve. Tharouhly clean and dismantle the valve. Check for any defects in parts and repair. Lap the seat and disc and ensure the color matching and box up. Hydrotest by putting water and fit the valve in position by new flange gasckets	BD	2	858.88	1717.76
12	Servicing of gate,globe valve and NRV upto 150 to 350NB	do	BD	2	858.88	1717.76
13	Fabrication & Erection of G.I. Duct (Sq. Mt.)	Fabricate GI duct as per site requirement & Erect the same with support	BD	15	322.08	4831.20
14	Insulation of Pipe / Duct. (Sq. Mt.)	Remove old insulation. Apply glass wool. Wrap with chicken mesh. Apply POP,cement & Paint.	BD	15	322.08	4831.20
15	Freeness checking of various type & size of valves	Check the valve for jamming. Made free if required. Lubricate the spindle of valve. Assist trial run of valve by opening and closing of valve.	BD	5	214.72	1073.60
16	Servicing of Level gauge.	Service the level indicator and insure visibility.	BD	2	429.44	858.88
					PART TOTAL	32376.41

	C & I EQUIPMENTS						
		PART#	H2				
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)	
1	PLC CONTROL PANEL	JOB INCLUDES, CONTACT CHECKING, AND REPLACEMENT OF FAULTY LAMPS AND PUSH BOTTON AND CONTACT OF PANEL.	PM	3	236.57	709.70	
2	MICRO CONTROLLERS	TESTING/REPLACEMENT OF CONTROLLER	PM	1	138.00	138.00	
3	PRESSURE GUAGES	CALIBRATION/REPLACEM ENT	PM	30	139.97	4199.03	
4	PRESSURE	CALIBRATION/REPLACEM	PM	10	138.00	1379.96	

	SWITCHES	ENT				
5	FLOW SWITCHES (DP TYPE)	CALIBRATION/REPLACEM ENT	PM	1	138.00	138.00
6	SOLENOID VALVES	CALIBRATION/REPLACEM ENT	PM	2	138.00	275.99
7	TEMPERATURE GAUGES	CALIBRATION/REPLACEM ENT	PM	6	118.28	709.70
8	LEVEL SWITCHES (ALL TYPES)	CALIBRATION/REPLACEM ENT	PM	4	128.14	512.56
9	RTDs	REPLACEMENT	PM	6	118.28	709.70
10	PLC CONTROL PANEL	JOB INCLUDES CLEANING OF PANEL/ EQUIPMENTS AND CONNECTION TIGHTNING	PM	8	157.71	1261.68
11	PRESSURE GUAGES	- do -	PM	30	98.57	2957.06
12	PRESSURE SWITCHES	- do -	PM	10	98.57	985.69
13	FLOW SWITCHES (DP TYPE)	- do -	PM	1	93.64	93.64
14	SOLENOID VALVES	- do -	PM	1	93.64	93.64
15	TEMPERATURE GAUGES	- do -	PM	6	93.64	561.84
16	RTDs	- do -	PM	10	93.64	936.40
					PART TOTAL	15662.58

	WINDOW AC, SPLIT AC & WATER COOLERS						
	PART # I2						
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)	
1	PM of Window A.C. make Fedders Lloyd/Blue star/voltas/Carri er capacity up to 2 TR	PM / Servising includes maintenance / defect attending of all the machines on comprehensive basis including repair/supply of all required spares,	PM	550	94.65	52059.75	
2	PM of Split A.C. with remote make LG/Blue star/voltas capacity up to 2.0 TR	electrical items (swing/fan motor,capacitor,switch, thermostate, remote battery cell etc), electrodes, gas charging, condenser & cooling copper tube repair,	PM	550	94.65	52059.75	

3	PM of Split A.C./ ductable with remote make LG/Blue star/voltas capacity 3.0TR	sealing etc. except compressor rewinding /repair, main body outer frame, new condenser coil supply, front grill, base	РМ	450	94.65	42594.34
4	PM of Split A.C./ ductable with remote make LG/Blue star/voltas capacity 5.0TR	frame & Air filter . You shall carry out inspection and servicing of each unit once in fifteen days and and for Lignite handling area	PM	200	94.65	18930.82
5	PM of Water Coolers make Voltas/Usha/kri ps cold/blue star capacity upto 250 ltr	servicing shall be carried out twice in a week. Maintain the record after taking signature of concerned. (Total quantity as indcated is for one years condering	РМ	250	94.65	23663.52
6	PM of Deep freezer	the frequency of servicing of each unit)	PM	40	94.65	3786.16
7	Rewinding of compressor of Window A.C. (any make) capacity up to 2 TR		BD	3	3200.00	9600.00
8	Rewinding of compressor of Split A.C. (any make) capacity up to 2 TR	Rewinding /repair of Compressors (including	BD	4	3200.00	12800.00
9	Rewinding of compressor of Split A.C. (any make) capacity up to 3.0/5.0 TR	removal, re-erection, to & fro transporation and one year guarentee of rewinding /repair)	BD	2	3500.00	7000.00
10	Rewinding of compressor of Water cooler (any make)		BD	3	3200.00	9600.00
11	Rewinding of compressor of Deep freezer (any make)		BD	1	3200.00	3200.00
12	Replacement of air filter of Window A.C.	Supply air filter to site as per	BD	5	200.00	1000.00
13	Replacement of air filter of Split A.C.	OEM specification & replace the same.	BD	5	200.00	1000.00
14	Replacement of front Grill for window AC	Supply grill for window AC as per OEM specification to	BD	1	1000.00	1000.00
13	Replacement of base frame for window AC	site & replace the same. Make Fedders Lloyd/Blue star/voltas/Carrier.	BD	1	500.00	500.00

16	Replacement of MAIN BODY OUTER FRAME for window AC	BD	1	1000.00	1000.00
17	Replacement of damaged Al condecer coil with copper condencer coil	BD	3	3000.00	9000.00
				PART TOTAL	248794.33

	OPERATION OF AC PLANT					
		PART#	J2			
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)
1	Deputing one operaotor per shift (8hrs) for operation of Central / Package AC.	Operator should maintain logbook as instruction given by shift in charge and should report to shift in charge.	Орр.	36	12548.92	451761.15
					PART TOTAL	451761.15

	Unitary Air Filteration (UAF) SYSTEM							
	PART # K2							
Sr. No.	Name of Activity (A)	Scope of Work (B)	Nature of Mntc, (C)	Qty. (D) for one years	Estimate d SOR in ₹. (E)	Amount in ₹. (F = D X E)		
1	PM of UAFan.	Remove pulley guard and belt. Check fan and motor pulley alignment, if required align the same. Tighten the fan assembly and foundation bolt. Fix / replace the belt. Put the pulley guard. Grease the bearing. Take successful trial run.	PM	8	858.88	6871.04		
2	Cleaning of suction air filter of UAF system	Remove of all filter elements and clean with air and water and refit the same.	PM	24	858.88	20613.12		
3	Greasing of Bearing.	Issue grease from warehouse and apply grease	BD	2	214.72	429.44		

		with grease gun in bearings.				
4	Replacement of belt In case of failure of belt or motor replacement.	Issue belt from warehouse. Remove pulley guard. Remove old belt. Check the alignment of pulley, if required corrects the same. Fix new belt. Put the pulley guard.	BD	1	638.37	638.37
5	Replacement of fan pulley or motor pully.	Issue from warehouse. Remove pulley guard. Remove belt & pully. Fix new pully. Check the alignment of pulley, if required corrects the same. Fix belt. Put the pulley guard.	BD	1	2553.49	2553.49
6	Bearing OR bearing housing replacement.	Issue bearing from store. Remove pulley guard and belt. Remove fan pulley. Remove the bearing from plumber block. Fix new bearing. Fix the pulley. Align the pulley and shaft. Put belt and pulley guard. Take successful trial run.	BD	1	2553.49	2553.49
7	Replacement of flexible canvas joint.	Issue from warehouse. Remove canvas joint. Replace with new one.	BD	2	3412.37	6824.74
8	Overhauling of UAF	Shift material from stores.Remove pulley guard & Belt. Open inspection door Inspect fan. Replace/Repaire the damaged parts if any. Assemble the fan. Close inspection door Put the	BD	1	6824.74	6824.74
		pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take successful trial run.				
9	Adjustment of nozzel for water spilage out side planum chamber per unit	pulley. Align the motor and fan pulley. Fix the belt. Clean the equipment. Take	BD	4	429.44	1717.76

	washer nozzel.(one number)					
11	Servicing of ventilation dampers	Insuring freeness of dampers and opening and closing	BD	4	429.44	1717.76
12	PM of UAF cooling water pump.	Decouple the pump and motor. Tharoughly clean the equipment. Check the alignment. Tighten / replace the gland. Check for Tightness of pump assembly and foundation bolt. Align and couple the pump. Clean the equipment. clean the suction filter of pump. Remove tools&tackles and waste mterial. Take successful trial run.	РМ	8	429.44	3435.52
13	Gland tightening of pump.	Adjust the gland by tightening to minimise leakages.	BD	2	214.72	429.44
14	Greasing in pump.	Issue grease from warehouse and supply grease with grease gun in bearings.	BD	2	214.72	429.44
15	Gland replacement of pump.	Remove the damaged gland completely and replace with new. Adjust the gland to minimise leakages. Take successful trial run.	BD	2	429.44	858.88
16	Decoupling, alignment and coupling of pump / Coupling replacement	Remove coupling guard, decouple the pump and motor. Check the alignment. If required, correct the same. Couple and tighten the coupling bolt. Taketrial run for successful operation.	BD	1	858.88	858.88
17	Overhauling of UAF cooling water pump.	Shift material from stores. Decouple the pump. Dismantle the pump. Inspect all pump parts. Replace / repair the damaged parts if any. Assemble the pump. Fix the motor and coupling. Align and couple the pump. Clean the equipment. Take successful trial run.	BD	1	2553.49	2553.49

18	Vibration measurement Assistance per fan.	Supply manpower for assisting vibration measurement to GIPCL EIC for all categories rotating equipment. Semiskilled labor shall be required.	BD	12	104.47	1253.59
19	Balancing of Pump, Impellar, Fan	Providing manpower for assisting balancing of fan, Pump & motor. This includes welding of trial / final weight. Correctness of alignment. Inspection of bearings Tightness of foundation bolt etc.	BD	1	1288.32	1288.32
					PART TOTAL	66145.90

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

PACKAGE-III

SCHEDULE OF RATES INCLUDING ALL TAXES FOR SUPPLY ITEMS REQUIRED FOR WINDOW/SPLIT AC FOR TWO YEARS.

Part-L (Phase-1 & Phase-2)

Sr. No.	Part-L (Phase-1 Name of Activity (A)	Nature of	Qty.	Estimated	Total
0.1.1.0.	name of reality (rt)	Mntc, (C)	for two years.	SOR Including all taxes in Rs.	Amount in Rs.
1	Supply & replacement of fan W/O motor	No	1	900.00	900.00
2	Supply & replacement of swing motor	No	1	250.00	250.00
3	Supply & replacement of blower 1.5 TR AC	No	1	750.00	750.00
4	Supply & replacement of blower 2.0 TR AC	No	1	750.00	750.00
5	Supply & replacement of cooling coil	No	1	4375.00	4375.00
6	Supply & replacement of condenser coil	No	1	3000.00	3000.00
7	Supply & filling of gas in 1.5 TR AC	No	1	2200.00	2200.00
8	Supply & filling of gas in 2.0 TR AC	No	1	2500.00	2500.00
9	Supply & filling of gas in 3.0 TR AC	No	1	3000.00	3000.00
10	Supply & filling of gas in 5.0 TR AC	No	1	4000.00	4000.00
11	Supply & replacement of thermostat/capacitor/selector switch reputed make only	No	1	500.00	500.00
12	Supply & replacement of fan motor	No	1	2000.00	2000.00
13	Supply & replacement of energy efficient compressor for 1.5 TR window AC (with min. 3 year guarantee) reputed make only	No	1	6000.00	6000.00
14	Supply & replacement of energy efficient compressor for 1.5 TR split AC (with min. 3 year guarantee) reputed make only	No	1	6000.00	6000.00
15	Supply & replacement of energy efficient compressor for 2.0 TR split AC (with min. 3 year guarantee) reputed make only	No	1	9000.00	9000.00
16	Supply & replacement of energy efficient compressor for 3.0 TR split / ductable AC (with min. 3 year guarantee) reputed make only	No	1	12000.00	12000.00
17	Supply & replacement of energy efficient compressor for 5.0 TR split / ductable AC (with min. 3 year guarantee) reputed make only	No	1	15000.00	15000.00
18	Supply & replacement of relay /over load protector	No	1	250.00	250.00

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19	Supply & replacement of wire kit	No	1	350.00	350.00
20	Supply of remote control (as per OEM)	No	1	800.00	800.00
21	Supply & erection of best quality size 1/4" copper tube suitable for split AC	mtr	1	200.00	200.00
22	Supply & erection of best quality size 1/2" copper tube suitable for split AC	mtr	1	300.00	300.00
23	Supply & erection of best quality size 3/8" copper tube suitable for split AC	mtr	1	350.00	350.00
24	Supply & erection of best quality size 5/8" copper tube suitable for split AC	mtr	1	450.00	450.00
25	Supply & erection of best quality size 7/8" copper tube suitable for split AC	mtr	1	600.00	600.00

Sr. No.	Item	Total Amount in Rs.
1	Package-1	1647640.46
2	Package-2	1215290.62
3	Total estimated Value for first year (Sr. No. 1+2)	2862931.08
4	Total Estimated Value for second year (with 5% escalation for package-1 & 2)	3006077.63
5	Package-3 (Supply items including all taxes for two years),	75525.00
6	Provision for Unforseen Works for two years	50400.00
7	Total Contract value for two years (Sr. No.3+4+5)	5994933.71

(Rs. Fifty nine lakh ninety four thousand nine hundred thirty three and seventy one paisa)

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

CHECKLIST FOR PASSING THE BILLS	
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1)	Work Order / P.O. No. & Contract value	:	For the mon	ith of :		
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	Person	S.	for
6)	Details of E.C Policy	:	Valid up to Persons.		for	
7)	Documents attached for verification for the previous month.	:	Wage & Atte	endance	Sheets.	Yes/No
			P.F Challan			Yes/No
8)	Documents attached for verification (in case of Final Bill)	:	Bonus Payn	nent Reg	ister	Yes/No
		:	Leave wage	register		Yes/No
9)	Security Deposit / Retention Money lying with Co.	:	Yes / No if y	es, Rs.		
Dat	te:			Si	gnature of Co	ntractor

with official stamp

2.0 ANNEXURE-B

Ref:

PROFORMA OF BANK GUARANTEE FOR ORDER PERFORMANCE

(To be Stamped in accordance with Stamp Act)

Bank Guarantee No.....

o as reof to ffice ifter text and ued ctor the sful tory asaid
eof, thee the (in ear) e or the nce ourt,

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 aborestricted to Rs	all remain in force up to the including aforce any claim under this Guarantee is the discharged from its liabilities under this mutime to time for such period or period as
Dates thisday ofat	20
	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	То	
To M/s. Gujarat Industries Power At & Post – Nani Naroli Taluka: Mangrol Dist.Surat-394 110	Company Limited	
Dear Sirs,		
In accordance with you	ur "Invitation for Bids" Dated	under your Specification
M/s		having its
(Herein after called the	Bidder) wish to particip	ate in the said Bid for
Rsv vbe submitted by the Bidder as	valid for one (1) year from a a condition precedent for par	narantee for an amount of is required to ticipation in the said Bid, which tingencies mentioned in the Bid
our Head	Office at	Bank at, having (local address) Guarantee and undertake
to pay immediately on writte (hereinafter called the "Purcha:	en demand by Gujarat Indus ser")	tries Power Company Limited
Any such demand made by irrespective of any dispute or enough for enforcement of B	without any reservation, said "Purchaser" shall be of difference raised by the Bidd ank Guarantee on the Bank	protest, demur and recourse. conclusive and binding on us der. It shall be conclusive and if Purchaser invokes the Bank by the Bidder, thus far and no

(2)

			e irrevocable				
guara	ntee is require	ed, the sai	me shall be ext	ended to such	required pe	riod on red	
			igh its authorized day of			•	
				(Signa	ature)		
				(Na	ıme)		
Stamp) :			Designation	n with Bank		
				Attorney as Attorney No	per Power o	of	
				Dated			

Bid No.: SLPP/MECH/AC&V/AMC/2017-19

4.0 ANNEXURE-D

<u>PERFORMA CERTIFICATE</u> (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 Lol / contract is full and final. We accept this, and no claim related to payment is left.
- 3. The rates of the Lol / 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 so	oon as payment from final bill after due
recoveries will be received by us.	

Signature, Stamp and date.

For. M/S.

5. <u>Form-A</u>

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. <u>Form-B</u>

List of Tools & Tackles to be submitted with physical documents

Sr. No.	Description	Nos.	Status

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

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

ANNEXURE - F

Schedule of Prices For Manpower for the jobs not covered in the contract (All the Prices are in Rs.)

		For Normal Working Days			For Overtime Hours		
Sr. No.	Category	Qty. for two years (Man Day)	Man Day rate Rs. / Day	Total Estimated Cost in Rs.	Qty. for two years (Hours)	Man Hour rate Rs. / Hour	Total Estimated Cost in Rs.
1	Mechanical fitter	15	660.00	9900.00	30	165.00	4950.00
2	Arc welder	10	600.00	6000.00	20	150.00	3000.00
3	Grinder	5	600.00	3000.00	10	150.00	1500.00
4	Rigger	5	600.00	3000.00	10	150.00	1500.00
5	Gas cutter	5	600.00	3000.00	10	150.00	1500.00
6	Helper	15	580.00	8700.00	30	145.00	4350.00
				33600.00			16800.00

Total Estimated Cost of manpower four unforseen/contigency jobs for two years	50400.00
without escalation	

NOTE:

- 1. The rates includes cost of all manpower, equipments, vehicles, consumables, tools & tackles, transportation, Safety and statutory compliance, mobilization, Contingency expenditure and supervision charges etc..
- 2. 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 basedon site requirements.
- 3. Percentage quoted by the parties shall also remain applicable on above rates. Rate shall be fixed for contract period (Two years).

COMPANY SEAL	SIGNATURE
	NAME
	DESIGNATION
	COMPANY

ANNEXURE - G

LIST OF MAINTENANCE TOOLS AND TACKLES (TENTATIVE)

Sr. No.	DE MAINTENANCE TOOLS AND TACKLES (TENTATIVE Description	Quantity (No.)
1	Refrigerant gas evacuation kit along with storage	1
	cylinder	
2	320/400AMP.WELDING RECTIFIER/ GENERATORS	1
3	CUTTING TORCH WITH HOSE PIPE AND	1set
	REGULATOR & GAS CYLINDER	
4	STEEL TAPE-2 MTR TO 5 MTR	2
5	D/E SPANNER COMPLETE SET	2
6	RING SPANNER COMPLETE SET	2
7	BOX SPANNER COMPLETE SET	1
8	PIPE WRENCH/DIFFERENT SIZES	4
9	PULLER/BEARING PULLER	2
10	INSIDE/OUTSIDE CALIPERS OF DIFFERENT SIZE.	2
11	MECHANICAL JACK 25 MT	2nos.
12	ANGLE GRINDING MACHINE AG7	2
13	STRAIGHT GRINDING MACHINE GQ4	2
14	SPIRIT LEVEL	4
15	MASTER LEVEL	2
16	MECHANICAL SCREW DRIVER OF VARIOUS SIZE	2set
17	DIAL GUAGE WITH MAGNETIC STAND	2
18	FEELER GUAGE of different size	2set each.
19	GREASE GUN -CAP. 1 LTR	4
20	HAMMER –4 LBS, 10 LBS, 20LBS	2 nos. each
21	MANILA ROPE OF DIFFERENT SIZES	2 set
22	CHAIN PULLEY BLOCK-1 MT, 2 MT, 5 MT	1nos. each
23	HACK SAW	2 set
24	WIRE CUTTER	2
25	SHIM CUTTER	2
26	HAND LAMP	4nos.
27	WELDING LEAD OF 100 METER LENGTH EACH	1nos. each
28	CHIESEL OF DIFFERENT SIZES	2sets
29	COPPER ROD	2nos.
	TOOLS/TACKLES FOR INSTRUMENT MAINT.	
1	Fixed & Ring Spanner Set Size 4 TO 22MM 'TAPARIA' Make	01 Set each
2	Line Tester 'TAPARIA-813' Make	01 No
3	8" AND 12" Adjustable Wrench 'TAPARIA' Make	01 No each
4	Multi meter 'MECO' OR 'RISHABH' Make	01 No
5	Combination AND Nose Pliers 'TAPARIA'	01 No each
6	Nut Driver set 6MM, 8MM, 10MM	01 No. each
7	Allen key set (INCH AND MM)	01 Set eah
8	Wire stripper & Knife 'TAPARIA'	01 No. each
9	Flat screw driver set 6mm, 8mm, 10mm 'TAPARIA'	01 set
10	Star screw driver set 'TAPARIA'	01 set
11	Tool bag	01 No.
12	LED Torch	01 No.
13	Hack saw with high speed blade	01 No.

ANNEXURE-J

SCHEDULE OF DEVIATION FROM GENERAL SPECIFICATION.

All deviation from the General condition and Technical specification shall be filled by the BIDDER clause in this schedule.

SECTION	CLAUSE NO.	AS PER TENDER DOCUMENT	DEVIATION

The BIDDER here by certifies that the above mentioned points are the only deviations from the Owner's General condition 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 the specific requirements laid out in the Owner's General specifications, then the latter shall govern and will be binding on the BIDDER for the quoted price.

COMPANY SEAL	SI	IGNATURE	
	N/	AME	
	DE	ESIGNATION	
	CC	OMPANY	
	DA	ATE	

ANNEXURE- I1 Details of Equipments

Equipment List For Phase#1 AC & Ventilation System						
Sr. No.	Equipment	Make	Qty.	Model	Capacity (Each)	
I.	CENTRAL AC PLANT					
1	Compressor	Kirloskar	4	AC 1270	100 TR	
2	Condenser water pump	Beacon Weir	4	BWC 80/100	100 M3/Hr.	
3	Chilled water pump	Beacon Weir	4	BWC 80/100	70 M3/Hr.	
4	Cooling tower	Pharpur	4	3871	100 M3/Hr.	
5	Condenser	Jay Pee	4	CDS-2090	100 TR	
6	Chiller	Jay Pee	4	DXC-2409	100 TR	
II.	AIR HANDLING UNIT (AHU 1-16)					
7	Main control room Unit-I&II (1 - 6)	Jay Pee	6	AH-11	23335 M3/Hr.	
8	ESP Control Room Unit I & II (7-10)	Jay Pee	4	AH-3	4500 M3/Hr.	
9	Service Building (11-12)	Jay Pee	2	AH-6	8900 M3/Hr.	
	Gervice Building (11-12)	July 1 CC		AITO	8000	
10	Switchyard control room (13-14)	Jay Pee	2	AH-6	M3/Hr.	
11	DM Plant Control Room (15-16)	Jay Pee	2	AH-2	3500 M3/Hr.	
III.	FRESH AIR FAN IN AHU				2.22	
12	Plant Control Room (Unit I & II)	ABB	2	AXBZ-3B-035	2400 M3/Hr.	
13	Service Building	ABB	1	AXBZ-3B-035	1800 M3/Hr.	
14	Switchyard Control Room	ABB	1	PMCX-315/258-6	1100 M3/Hr.	
15	ESP Control Room (Unit I & II) & DM Plant	ABB	3	PMCX-315/258-6	800 M3/Hr.	
IV.	PACKAGE AC					
16	415 UPS Room Unit I & II	Voltas	8	50 BA 012	10 Tons	
17	Ash Handling Control Room	Blue Star	3	DPA105 2R1	10Ton	
18	Limestone Control Room	Voltas	3	50 BB 012	10 Tons	
19	Lignite control Room (Operation) Air cooled package AC 5.5 MT X 4 Nos. Lignite Control Room (Maintenance Office)	Carrier	6	40LC009/38LH090T	7.5 Tons 5.5 TR	
20		Blue star	4	DPA 661 R1-I		
24	Ductable Split AC 5.5 TR X 3 No	Blue star	2		5.5TR	
21 V.	installed for industrial canteen. AIR WASHER SYSTEM	LG	1		5.5TR	
20	Air Washer Fan	DUVENT	4	DCLL-D-12-D-L3	250000 M3/Hr	
21	Circulating water pump for air washer	BEACON WEIR	6	SDB 150/200	335 M3/Hr	
VI.	FRESH SUPPLY AIR FAN					
	FOR T G BUILDING					
22	UPS Battery Room U 1&2 10.5 Mt.	ABB	2	AXBZ-6B-060-VA	9000 M3/Hr	

	220 V DC Bat. Charger Room 15.5				12000
23	Mt.	ABB	2	AXBZ-3B-070-VA	M3/Hr
24	220 V DC Unit Switch Board Room	ABB	2	AXBZ-3B-035-VA	3000 M3/Hr
24	15.5 Mt.	ADD		AVPT-SP-030-AV	9000
25	24 V DC Switch Board Room 15.5 Mt.	ABB	2	AXBZ-6B-060-VA	M3/Hr
	24 V BO CWIGH BOOK TROOM TO WIL	, NBB		700BZ 0B 000 V/1	9000
26	24 V DC Battery Room 10.5 Mt.	ABB	2	AXBZ-6B-060-VA	M3/Hr
	_				3000
27	Elevator Machine Room	ABB	1	AXBZ-3B-035-VA	M3/Hr
	FOR SWITCH GEAR ROOM				
					12000
28	ESP Control Room U 1 & 2	ABB	2	AXBZ-6B-070-VA	M3/Hr
00	DC Haves	ADD	_	AVD7 CD 000 \/A	9000
29	DG House	ABB	1	AXBZ-6B-060-VA	M3/Hr 9000
30	Switch yard Control Room.	ABB	2	AXBZ-6B-060-VA	9000 M3/Hr
30	Switch yard Control Noom.	ADD		AADZ-0D-000-VA	12000
31	CW Pump House	ABB	1	AXBZ-3B-070-VA	M3/Hr
<u> </u>	ovvi ampribace	7.00		700000000000	12000
32	DM Plant	ABB	1	AXBZ-3B-070-VA	M3/Hr
					12000
33	Clarified water Pump house	ABB	1	AXBZ-3B-070-VA	M3/Hr
					6000
34	Raw Water Pump house	ABB	1	AXBZ-3B-060-VA	M3/Hr
					9000
35	Fuel Oil Transfer Pump House	ABB	1	AXBZ-6B-060-VA	M3/Hr
26	Switch word Botton, Boom	ADD	1	A V D 7 2 D 02 E 1/A	3000
36	Switch yard Battery Room	ABB	1	AXBZ-3B-035-VA	M3/Hr
	FOR BUNKER BAY				
0.7	LIDO D # D LIAGO EL GOLF	4.55		AVD7 OD 005 V4	4500
37	UPS Battery Room U 1&2 EL 8.2 Mt.	ABB	2	AXBZ-6B-035-VA	M3/Hr
38	Lift Machine Boom 11182 EL 9 2 Mt	ADD	2	A V D 7 2 D 02 5 1/A	3000
ುಂ	Lift Machine Room U1&2 EL 8.2 Mt.	ABB		AXBZ-3B-035-VA	M3/Hr

C&I EQUIPMENT LIST FOR AC SYSTEM PHASE # 1					
Sr. No.	Equipment	Qty.			
1	PLC CONTROL PANEL	1			
2	MICRO CONTROLLERS	26			
3	PRESSURE GUAGES	68			
4	PRESSURE SWITCHES	55			
5	DIFFERENTIAL PRESSURE SWITCHES	19			
6	FLOW SWITCHES (DP TYPE)	8			
7	SOLENOID VALVES	48			
8	THERMOSTATS	44			
9	TEMPERATURE GAUGES	74			
10	TEMPERATURE SWITCHES	4			
11	LEVEL SWITCHES (MAGNETIC TYPE)	4			
12	RTDs	26			

LIST OF INSTALLED WINDOW/SPLITAC & WATERCOOLERS

	WATERCOOLE	NO	CADACIT		
			CAPACIT	04.	
4	AREA	MAKE	Y 4.5TD	Qty	REMARK
1	101 VIP G/H	LG	1.5TR	1	SPLIT AC
2	102 VIP G/H	LG	1.5TR	1	SPLIT AC
3	103 VIP G/H	LG	1.5TR	1	SPLIT AC
4	104 VIP G/H	LG	1.5TR	1	SPLIT AC
5	105 VIP G/H	LG	1.5TR	1	SPLIT AC
6	106 VIP G/H	LG	1.5TR	1	SPLIT AC
7	107 VIP G/H	LG	1.5TR	1	SPLIT AC
8	108 VIP G/H	LG	1.5TR	1	SPLIT AC
9	201 VIP G/H	LG	1.5TR	2	SPLIT AC
10	202 VIP G/H	LG	1.5TR	2	SPLIT AC
11	203 VIP G/H	LG	1.5TR	2	SPLIT AC
12	204 VIP G/H	LG	1.5TR	2	SPLIT AC
	CONF.				
	ROOM VIP				
13	G/H	LG	2 TR	2	SPLIT AC
	LAUNGE				
	ROOM VIP	_			
14	G/H	LG	2 TR	2	SPLIT AC
l	DINNING			_	
15	HALL VIP G/H	LG	2 TR	2	SPLIT AC
	G.F MD				
40	BUNGLOW (1.0	4 570		ODLIT AO
16	F-2)	LG	1.5TR	2	SPLIT AC
47	F.F M.D	1.0	4 ETD		CDLIT AC
17	BUNGLOW	LG	1.5TR	2	SPLIT AC
40	501 EXECU	1.0	1 ETD	1	SPLIT AC
18	G/H 502 EXECU	LG	1.5TR	1	SPLIT AC
19	G/H	LG	1.5TR	1	SPLIT AC
19	601 EXECU	LG	1.511	I	SPLIT AC
20	G/H	LG	1.5TR	1	SPLIT AC
20	602 EXECU	LO	1.511	I	OI LIT AO
21	G/H	LG	1.5TR	1	SPLIT AC
	603 EXECU		1.011		OI LIT AO
22	G/H	LG	1.5TR	1	SPLIT AC
	EGH			'	0. 2.1 7.0
23	CANTEEN	LG	2 TR	3	SPLIT AC
	EGH		2 111		01 211 7(0
	CANTEEN				
24	(EXTENSION)	LG	2 TR	2	SPLIT AC
	AGM (SLPP)	_ _			
	HOUSE				
25	COLONY F-1	VOLTAS	1.5TR	1	WINDOW
26	AGM (SLPP)	WHIRLPOOL	1.5TR	1	SPLIT AC
	· · · /		1	1	

	HOUSE				
	COLONY F-1				
	AGM (SLPP)				
	HOUSE			_	
27	COLONY F-1	LG	1.5TR	1	SPLIT AC
28	SCHOOL BUILDING	LG	1.5TR		SPLIT AC
20	SCHOOL	LG	1.51K		SPLIT AC
29	BUILDING	CARRIER	1.5TR	1	WINDOW
	GM HOUSE	07 II (I (I Z I (1.0111		111112011
30	COLONY F-3	LG	1.5TR	1	SPLIT AC
	AGM (F)				
	HOUSE				
31	COLONY E-5	LG	1.5TR	1	SPLIT AC
	AGM (O&M)				
	HOUSE	WILLIDI BOOL	4 575		ODLIT AC
32	COLONY E-12	WHIRLPOOL	1.5TR	1	SPLIT AC
	GM (MINES) COLONY				
33	HOUSE F-4	LG	1.5TR	1	SPLIT AC
	1100021 1	F.LLOYD/BLUE	1.011		01 211 710
34	CATV ROOM	STAR	1/1.5/TR	2	WINDOW
	NEW ADM				
35	ED OFFICE	LG	2.0TR	1	SPLIT AC
	NEW ADM				
36	MD OFFICE	LG	2.0TR	1	SPLIT AC
	OLD ADM CM	DI LIE OTAD	4 570	4	\A/INIDO\A/
37	(HR&A) OLD ADM	BLUE STAR	1.5TR	1	WINDOW
38	MINES	LG	1.5TR	1	SPLIT AC
30	OLD ADM	LO	1.511	l l	OI LIT AO
	AGM				
39	(FINANCE)	F.LLOYD	1.5TR	1	WINDOW
	OLD ADM				
	CONFERENC				
40	E ROOM	BLUE STAR	1.5TR	3	WINDOW
44	NEW ADM	1.0	1 ETD	4	CDLIT AC
41	DGM (MINES) NEW ADM	LG	1.5TR	1	SPLIT AC
42	GM (MINES)	VOLTAS	1.5TR	1	SPLIT AC
74	NEW ADM IT	VOLIAG	1.011	1	OI LII AO
43	DEPT	BLUESTAR	1.5TR	1	SPLIT AC
	NEW ADM				_
44	UPS ROOM	LG	2.0TR	1	SPLIT AC
	MCC ROOM				
	I/P STAKER	E	4		14/14/15 6347
45	MCC	F.LLOYD	1.5TR	2	WINDOW
	OPERATION CABIN				
46	STAKER	LG	1.5TR	1	WINDOW
40	SIAKEK	LG LG	1.51K	l I	VVIINDOVV

MCC ROOM	WINDOW WINDOW SPLIT AC
CABIN I/P 48 BUCKET LG 1.5TR 1 WARE	
48 BUCKET LG 1.5TR 1 WARE 1	
WARE	
	SPLIT AC
	SPLIT AC
49HOUSEBLUE STAR1.5TR1	
WARE	
50 HOUSE F.LLOYD 1.5TR 1	WINDOW
NEW WEIGH	
BRIDGE FOR	CDLIT AC
51 LIME VOLTAS 1.5TR 1	SPLIT AC
NEW WEIGH BRIDGE FOR	
52 LIGNITE WHIRLPOOL 1.5 TR 1	SPLIT AC
OLD WEIGH	OI LIT AC
53 BRIDGE CARRIER 1.5TR 1	WINDOW
PLCC ROOM CARRIERF.LLO	
54 AHS YD 1.5TR 2	WINDOW
G.F DM	
55 PLANT CARRIER 3.0T 1	SPLIT AC
G.F DM	
56 PLANT BLUE STAR 3.0T 1	SPLIT AC
G.F DM	
57 PLANT CARRIER 1.5TR 1	WINDOW
F.F DM	\A/INIDO\A/
58 PLANT F.LLOYD 1.5TR 1	WINDOW
SOX-NOX	SPLIT AC
ELHS BLUESTAR STR T	SPLIT AC
OPERATOR	
60 CABIN HIYER 1.5TR 1	WINDOW
ELHS MCC	
ROOM	
61 STACKER HIYER 1.5TR 2	WINDOW
MCC ROOM	
62 O/P STAKER LG/VOLTAS 1.5TR 2	WINDOW
OPERATER OF THE PROPERTY OF TH	
CABIN O/P	JA/JAJD OJA/
63 STAKER LG 1.5TR 1	WINDOW
MCC ROOM O/P FEEDER	DUCTABL
64 BREAKER BLUE STAR 3 TR 2	E
OPERATER BLUESTAR STR 2	<u> </u>
CABIN O/P	
FEEDER	
65 BREAKER BLUE STAR 1.5TR 1	SPLIT AC
SITE OFFICE	
66 MINES WHIRLPOOL 1.5TR 1	SPLIT AC
67 CM (MINES LG 1.5TR 1	SPLIT AC

	SITE OFFICE)				
	CONFE.				
	ROOM MINES				
68	SITE OFFICE	BLUE STAR	1.5TR	1	SPLIT AC
	DEMO CLINIC				
69	SPLIT AC	BLUE STAR	1.5TR	1	SPLIT AC
	DEMO				
	TRAINING	_			_
70	ROOM	BLUE STAR	1.0TR	1	WINDOW
71	DEMO HALL	VOLTAS	1.5TR	1	SPLIT AC
	DGM MINES				
72	VALIA	LG	1.5TR	1	SPLIT AC
	VALIA				
	SURVEY				00.15.40
73	ROOM	LG	1.5TR	1	SPLIT AC
	VALIA				
7.4	CONFERENC	1.0	4.570		CDUTAG
74	E HALL	LG	1.5TR	1	SPLIT AC
	VALIA				
75	COMMON	1.0	4 ETD	2	CDLIT AC
75	ROOM	LG	1.5TR	2	SPLIT AC
76	MANGROL MINES	LG	1.5TR	2	SPLIT AC
70	UTILITY	LG	1.51K		SPLIT AC
	BUILDING				
	(EMERGENC				
77	Y RPOOM)	LG	1.5TR	1	SPLIT AC
	UTILITY	LO	1.011	<u>'</u>	OI LII 7.0
	BUILDING				
	(DOCTOR				
78	RPOOM)	LG	1.5TR	1	SPLIT AC
	UTILITY	-	-		
	BUILD (
	VISITING				
	DOCTOR				
79	RPOOM-1)	WHIRLPOOL	1.5TR	1	SPLIT AC
	UTILITY				
	BUILD (
	VISITING				
_	DOCTOR				
80	RPOOM-2)	WHIRLPOOL	1.5TR	1	SPLIT AC
	UNIT 3 & 4				
	CHARGER		0.70		ODUT AC
81	ROOM	BLUE STAR	3 TR	2	SPLIT AC
	UNIT 3				
82	BOILER LIFT	VOLTAS	1 5TD	3	WINDOW
02	ROOM UNIT 4	VULTAS	1.5TR	<u> </u>	VVIINDOVV
	BOILER LIFT				
83	ROOM	VOLTAS	1.5TR	3	WINDOW
03	NOON	VULTAG	1.511	J	VVIIVDOVV

	UPS ROOM		1		DUCTABL
84	UNIT-3	LG	5TR	1	E
	UPS ROOM		0111	•	DUCTABL
85	UNIT-3	BLUE STAR	5TR	1	E
	UPS ROOM	2202 017 117	0111	•	DUCTABL
86	UNIT-4	BLUE STAR	5TR	1	E
	UPS ROOM	220201111	0.1.1	-	DUCTABL
87	UNIT-4	LG	5TR	1	E
	ESP ROOM			-	DUCTABL
88	U-3	LG	5TR	1	E
	ESP ROOM				DUCTABL
89	U-4	LG	5TR	1	E
	IND				DUCTABL
90	CANTEEN	BLUE STAR	5TR	2	E
	IND				DUCTABL
91	CANTEEN	LG	5TR	1	E
	DEEP CEO				
92	OFFICE	LG	1.5TR	1	SPLIT AC
	DEEP DM				
93	OFFICE	LG	1.5TR	1	SPLIT AC
94	DEEP OFFICE	LG	1.5TR	1	SPLIT AC
	DEEP DM				
95	CIVIL	LG	1.5TR	1	SPLIT AC
	DEEP				
	SUPERVISOR				
96	OFFICE	LG	1.5TR	1	SPLIT AC
	DEEP				
	FINANCE	_			
97	OFFICE	LG	1.5TR	1	SPLIT AC
	DEEP				
	ACCOUNTAN			_	
98		LG	1.5TR	1	SPLIT AC
	DEEP				
00	PROJECT	1.0	4 570	4	ODLIT AO
99	OFFICE	LG	1.5TR	1	SPLIT AC
40	WEIGH				
10	BRIDGE VALIA MINES	VOLTAS	1.5TR	3	WINDOW
0	UNIT 2	VULTAS	1.51K	<u> </u>	VVINDOVV
10	BOILER LIFT				
10	ROOM	LG	1.5TR	2	WINDOW
	WATER	LG	1.011	۷	VVIINDOVV
	COOLER &				
	DEEPFREEZE				
	R				
			CAPACIT		
	AREA	MAKE	Y	Qty	REMARK
	KITCHEN VIP		·	<u> </u>	
1	G/H	BLUE STAR	150L	1	
2	EGH	USHA	150L	1	
				•	

	CANTEEN					
	PENTRY 2ND					
3		USHA	150L	1		
	3.2 MCC					
4	ROOM	BLUE STAR	220L	1		
_	WARE		4.501			
5	HOUSE	USHA	150L	1		
_	FIRE	110114	0001	_		
6	STATION	USHA	220L	1		
7	INDUSTRIAL	ПСПУ	2201	2		
	CANTEEN AHS PUMP	USHA	220L	2		
8	HOUSE	USHA	150L	1		
0	LHS	USHA	TOOL	1		
9	WORKSHOP	USHA	220L	1		
	2ND FLOOR	001171	ZZUL	'		
10	LHS C/R	USHA	220L	1		
	G.F DM	33				
11	PLANT	VOLTAS	40L	1		
	LIMESTONE					
	CONTROL					
12	ROOM	USHA	80L	1		
	SCHOOL					
13	BUILDING	USHA	150L	3		
	SWITCHYAR					
	D CONTROL					
14	ROOM	USHA	150L	1		
15	WORK SHOP	USHA	150L	1		
16	MINES SITE		1501	_		
16	OFFICE NEW ADM	BLUE STAR	150L	1		
17	BUILDING	USHA	220L	2		
18	DEEP OFFICE	VOLTAS	80L	1		
10	UTILITY	VOLTAG	OOL	1		
19	BUILDING	USHA	150L	1		
	NEAR ID FAN	301111	1002	•		
20	UNIT -1	POLE STAR	220L	1		
	OLD ADM			-		
21	BUILDING	USHA	150L	1		
	SECURITY					
	BARRACK					
22	NEAR GATE-4	K.KOLD	150L	1		
23	NEW PCH	K.KOLD	220L	1		
	VALIA MINES					
24	OFFICE	USHA	220L	2		
	MAIN					
	CONTROL					
25	ROOM	USHA	40L	1	1	
	Deep					
	Freezers					

			CAPACIT		
	AREA	MAKE	Υ	Qty	REMARK
	EGH		Deepfreez	-	
1	CANTEEN	BLUE STAR	er	1	
	KITCHEN VIP		Deepfreez		
2	G/H	BLUE STAR	er	1	

ANNEXURE-12

Equipment List For Phase#2 AC & Ventilation System

Equipment List For Phase#2 AC & Ventilation System						
Sr. No.	Equipment	Make	Qty.	Model	Capacity (Each)	
l.	CENTRAL AC PLANT					
1	Compressor	Kirloskar	4	AC 1270	100 TR	
2	Condenser water pump	Beacon Weir	4	BWC 80/100	100 M3/Hr.	
3	Chilled water pump	Beacon Weir	4	BWC 80/100	70 M3/Hr.	
4	Cooling tower	Pharpur	4	3871	100 M3/Hr.	
5	Condenser	Jay Pee	4	CDS-2090	100 TR	
6	Chiller	Jay Pee	4	DXC-2409	100 TR	
II.	AIR HANDLING UNIT (AHU 1-16)	00.9 : 00		27.0 2.00		
7	Main control room Unit-I&II (1 - 6)	Jay Pee	6	AH-11	23335 M3/Hr.	
8	ESP Control Room Unit I & II (7-10)	Jay Pee	4	AH-3	4500 M3/Hr.	
9	Service Building (11-12)	Jay Pee	2	AH-6	8900 M3/Hr.	
10	Switchyard control room (13-14)	Jay Pee	2	AH-6	8000 M3/Hr.	
11	DM Plant Control Room (15-16)	Jay Pee	2	AH-2	3500 M3/Hr.	
III.	FRESH AIR FAN IN AHU					
12	Plant Control Room (Unit I & II)	ABB	2	AXBZ-3B-035	2400 M3/Hr.	
13	Service Building	ABB	1	AXBZ-3B-035	1800 M3/Hr.	
14	Switchyard Control Room	ABB	1	PMCX-315/258-6	1100 M3/Hr.	
15	ESP Control Room (Unit I & II) & DM Plant	ABB	3	PMCX-315/258-6	800 M3/Hr.	
IV.	PACKAGE AC					
16	415 UPS Room Unit I & II	Voltas	8	50 BA 012	10 Tons	
17	Ash Handling Control Room	Blue Star	3		10Ton	
18	Limestone Control Room	Voltas	3	50 BB 012	10 Tons	
19	Lignite control Room	Carrier	6	40LC009/38LH090T	7.5 Tons	
٧.	AIR WASHER SYSTEM					
20	Air Washer Fan	DUVENT	4	DCLL-D-12-D-L3	250000 M3/Hr	
21	Circulating water pump for air washer	BEACON WEIR	6	SDB 150/200	335 M3/Hr	
VI.	FRESH SUPPLY AIR FAN					

	FOR T G BUILDING				
					9000
22	UPS Battery Room U 1&2 10.5 Mt.	ABB	2	AXBZ-6B-060-VA	M3/Hr
	220 V DC Bat. Charger Room 15.5				12000
23	Mt.	ABB	2	AXBZ-3B-070-VA	M3/Hr
	220 V DC Unit Switch Board Room				3000
24	15.5 Mt.	ABB	2	AXBZ-3B-035-VA	M3/Hr
					9000
25	24 V DC Switch Board Room 15.5 Mt.	ABB	2	AXBZ-6B-060-VA	M3/Hr
00	04 \ / DO Dattara Dagara 40 5 M	ADD		AVD7 0D 000 V/A	9000
26	24 V DC Battery Room 10.5 Mt.	ABB	2	AXBZ-6B-060-VA	M3/Hr
27	Flourator Machine Deem	ADD	1	A V D 7 2 D 02 E V A	3000
21	Elevator Machine Room	ABB	l	AXBZ-3B-035-VA	M3/Hr
	FOR SWITCH GEAR ROOM				
	TOR SWITCH CLAR ROOM				12000
28	ESP Control Room U 1 & 2	ABB	2	AXBZ-6B-070-VA	M3/Hr
	EST CONTROLLED TO E	7.00		70002 00 070 070	9000
29	DG House	ABB	1	AXBZ-6B-060-VA	M3/Hr
					9000
30	Switch yard Control Room.	ABB	2	AXBZ-6B-060-VA	M3/Hr
	,				12000
31	CW Pump House	ABB	1	AXBZ-3B-070-VA	M3/Hr
					12000
32	DM Plant	ABB	1	AXBZ-3B-070-VA	M3/Hr
					12000
33	Clarified water Pump house	ABB	1	AXBZ-3B-070-VA	M3/Hr
					6000
34	Raw Water Pump house	ABB	1	AXBZ-3B-060-VA	M3/Hr
					9000
35	Fuel Oil Tranfer Pump House	ABB	1	AXBZ-6B-060-VA	M3/Hr
		4.00		11/27 02 005 1/4	3000
36	Switch yard Battery Room	ABB	1	AXBZ-3B-035-VA	M3/Hr
	FOR BUNKER BAY				
					4500
37	UPS Battery Room U 1&2 EL 8.2 Mt.	ABB	2	AXBZ-6B-035-VA	M3/Hr
					3000
38	Lift Machine Room U1&2 EL 8.2 Mt.	ABB	2	AXBZ-3B-035-VA	M3/Hr