

E-TENDER: CDI0220P16

OIL INDIA LIMITED
(A Government of India Enterprise)
CONTRACTS DEPARTMENT
P.O. DULIAJAN – 786602, ASSAM

E-TENDER NOTICE

OIL INDIA LIMITED (OIL) invites Bids from experienced Service Providers through its E-Procurement portal “<https://etender.srm.oilindia.in/irj/portal>” for the following services under **Single Stage Two bid** system.

1.0 IFB No.	CDI0220P16
Service Requirement	Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.
Cost of Bid Document	₹ 5000.00
Bid Security(EMD)	₹ 1,58,000.00
Period of Sale of Bid Document/Issue of User ID & Password	29.02.2016 TO 29.03.2016(15:30Hrs)
Bid Closing / Opening Date & Time	05.04.2016 (11:00 Hrs / 14:00 Hrs)

2.0 For participation, Cost of Bid Document (Non-Transferable and Non-refundable) by way of Demand Draft / Banker's Cheque from any Scheduled Bank in favour of OIL INDIA LIMITED and payable at Duliajan, along with the application(s) on applicants letter pad with a request for USER ID & PASSWORD is to be submitted /sent to reach the Office of Head-Contracts, Contracts Department, Oil India Limited, P.O. Duliajan, Assam-786602 within the period of sale (inclusive both the days i.e. start date & end date) of Bid document. *Alternatively, applicants already having User ID & Password for OIL's E-procurement portal can register against the IFB and pay the requisite Bid Document cost through the online payment gateway provided in the E-procurement portal.*

2.1 In case the Bidder(s) send their application for Bid Documents in sealed envelopes, the following must be super scribed on the envelope along with the name & registered postal address of the bidder in typed format or in clear legible handwriting:

“Application & Tender Fees, IFB No.: CDI0220P16

Description of Services: “Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant”

2.2 Amongst others, the Bidder(s) must also provide the following information in the application for request for Bid documents: (i) Valid e-mail ID (ii) Registered Postal Address with PIN code (iii) Vendor Code with OIL (if available) (iv) Mobile No. /Telephone No/Fax No.

3.0 No physical Bid documents will be provided. On receipt of requisite Bid Document Cost (in case Cost of Bid Document is submitted in the form of Demand Draft / Banker's Cheque), USER_ID and initial PASSWORD will be communicated to the bidder through e-mail at the e-mail address provided along with request for Bid documents as mentioned in 2.2 (i) above and will be allowed to participate in the bidding through OIL's E-Procurement portal.

3.0 EXEMPTION OF TENDER FEE:

3.1 If the bidder is a Micro or Small Enterprise under the Micro, Small and Medium Enterprises Development Act, 2006 and is registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises, then they are exempted from payment of tender fees for the items/services for which they are registered. Copy of valid Registration Certificate, must be enclosed along with the application for issuing tender documents and the Registration Certificate should clearly indicate the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies.

3.2 Public Sector Units (PSU) are also exempted from payment of tender fee.

3.3 Application for exemption of Tender Fee as indicated under Para 3.1 & 3.2 above should reach the office of Head-Contracts, Contracts Department, Oil India Limited, Duliajan-786602(Assam) within the bid selling period.

4.0 The details of IFB can be viewed using "Guest Login" provided in the E-Procurement portal and also in OIL's web site www.oil-india.com. The link to OIL's E-Procurement portal has also been provided through OIL's web site www.oil-india.com

Note: All corrigenda, amendments, time extension, clarifications etc. if any to the above tender will be hosted on OIL's website and in the e-portal <https://etenders.srm.oilindia.in/irj/portal> only and no separate notification shall be issued in the press. Prospective bidders are requested to regularly visit the website and e-portal to keep themselves updated.

**OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN**

OIL INDIA LIMITED invites ON-LINE BIDS from eligible Bidders/Firms for the following mentioned works/services under **SINGLE STAGE – 2 BID System** through its e-Procurement site:

DESCRIPTION OF WORK/ SERVICE:

Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.

IFB NO: CDI0220P16

Type of IFB: Single Stage Two Bid System

LOCATION: Duliajan Power Station, inside Main Industrial Area - OIL, Duliajan.

CONTRACT PERIOD: 02(Two) years with a provision for extension by another 01(One) year at the same rates, terms and conditions.

MOBILISATION PERIOD: 60(Sixty) days from the date of issue of LOA.

BID CLOSING/ OPENING DATE & TIME: 05.04.2016 (11:00HRS/14:00 HRS)

Bid Submission Mode: Bid should be submitted online in OIL's E-Procurement portal.

Bid Opening Place : Office of the Head-Contracts
Oil India Limited
Duliajan – 786602, Assam

Bid Validity : 180 days from Bid opening date

BID SECURITY AMOUNT: Rs. 1, 58,000.00(Rupees One Lakh Fifty Eight Thousand) only.

AMOUNT OF PERFORMANCE SECURITY: 2.5% of total Contract Value.

a) Bid Security deposited vide Demand Draft/Banker Cheque /Bank Guarantee No. _____ dated _____ of _____

Original hard copy of (a) should reach the office of HEAD-CONTRACTS on or before 12:45 Hrs (IST) on the bid closing date or it *can be paid through the online payment Gateway against this Tender*, otherwise Bid will be rejected. A scanned copy of this document should also be uploaded along with the Un-priced Techno-commercial bid documents.

b) Bidders to confirm that in the event of award of Contract, bidder will submit **Performance Security Deposit @ 2.5% of contract price and this will not earn any interest.**

2.0 (a) **SEALED ENVELOPES containing the Bid Security, Printed catalogue and Literature, if called for in the tender shall be marked with the above IFB Number and description of work and submitted in the office of :**

HEAD-CONTRACTS
CONTRACTS DEPARTMENT
OIL INDIA LIMITED
Duliajan – 786602(Assam).

All bidders shall deposit the requisite **BID SECURITY in the form of Demand Draft/Banker's Cheque/Bank Guarantee (BG should be valid for minimum 210 days from the date of opening of Technical Bid) from a Nationalised Bank / Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN** or *it can be paid through the online payment Gateway against this Tender*. This BID SECURITY shall be refunded to all unsuccessful bidders, but is liable to be forfeited in full or part, at Company's discretion, as per Clause No. 6(a), 14, 15 & 16 below. **Bids without BID SECURITY in the manner specified above will be summarily rejected.**

2.0 (b) Exemption from submission of Bid Security:

(i) Central Govt. offices and Central Public Sector undertakings are exempted from submitting Bid Security.

(ii) If the bidder is a Micro or Small Enterprises (MSE) registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME, then they are also exempted from submitting Bid Security. Bidding MSEs shall have to submit a Copy of valid Registration Certificate clearly indicating the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies.

(iii) In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur should also be enclosed.

3.0 Bid should be submitted online up to 11:00 AM (IST) (OIL's e-procurement Portal Server Time) on the date as mentioned and will be

opened on the same day at 02:00 PM (IST) at Office of the Head-Contracts in presence of authorized representative of the bidder.

4.0 The rates shall be quoted as specified in the “PRICE BID FORMAT” and to be uploaded in attachment under Notes & Attachments tab.

The bid and all uploaded documents must be digitally signed using **“Class 3” digital certificate [e-commerce application (Certificate with personal verification and Organization name)]** as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

Digital Signature Certificates having “Organization Name” field as “Personal” are not acceptable. However, aforesaid Digital Signature Certificates having Bidder’s Name in the “ Organization Name” field are acceptable.

The authenticity of above digital signature shall be verified through authorized CA after bid opening. If the digital signature used for signing is not of “Class - 3” with Organizations name, the bid will be rejected.

Bidder is responsible for ensuring the validity of digital signature and its proper usage by their employee.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidding company.

5.0 The Company reserves the right to reject any or all the tenders or accept any tender without assigning any reason.

6.0 (a) No Bidder can withdraw his bid within the validity or extended validity of the bid. Withdrawal of any bid within validity period will lead to forfeiture of his/her/their BID SECURITY in full and debarred from participation in future tenders, at the sole discretion of the company.

(b) Once a withdrawal letter is received from any bidder, the offer will be treated as withdrawn and no further claim / correspondence will be entertained in this regard.

7.0 Conditional bids are liable to be rejected at the discretion of the Company.

8.0 The bidders are required to furnish the composition and status of ownership of the firm in whose name bid documents have been purchased/issued along with one or more of the following documentary evidences (which are applicable to the bidder) in support of the same and scanned copies of the same should be uploaded along with the Un-priced bid documents.

8.1 In case of Sole Proprietorship Firm, Copies of Telephone(Landline Bill)/Electricity/ PAN card, latest Income Tax Return form indicating therein the name, business and residential address, E-mail and telephone numbers of the owner and copies of Service Tax and Central Excise Registration Certificate.

8.2 In case of HUF, Copies of Telephone(Landline Bill)/Electricity/PAN card, latest Income Tax Return form, Family Arrangement indicating therein the name, residential address, E-mail and telephone numbers of the owners in general and Karta in particular and copies of Service Tax and Central Excise Registration Certificate.

8.3 In case of Partnership Firm, Copies of Telephone(Landline Bill)/Electricity/ PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the partners(including the Managing Partner), registered partnership agreement/deed and copies of Service Tax and Central Excise Registration Certificate.

8.4 In case of Co-Operative Societies, Copies of Telephone(Landline Bill)/Electricity/PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, registration certificate from Registrar of Co-Operative Societies and copies of Service Tax and Central Excise Registration Certificate.

8.5 In case of Societies registered under the Societies Registration Act, Copies of Telephone (Landline Bill)/Electricity/PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, registration certificate from the Registrar of the state and copies Service Tax and Central Excise Registration Certificate.

8.6 In case of Joint Stock Companies registered under the Indian Companies Act, Copies of Telephone (Landline Bill)/Electricity/PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Directors or persons who are at the helm of affairs, Certificate of Incorporation from the Registrar of Companies, Memorandum and Articles and copies of Service Tax and Central Excise Registration Certificate.

8.7 In case of Trusts registered under the Indian Trust Act, Copies of Telephone (Landline Bill)/Electricity/ PAN card, latest Income Tax Return form indicating therein the name, residential address, E-mail and telephone numbers of all the Trustee or persons who are at the helm of affairs,

registration certificate from the Registrar of the state, Trust Deed and copies Service Tax and Central Excise Registration Certificate.

9.0 The selected bidder will be required to enter into a formal contract, which will be based on their bid and O.I.L's Standard Form of Contract.

10.0 Time will be regarded as the essence of the Contract and the failure on the part of the Contractor to complete the work within the stipulated time shall entitle the Company to recover liquidated damages and / or penalty from the Contractor as per terms of the tender /contract.

11.0 The contractor will be required to allow OIL officials to inspect the work site and documents in respect of the workers payment.

12.0 **The successful bidder shall furnish a Performance Security Deposit in the form of Demand Draft / Banker's Cheque / Bank Guarantee as specified above before signing the formal contract.** The Performance Security Deposit will be refunded to the Contractor after satisfactory completion of the work, but a part or whole of which shall be used by the Company in realization of liquidated damages or claims, if any or for adjustment of compensation or loss due to the Company for any reason. This Performance Security Money shall not earn any interest.

13.0 **BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, Bid Security shall be forfeited and the party will be debarred for a period of 2(two) years from the date of withdrawal of bid.

14.0 **BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or Performance Security is not submitted as per terms of the Contract within the stipulated time, Bid Security shall be forfeited and the bidder shall be debarred for 2 (two) years from the date of default.

15.0 **FURNISHING FRAUDULENT INFORMATION/DOCUMENT:** If it is found at any time that, a Bidder / Contractor has / had furnished fraudulent documents / information, the Bid Security/Performance Security shall be forfeited and the bidder / the party/the contractor shall be debarred for a period of three (03) years from the date of detection of such fraudulent act, besides legal action.

16.0 **The tender will be governed by:**

Forwarding Letter.

Instruction to Bidders

BRC-BEC-Bid Rejection Criteria & Bid Evaluation Criteria.

Part - I - General Conditions of Contract. (GCC)

Part - II - Schedule of Work, Unit and Quantity (SOQ)

Part - III - Special Conditions of Contract (SCC)

Part-IV-Schedule of company's Plants, Materials and Equipments-

Part-V-Safety Measures (SM)

Integrity Pact-Applicable for this IFB

Proforma and Annexures

17.0 **The Integrity Pact is applicable against this tender:**

OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide “Part-VI Integrity Pact” of the tender document. This Integrity Pact Proforma has been duly signed digitally by OIL’s competent signatory(Digitally Signed). The proforma has to be returned by the bidder (along with the technical bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder’s authorized signatory who sign the Bid.

(Note: Following person has been appointed as Independent External Monitor: SHRI RAJIV MATHUR, IPS (Retd.), E-Mail ID: rajivmathur23@gmail.com)

SPECIAL NOTE:

GUIDELINES FOR PARTICIPATING IN OIL’S E-PROCUREMENT :

To participate in OIL’s E-procurement tender, bidders should have a legally valid digital certificate **of Class 3 with Organizations Name** as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India (<http://www.cca.gov.in>). Bidders must have a valid User Id to access OIL e-Procurement site. Bidders can click on **Guest** login button to view the available open tenders in the E-portal. Bidders shall request OIL through E-mail or fax or letter along with the cost of bid documents as indicated in the NIT for issue of the **USER ID** for accessing and submitting against the E-procurement tender. The User ID shall be issued to the eligible bidders on receipt of the requisite cost of the bid document. In case any bidder is exempted from paying the tender fee, they should request OIL with supporting documents for issue of the User Id on free of charge basis. The detailed guidelines are available in OIL’s e-procurement site. For any clarification in this regard, bidders may contact OIL.

Please note that all tender forms (Bid documents, Integrity Pact, Proforma Annexures) and supporting documents are to be submitted through OIL’s E-Procurement site only except Original Bid Security and

any other document if specified in the IFB which are to be submitted in sealed envelope **super scribed with tender no. and due date to : The Head Contract, Contracts Department, Oil India Limited, Duliajan- 786602,**

Bidders are requested to examine all instructions, forms, terms and specifications in the bid. Failure to furnish all information required as per the bid or submission of offers not substantially responsive to the bid in every respect will be at the bidders risk and may result in the rejection of its offer without seeking any clarifications. Offers sent without the requisite value of prescribed bid security (if called for in the bid) in original will be ignored straightway.

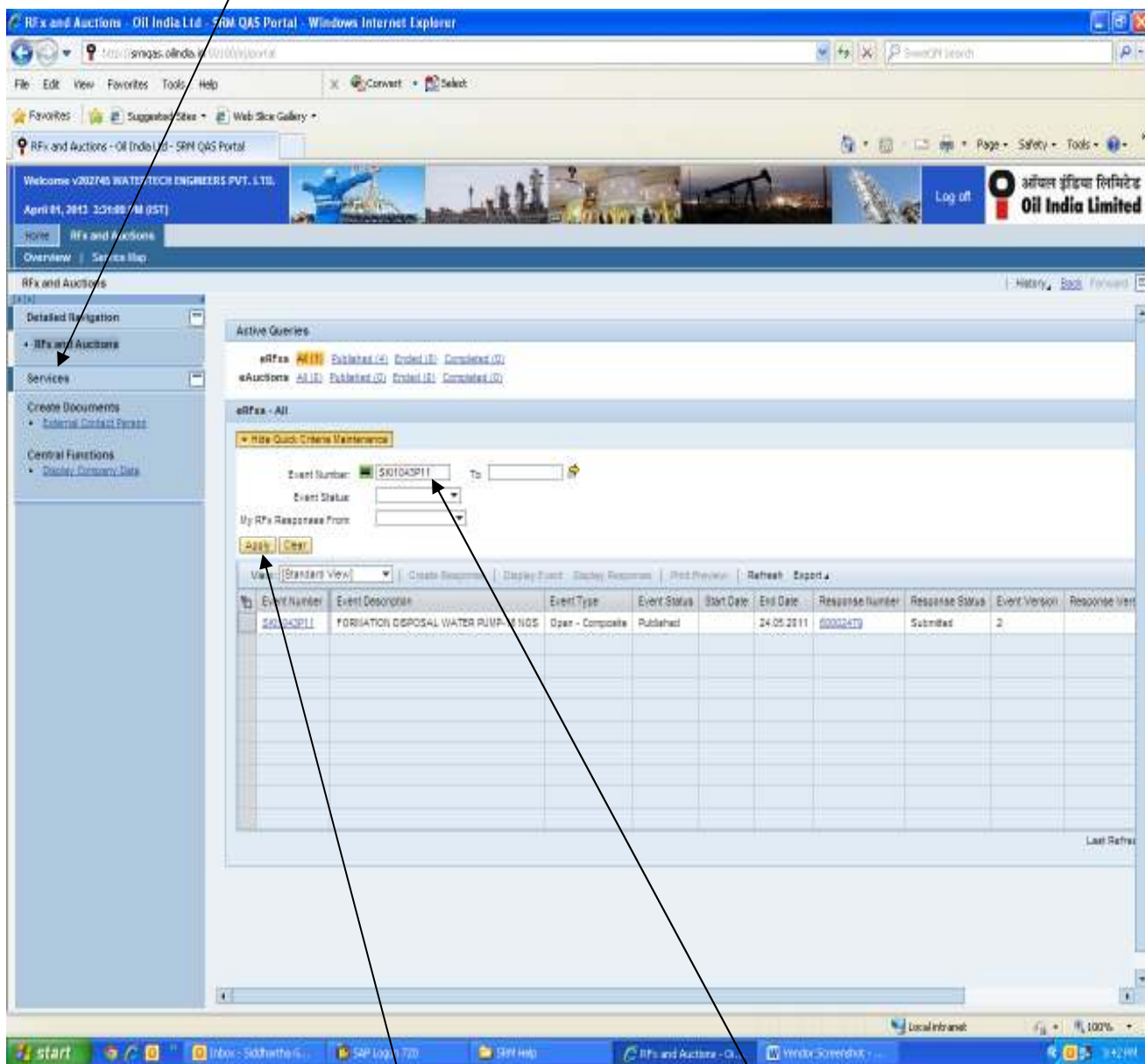
19.0 The tender is invited under SINGLE STAGE TWO BID SYSTEM. The bidder has to submit the “Un-Priced Techno-Commercial” and “Price-Bid” through electronic form in the OIL’s e-Tender portal within the Bid Closing Date and Time stipulated in the e-Tender portal. **The Technical Bid is to be submitted as per Scope of Work & Technical Specifications along with all technical related documents related to the tender are to be uploaded under Technical RFx Tab.** The Price Bid rates shall to be quoted as specified in the “PRICE BID FORMAT” and to be attached as attachment under the Notes & attachment tab. **The price quoted in the “PRICE BID FORMAT” will only be considered for evaluation.**

Please note that no price details should be uploaded under Technical RFx. Details of prices as per Price Bid format / Priced bid can be uploaded as Attachment under Notes & Attachment Tab. Offer not complying with above submission procedure will be rejected.

A few screen shots to find out the required IFB is shown below.

1.

Select RFx and Auction Tab



Please enter the IFB No. here & Click Apply Tab

After following the above mentioned steps, the details of the IFB under RFX information will be displayed as shown in the page below.

Display RFX :

Verify Signature of RFX | Print Preview | Close | Request Export

RFX Number: SDO716SP13 | RFX Name: SRM RFX Open Competitive Bid 180T | RFX Status: Published | RFX Start Date: | Submission Deadline: 12/04/2013 11:00:00 INDIA | Remaining Time: 10 Days 18:25:18
RFX Owner: SRM And Bidder | RFX Version Number: 2 | RFX Version Type: Active Version

RFX Information | Items | Notes and Attachments

RFX Parameters | Questions | Note and Attachments | Conditions

Time Zone: INDIA
Start Date: 00:00:00
Submission Deadline: 12/04/2013 11:00:00
Opening Date: 12/04/2013 14:00:00
Currency: INR
Price Bid Opening Date: |
Pre-Bid Conference Time: 00:00:00
Pre-Bid Conference Date: |
Last Time of Tender Fee Payment: 11:00:00
Last Date of Tender Fee Payment: 12/04/2013
Last Time to receive RBC queries: 00:00:00
Last Date to receive RBC queries: |
Contact Details: RUS
Contact Details: RUS 1
Earnest Money Deposit - USD: 12,500.00
Earnest Money Deposit - INR: 8,000,000.00

Validation Type: NON ELIGIBLE FOR NL DUTY DEFERRED EXPORT
Bank Guarantee: APPLICABLE @ 10% OF ODR VAL
Integrity Pwd: Not Applicable
EMD Validity Period: 12/04/2013
Tender Type: ICB (International Competitive Bidding)
Tender Fee in USD: 1,000.00
Tender Fee in INR: 85,000.00
Price Bid Opening Time: 00:00:00

Partners and Delivery Information

Details | Add | Send E-Mail | Call | Copy

Function	Number	Name	Phone Number
Requester		Ext req transfer user SERVICE_R3	
Goods Recipient		Ext req transfer user SERVICE_R3	
Ship-To Address		Axaxit- Services	2000414
Location		Axaxit- Services	2000414

NB: All the Bids must be Digitally Signed using “Class 3” digital signature certificate with Organizations Name (*e-commerce application*) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

INSTRUCTIONS TO BIDDERS

1.0 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as 'Company', will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2.0 BIDDING DOCUMENTS

2.1 The services required, bidding procedures and contract terms are prescribed in the Bidding Documents. This Bidding Document includes the following:

- a) A forwarding letter highlighting the following points
 - (i) Company's IFB No.
 - (ii) Bid closing date and time
 - (iii) Bid opening date, time and place
 - (iv) Bid submission place
 - (v) Bid opening place
 - (vi) The amount of Bid Security
 - (vii) The amount of Performance Guarantee
 - (viii) Quantum of liquidated damages for default in timely mobilizations
- b) Instructions to Bidders
- c) General Conditions of Contract (**Part-I**)
- d) Schedule of Work, Unit, Quantities, Rates and Prices (**Part- II-SOQ**)
- e) Special Conditions of Contract (**Part-III-SCC**)
- f) Schedule of company's Plants, Materials and Equipments-(**Part-IV**)
- g) Safety Measures (**Part-V-SM**)
- h) Integrity Pact
- i) Price Bid Format
- j) BRC/BEC
- k) (**Proforma & Annexures**).

2.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid document. Failure to furnish all information required in the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk & responsibility and may result in the rejection of its bid.

3.0 TRANSFERABILITY OF BID DOCUMENTS :

3.1 Bid Documents are non-transferable. Bid can be submitted only in the name of the bidder in whose name the Bid Document has been issued.

3.2 Unsolicited offers will not be considered and will be rejected straightway.

4.0 AMENDMENT OF BIDDING DOCUMENTS:

4.1 At any time prior to the deadline for submission of bids, the company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by the issuance of an Addendum.

4.2 The Addendum will be sent in writing through post / courier / Fax/e-mail to all prospective Bidders to whom Company has sent the bid documents and also be uploaded in the OIL's e-portal in the C-folder under the tab "Amendments to Tender Documents". The company may, at its discretion, extend the deadline for bid submission, if the Bidders are expected to require additional time in which to take the Addendum into account in preparation of their bid or for any other reason. Bidders shall also check OIL's E-Tender portal [C-folder under the tab "Amendments to Tender Documents"] for any amendments to the bid documents before submission of their bids.

5.0 PREPARATION OF BIDS

5.1 LANGUAGE OF BIDS: The bid as well as all correspondence and documents relating to the bid exchanged between the Bidder and the Company shall be in English language, except that any printed literature may be in another language provided it is accompanied by an English translated version, which shall govern for the purpose of bid interpretation.

5.2 DOCUMENTS COMPRISING THE BID: The complete bid should be submitted on-line in the e-portal.

6.0 BID FORM:

6.1 The bidder shall complete the Bid Form and the appropriate Price Schedule furnished as attachment in the e-portal. Bid form to be uploaded with Technical Bid.

7.0 BID PRICE:

7.1 Prices must be quoted by the bidders, both in words and in figures. In case of any discrepancy between the words and in figures, the prices indicated in words only will be considered.

7.2 Price quoted by the successful bidder must remain firm during its performance of the Contract and will not be subjected to variation on any account.

7.3 Since the tender is invited under SINGLE STAGE 2- BID SYSTEM and such no price details should be uploaded/mentioned under Technical RFx Tab. Details of prices as per Price Bid format / Priced bid can be uploaded as Attachment in the attachment header under the notes and attachment tab. Offer not complying with above submission procedure will be rejected. Kindly refer the screen shots below.

Click on this tab to upload Price Bid

Response

Edit RFx Response:

Submit | Read Only | Print Preview | Check | Technical RFx Response | Close | Save | Delete | Verify signature | Sign Response

RFx Response Number: 68885122 | RFx Number: 577 | Status: Saved | Submission Deadline: 06/03/2013 09:00:00 NDA | Opening Date: 06/03/2013 09:00:00 NDA | Remaining Time: 0 Days 03:19:18
 RFx Owner: WSRM_31007 | Total Value: 0.00 BIR | RFx Response Version Number: Active Version | RFx Version Number: 2

RFx Information | Item | Notes and Attachments | Conditions | Summary | Tracing

Basic Data | Questions

Question	Reply	Comment
exclusive Test:	<input checked="" type="radio"/> Yes <input type="radio"/> No	yes
HAVE YOU SUBMITTED THE ORIGINAL BID BOND:	<input checked="" type="radio"/> Yes <input type="radio"/> No	yes
INDICATED IAC IS INCLUDED IN THE FOR PRICE:	<input checked="" type="radio"/> Yes <input type="radio"/> No	yes
FROM OCEAN FREIGHT: <input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	yes
HAVE YOU MENTIONED THE TM CHARGE: <input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	yes
HAVE YOU INDICATED THE TOLERANCE OF QUANTITY: <input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	yes
HAVE YOU INDICATED HANDLING CHARGE FOR RAIL DESPATCH:	<input checked="" type="radio"/> Yes <input type="radio"/> No	yes
HANDLING CHARGE INCASE OF INDIAN BIDDER: 2000	<input type="text" value="2000"/>	yes
HAVE YOU SUBMITTED THE SAMPLE:	<input type="radio"/> Yes <input checked="" type="radio"/> No	no
HAVE YOU ATTACHED PRICE SCHEDULE AS PER THE BRG (COMMERCIAL): <input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	
HAVE YOU QUOTED THE PRICES WITH ALL LIABILITIES INCLUDING STATUTORY LIABILITIES: <input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	

Page: 9 of 9 | Words: 1 | English (India)

20/51
05-03-2013

Next Screen on clicking Notes & attachment Tab and go to edit mode

Bidders can insert comments here

RFx and Auctions - Oil India Ltd e-Procurement System - Microsoft Internet Explorer

Display RFx Response:

RFx Response Number: 80006427 RFx Number: Status: Saved Submission Deadline: 28.03.2013 11:00:00 INDIA
Opening Date: 07.03.2013 14:00:00 INDIA Remaining Time: 2 Days 01:41:02 RFx Owner: Total Value: 0.00 INR
RFx Response Version Number: Active Version RFx Version Number: 6

RFx Information | **Notes and Attachments** | Summary | Tracking

Notes

Assigned To	Category	Text Preview
Document Header	Bid Invitation/Auction Text	
	Bid Invitation/Auction Text	
	Bid Invitation/Auction Text	
	Bid Invitation/Auction Text	
	Bid Invitation/Auction Text	
	Bid Invitation/Auction Text	

Attachments

Assigned To	Category	Description	File Name	Version	Processor	Checked Out	Type	Size (KB)	Changed by	Changed on
Document Header	Standard Attachment	PRICE BID	PRICE BIDDING FORMAT	1	MS		MS	32		03.03.2013

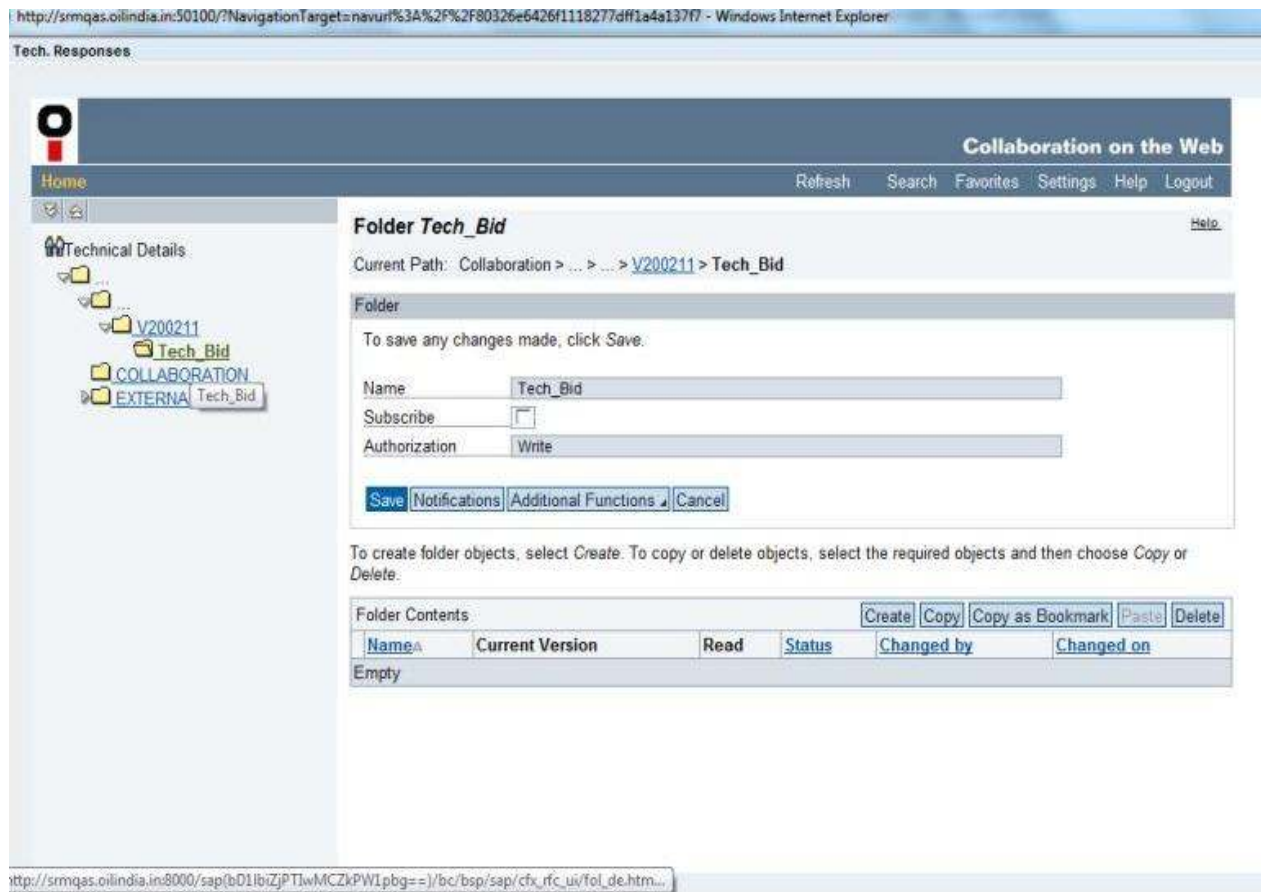
1 2

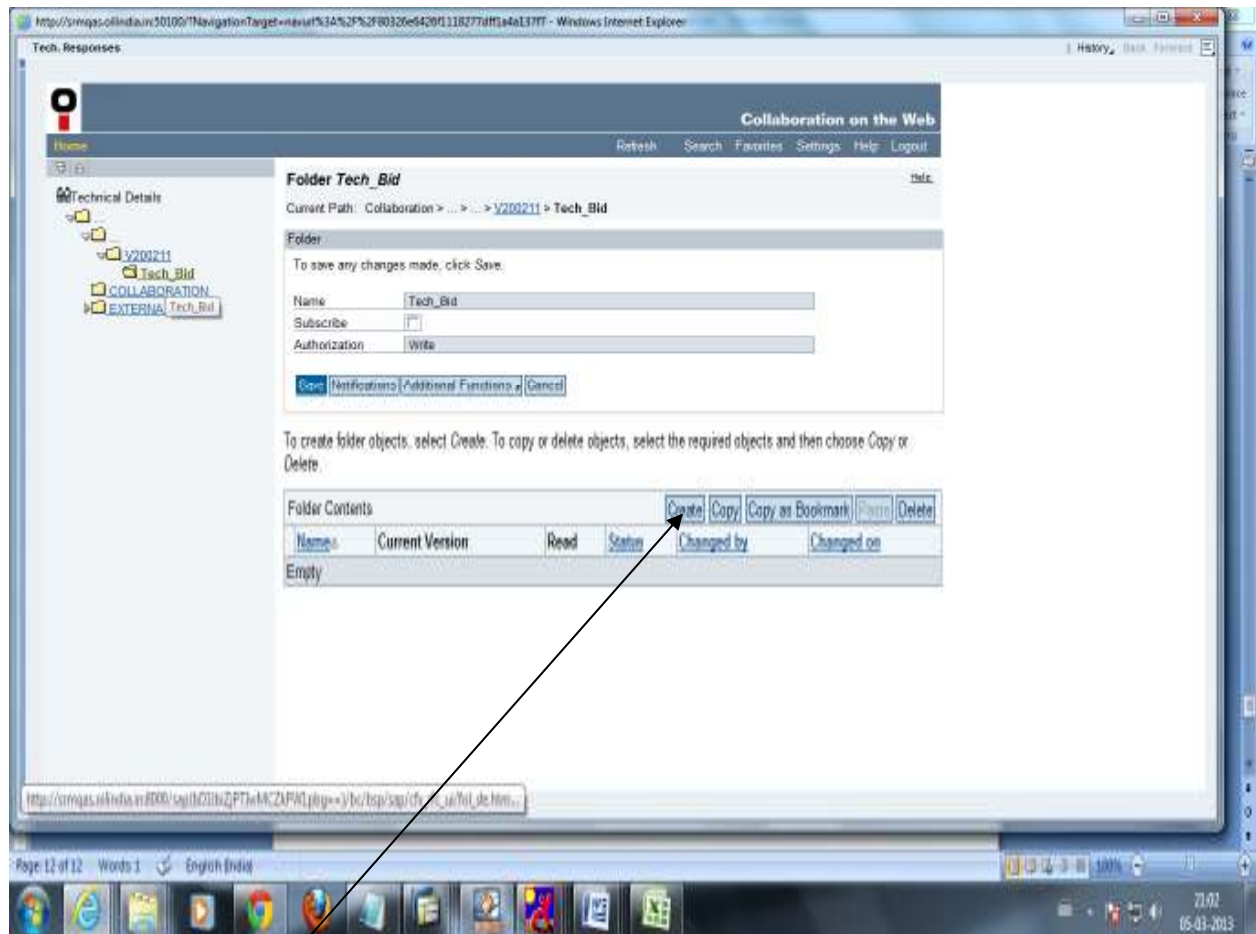
Price Bid Format to be attached here after digitally signing the attachment

Create Technical Rfx response (creating Technical Rfx response is mandatory)

To create Technical Rfx response click on [Technical Rfx Response](#) , at the top of the Response.(Refer screen shot on Page no:3)

System will redirect you to the C-folder in new window(Screen shot Below)





Click on button **Create** to create and upload new document.

7.4 Bidder shall be deemed to have satisfied himself before submitting his bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except insofar as otherwise provided, cover all its obligations under the contract.

8.0 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS:

8.1 These are as per BEC/BRC

9.0 PERIOD OF VALIDITY OF BIDS:

9.1 Bids shall remain valid for 180 days from the date of bid opening.

9.2 In exceptional circumstances, the OIL may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (or by Fax). A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will neither be required nor permitted to modify their bid.

10.0 FORMAT AND SIGNING OF BID:

10.1 The original and all copies of the bid shall be typed or written in indelible inks and shall be signed(digitally) by the Bidder or a person or persons duly authorized to bind the Bidder to the contract.

11.0 SUBMISSION OF BIDS.

11.1 Bids are to be submitted online through OIL's E-procurement portal with digital signature. The bid and all attached documents should be digitally signed by the bidder using "Class 3" digital certificates [e commerce application (Certificate with personal verification and Organisation Name)] as per Indian IT Act 2000 obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India(RCAI), Controller of Certifying Authorities(CCA) of India before bid is uploaded.

The bid including all uploaded documents shall be digitally signed by duly authorized representative of the bidder to bind the Bidder to the contract. The authenticity of above digital signature shall be verified through authorized CA after bid opening and in case the digital signature is not of "Class-3" with organization name, the bid will be rejected.

Bidder is responsible for ensuring the validity of digital signature and it's proper usage by their employees.

11.2 Any person signing the Bid or any other document in respect of this Bid Document or other relevant documents on behalf of the Bidder without disclosing his authority to do so shall be deemed to have the authority to bind the Bidder. If it is discovered at any time that the person so signing has no authority to do so, the Company (OIL) may, without prejudice to any other right or remedy, cancel his Bid or Contract and hold the Bidder liable to the Company(OIL) for all costs and damages arising from the cancellation of the Bid or Contract including any loss which the Company(OIL) may sustain on account thereof.

11.2 Timely submission of the bids is the responsibility of the Bidder should be submitted before the bid closing date and time. Company shall not be responsible for any delay.

11.3 E-mail/ Fax/ Telex/Telegraphic/Telephonic offers will not be accepted.

11.4 Bidder shall submit the Bid, duly completed in terms of the Bid Document.

12.0 DEADLINE FOR SUBMISSION OF BIDS:

12.1 Bids should be submitted on-line up to 11.00 AM (IST)(Server Time) on the Bid Closing date mentioned in the Forwarding Letter. Bidders will be permitted by System to make any changes in their bid after the bid has been uploaded by the bidder prior to the date and time as mentioned in the bid. But no changes would be allowed by the system once the due date and for submission of bids has been reached and bids are opened.

12.2 No bid can be submitted after the submission date line is reached. The system time displayed on the e-procurement web page shall decide the submission dead line.

12.3 The documents in physical form must be received by Company at the address specified in the "Forwarding Letter" on or before the Bid Closing Date & Time mentioned in the "Forwarding Letter". Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

13.0 LATE BIDS:

13.1 Bidders are advised in their own interest to ensure that their bids are uploaded in system before the closing date and time of the bid. Any Bid received by the Company after the Bid Closing Date & Time stipulated by the Company shall be rejected.

14.0 MODIFICATION AND WITHDRAWAL OF BIDS:

14.1 Bidders will be permitted by System to make any changes in their bid after the bid has been uploaded by the bidder prior to the date and time as mentioned in the bid. But no changes would be allowed by the system once the due date and for submission of bids has been reached and bids are opened.

14.2 No bid can be modified / withdrawn subsequent to the deadline for submission of bids.

14.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity specified by

the Bidder on the Bid Form. Withdrawal of a bid during this interval shall result in the Bidder's forfeiture of its Bid Security.

15.0 EXTENSION OF BID SUBMISSION DATE:

15.1 Normally no request for extension of Bid Closing Date & Time will be entertained. However, OIL at its discretion, may extend the Bid Closing Date and/or Time due to any reasons. In case of receipt of only one Bid on the Bid Closing Date and Time, OIL may extend the Bid Closing /Opening Date by 2(two) weeks. However, the bidder whose bid has been received within the bid closing date and time, will not be allowed to revise their Bid/prices. Withdrawal of such Bid also will not be permitted by the system.

16.0 BID OPENING AND EVALUATION:

16.1 OIL shall open the Bids, in the presence of Bidder's representatives who choose to attend at the date, time and place mentioned in the Covering Letter. However, an authorization letter (as per Proforma-II) from the bidder must be produced by the Bidder's representative at the time of bid opening. Unless this Letter is presented, the representative will not be allowed to attend the bid opening. The Bidder's representatives who are allowed to attend the bid opening shall sign a register evidencing their attendance. Only one representative against each bid will be allowed to attend. **In technical bid opening date, only Technical RFx will be allowed to open by the system.** Bidders therefore should ensure that techno-Commercial bid is uploaded under the **Technical RFx** Tab Page only **and no price should be mentioned anywhere under the Technical RFx.**

16.2 In case of any unscheduled holiday or Bandh on the Bid Opening Date, the Bids will be opened on the next full working day. Accordingly, Bid Closing Date / time will get extended up to the next working day and time.

16.3 Bid for which an acceptable notice of withdrawal has been received pursuant to clause 14.0 shall not be opened. OIL shall examine bids to determine whether they are complete, whether requisite Bid Securities have been furnished, whether documents have been properly signed and whether the bids are generally in order.

16.4 Bid opening shall be done as detailed in clauses 16.1 and 16.2 above

16.5 OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 16.3

16.6 To assist in the examination, evaluation and comparison of bids, normally no clarifications shall be sought from the Bidders. However, for assisting in the evaluation of the bids especially on the issues where the Bidder confirms compliance in the evaluation and contradiction exists on the same issues due to lack of required supporting documents in the Bid(i.e. document is deficient or missing), or due to some statement at other place of the Bid(i.e. reconfirmation of confirmation) or vice versa, clarifications may be sought by OIL at its discretion. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

16.7 Prior to the detailed evaluation, OIL will determine the substantial responsiveness of each bid to the requirement of the Bidding Documents. For purpose of these paragraphs, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations or reservation. A material deviation or reservation is one which affects in any way substantial way the scope, quality, or performance of work, or which limits in any substantial way, in-consistent way with the bidding documents, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. OIL's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

16.8 A Bid determined as not substantially responsive will be rejected by the Company and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

16.9 The Company may waive minor informality or nonconformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver, does not prejudice or affect the relative ranking of any Bidder.

17.0 EVALUATION AND COMPARISON OF BIDS:

17.1 The OIL will evaluate and compare the bids as per Priced Bid Format of the bidding documents.

17.2 DISCOUNTS / REBATES: Unconditional discounts/rebates, if any, given in the bid or along with the bid will be considered for evaluation.

17.3 Post bid or conditional discounts/rebates offered by any bidder shall not be considered for evaluation of bids. However, if the lowest bidder happens to be the final acceptable bidder for award of contract, and if they have offered any discounts/rebates, the contract shall be awarded after taking into account such discounts/rebates.

18.0 CONTACTING THE COMPANY:

18.1 Except as otherwise provided in Clause 14.0 above, no Bidder shall contact OIL on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded except as required by OIL vide sub-clause 16.6.

18.2 An effort by a Bidder to influence OIL in the bid evaluation, bid comparison or Contract award decisions may result in the rejection of their bid.

19.0 AWARD CRITERIA:

19.1 OIL will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

20.0 OIL' S RIGHT TO ACCEPT OR REJECT ANY BID:

20.1 OIL reserves the right to accept or reject any or all bids and to annul 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 of the grounds for OIL's action.

21.0 NOTIFICATION OF AWARD:

21.1 Prior to the expiry of the period of bid validity or extended validity, OIL will notify the successful Bidder in writing by registered letter or by cable or telex or fax or e-mail (to be confirmed in writing by registered / couriered letter) that its bid has been accepted.

21.2 The notification of award will constitute the formation of the Contract.

22.0 SIGNING OF CONTRACT:

22.1 At the same time as OIL notifies the successful Bidder that its Bid has been accepted, OIL will either call the successful bidder for signing of

the agreement or send the Contract Form provided in the Bidding Documents, along with the General & Special Conditions of Contract, Technical Specifications, Schedule of rates incorporating all agreements between the parties.

22.2 Within 2 Weeks from the date of issue of Letter of Award (LOA), the successful Bidder shall sign and date the contract and return it to OIL. Till the contract is signed, the LOA issued to the successful bidder shall remain binding amongst the two parties.

22.3 In the event of failure on the part of the successful bidder to sign the contract within the period specified above or any other time period specified by OIL. OIL reserves the right to terminate the LOA issued to the successful bidder. The party shall also be debarred for a period of 2(two) years from the date of default.

23.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENTS:

23.1 If it found that a bidder has furnished fraudulent information/documents, it shall constitute sufficient ground for annulment of the award and the party shall be debarred for a period of 3(three) years from the date of detection of such fraudulent act besides the legal action.

24.0 BID DOCUMENT:

Before submission of Bids, Bidders are requested to make themselves fully conversant with all Conditions of the Bid Document and other relevant information related to the works to be executed under this contract.

25.0 Mobilization Period: 60(Sixty) days from the date of issue of LOA.

&&&&&&&&&&&&& END OF ITB &&&&&&&&&&&&&

BID REJECTION CRITERIA & BID EVALUATION CRITERIA FOR THE TENDER:**A) BID REJECTION CRITERIA (BRC):**

The bids shall conform generally to the terms and conditions given in the bidding documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following mandatory requirements will have to be particularly met by the bidders without which the same will be considered non-responsive and rejected. All the documents related to BRC must be submitted along with the Bid. NON- SUBMISSION OF DOCUMENTS AS SPECIFIED IN BRC WILL RESULT IN REJECTION OF BIDS.

I. Bidder's Experience & Turnover:

1) Experience: Bidder's must have at least 2 (two) years of relevant experience in executing "**similar nature jobs**" (as described below) with Central Govt./ State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies in last 7 years from the date of bid closing. Contractor should submit documents in support of their relevant experiences along with the bid.

"**Similar nature of job**" mentioned above means: Services for operation and maintenance of

- a) Gas based power generation plant
- or
- b) Gas Compressor Station

Their experience should be in the field of mechanical, electrical, instrumentation jobs of Gas Based Power Stations/ Gas Compressor Stations involving Gas Compressor, Air Compressors, Substation Equipments and other electrical/ mechanical equipments such as motors, transformers, generators, battery banks, pumps, diesel engines, cooling water system & cooling towers, illumination, firefighting systems, housekeeping etc.

2) Bidder's must successfully executed "**similar nature jobs**" either of following values in last 7 years from the date of bid closing -

- a) Three similar completed jobs each costing not less than Rs. 1,30,00,000.00 (Rupees One Crore Thirty Lakhs) only

OR

- b) Two similar completed jobs each costing not less than Rs. 1,60,00,000.00 (Rupees One Crore Sixty Lakhs) only

OR

- c) One similar completed job costing not less than Rs. 2, 50, 00,000.00 (Rupees Two Crore Fifty Lakhs) only.

Bidder must submit all necessary documents related to their turnover in handling similar nature of jobs.

3) **Annual Turnover:** Bidder's Average Annual financial turnover as per Audited Annual Reports for the last 3 (Three) accounting years reckoned from the bid closing date should be at least Rs. 95, 00,000.00 (Rupees Ninety Five Lakh) only. Bidder must submit proof of Annual turnover during the last three accounting years.

II. The Bidder must submit along with the bid, a list of personnel the bidder intends to engage under this contract; along with their Bio-Data endorsing their experience,

qualification, their permanent address and "Electrical Supervisor's Certificate of Competency" and/or "Electrical Workman Permits (as applicable) etc. Photo copies of work experience, qualification and licenses (as applicable) shall also be submitted along with the bio-data. The original documents should be produced to OIL as & when required for verification.

III. The Bidder must give an **undertaking** that in case of award of the contract, he will deploy man power as per terms and conditions of the contract agreement and the bidder shall obtain OIL's approval of all the personals engaged before deployment through this service contract. Data and other necessary documents endorsing qualification, experience (individual) details, licenses, police verification and permanent address should be forwarded to OIL minimum 30 days prior to their deployment, for verification, clearance and approval. Original documents shall be produced to OIL as & when required for verification. OIL reserves right to conduct interview/ test of the contractor's personnel to test their experiences and skills prior to their deployment through this contract.

IV. Bidder must give an undertaking that in case of award of contract, Bidder shall submit copy of labour licenses issued by the office of Labour Commissioner, State/ Central Govt. for execution of the jobs under this service contract.

V. Documentations to be submitted:

1) For proof of Annual turnover during the last 3(Three) years, any one of the following document/ photocopy must be submitted along with the bid: -

a) A certificate issued by a practicing Chartered/ Cost Accountant's Firm, with membership no. certifying the Annual Turnover and nature of business.

b) Audited Balance Sheet and Profit & Loss account.

2) Bidder(s) must also furnish the followings:

a) NAME OF FIRM

b) DETAIL POSTAL ADDRESS

c) TELEPHONE NO.(If available)

d) MOBILE NO.

e) Valid E-MAIL

f) FAX No.(If available)

g) NAME OF CONTACT PERSON

h) CONTACT PERSON'S CONTACT NO.

i) PAN (Self-Attested copy required)

j) BANK ACCOUNT NO.

k) BANK ACCOUNT TYPE.

l) BANK NAME

m) BANK ADDRESS

n) SERVICE TAX REGD.NO. (Self-Attested copy required)

o) VENDOR NO. (IF AVAILABLE)

p) P.F.CODE NO. (Self-Attested copy required)

(Or a declaration by the bidder that provisions of Provident Fund Act is not applicable to them. In case the P.F. is required to be deposited later on, the same will be the responsible of the successful bidder only and not the company)

3) For proof of Contractor's requisite Experience/ credential, any one of the following document/photocopy must be submitted along with the bid: -

a) In case of OIL contractors, copy of 'Certificate of Completion (COC)'/ 'Certificate of Payment (COP)' / 'Service Entry Sheet (SES)' of jobs successfully completed or jobs successfully completed or undergoing contract during last seven (7) years from date of bid closing, showing gross value of job done, nature of job done etc. It may be clearly noted that simply mentioning of OIL CCO Number will not be accepted.

b) For others certificates issued by any of Central Govt. / State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies in last seven (7) years from date of bid closing showing:

- i. Gross value of job done; and
- ii. Nature of job done; and
- iii. Time period covering the year(s) as per the NIT.

VI. **INTEGRITY PACT:** The Integrity Pact is applicable against this tender. OIL shall be entering into an Integrity Pact with the bidders as per format enclosed vide Part-VI of the tender document. This Integrity Pact Proforma has been duly signed digitally by OIL's competent signatory. The Proforma has to be returned by the bidder (along with the Un-priced Techno-Commercial Bid) duly signed (digitally) by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed that all pages of the Integrity Pact has been signed by the bidder's authorized signatory who sign the Bid

VII. Bidder(s) must furnish documentations required are per clause I, II, III, IV, V & VI of BRC above.

B) BID EVALUATION CRITERIA (BEC):

The bids conforming to the terms and conditions stipulated in the bid documents and considered to be responsive after subjecting to the Bid Rejection Criteria will be considered for further evaluation as per the Bid Evaluation Criteria given below:

1. To ascertain the inter-se-ranking, the comparison of the responsive bids will be made on the basis of total amount quoted for the items (i.e. schedule of works, units, quantity, rates) as per **PRICE BID FORMAT (Copy enclosed)** of the Tender. The lowest (L1) bidder shall be awarded the contract provided they meet the other qualifying criteria listed in the tender document.

2. In case of identical lowest offered rate (L1) by more than 1(One) bidder, the selection will be made by draw of lot amongst the parties offering the same lowest price.

3. PURCHASE PREFERENCE to Micro and Small Enterprises registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME:

In case participating MSEs quote price within price band of L1+15%, such MSE shall be considered for award of contract by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE.

In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst the MSEs qualifying for 15% purchase preference.

In case any part of the work is sub-contracted to a Micro or Small Enterprise as per contract conditions than the contractor shall provide complete details (i.e. name of the subcontractor, value of sub-contacted work, copy of valid registration certificate etc.) of the sub-contractor to OIL .

Note: Documents required to be submitted by MSEs: Copy of valid Registration Certificate, if bidder is a Micro or Small Enterprises (MSE) registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME. The Registration Certificate should clearly indicate the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies.

In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur should also be enclosed

C) COMMERCIAL:

1. Bids are invited under Single Stage Two bid system.
2. Bidders must offer firm rates in Indian Rupees only. Rates quoted by the successful bidder must remain firm during the entire period of execution of the contract and not subject to variation on any account whatsoever. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
3. Bid security (EMD) shall be furnished as part of the technical bid. Any bid not accompanied by the proper bid security (EMD) will be rejected, except those are exempted.
4. The system will not permit to submit any bids after the scheduled bid closing date and time.
5. Any bid received in the form of Telex /Cable /Fax /E-Mail /Courier will not be accepted.
6. Bids must be kept valid for a minimum period of 180 days from the date of scheduled bid opening. Bids with inadequate validity will be rejected.
7. Bidders must quote clearly and strictly in accordance with the Price Bid Format of the bidding document; otherwise the bid will be summarily rejected. The Bids in which the

rates for any part of the work are not quoted shall be rejected. However, if no charge is involved for any of the item, NIL should be mentioned against such part of work.

8. Bidder must accept and comply with the following clauses as given in the Bidding Document in toto, failing which offer will be rejected-

- a) Performance Bank Guarantee clause
- b) Force Majeure clause
- c) Tax liabilities clause
- d) Arbitration clause
- e) Applicable Law
- f) Liquidated Damage clause
- g) Integrity Pact

9. The Company also reserves the right to cancel/withdraw the Tender without assigning any reasons to the bidders, for which no compensation shall be paid to the bidder. The bidder must confirm their acceptance to this clause in their respective bids.

10. Original bid shall be digitally signed and uploaded by the bidder or his authorized representative, failing which the bid will be rejected.

C. GENERAL:

1. In case bidder takes exception to any clause of tender document not covered under BEC/BRC, then the company has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw / modify the deviation when / as advised by the company. The loading so done by the company will be final and binding on the bidders.

2. To ascertain the substantial responsiveness of the bid the company reserves the right to ask the bidder for clarification in respect of clauses covered under BRC also and such clarification fulfilling the BRC clauses must be received on or before stipulated days from the date of clarification sought by the company, failing which the bid will be rejected.

3. In case any of the clauses in the BRC contradict with other clauses of bid document elsewhere, than the clauses in the BRC shall prevail.

4. OIL will not be responsible for delay or non-receipt of applications for participating in the bid and will not entertain any correspondence in this regard.

5. The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.

***** End of BRC-BEC*****

OIL INDIA LIMITED
(A Govt. of India Enterprise)
Contracts Department,
Duliajan, DISTRICT: DIBRUGARH
ASSAM, PIN: 786602

DESCRIPTION OF WORK/SERVICES:-

Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.

GENERAL CONDITIONS OF CONTRACT (GCC)

MEMORANDUM OF AGREEMENT made this _____ day of _____
Between OIL INDIA LIMITED a Company incorporated under the Companies Act 1956 and having its Registered Office at Duliajan in the District of Dibrugarh, Assam (hereinafter called Company) of the one part and Shri/Smti _____ and Shri/Smti _____ carrying on business as partners /proprietor under the firm name and style of M/s. _____ with the main Office at _____ in the District of _____ aforesaid (hereinafter called 'Contractor') on the other part.

WITNESSETH:

1. a) The contractor hereby agrees to carry out the work set down in the Schedule of work which forms part-II of this Contract in accordance with the 1968 General Conditions of Contract of Oil India Limited and General Specifications read in conjunction with any drawings and Particular Specifications & instructions which forms Part-III of the contract utilizing any materials/services as offered by the Company as per Part-IV of the contract at _____.

b) In this Contract all words and expressions shall have the same meaning as are respectively assigned to them in the 1968 General Conditions of Contract of Oil India Limited which the Contractor has perused and is fully conversant with before entering into this Contract.

c) The clauses of this contract and of the specifications set out hereunder shall be paramount and in the event of anything herein contained being inconsistent with any term or terms of the 1968 General Conditions of Contract of Oil India Limited, the said term or terms of the 1968 General conditions of Contract to the extent of such inconsistency, and no further, shall not be binding on the parties hereto.

2. The contractor shall provide all labour, supervision and transport and such specified materials described in part-II of the Contract including tools and plants as necessary for the work and shall be responsible for all royalties and other levies and his rates shall include for these. The work executed and materials supplied shall be to the satisfaction of the Company's Engineer and Contractor's rates shall include for all incidental and contingent work which although not specifically mentioned in this contract are necessary for its completion in a sound and workman like manner.

3. The Company's Engineer shall have power to:

a) Reduce the rates at which payments shall be made if the quality of work although acceptable is not up to the required standard set forth in the OIL Standard Specifications which have been perused and fully understood by the Contractor.

b) Order the Contractor to remove any inferior material from the site and to demolish or rectify any work of inferior workmanship, failing which the Company's Engineer may arrange

for any such work to be demolished or rectified by any other means at the Contractor's expenses.

c) Order the Contractor to remove or replace any workman who he (The Engineer) considers incompetent or unsuitable; the Engineer's opinion as to the competence and suitability of any workman engaged by the Contractor shall be final and binding on the Contractor.

d) Issue to the Contractor from time to time during the progress of the work such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the works and the Contractor shall carry out and be bound by the same.

e) Order deviations in Part II and III of this Contract. All such deviation orders shall be in writing and shall show the financial effect, if any, of such deviation and whether any extra time is to be allowed.

4. The Contractor shall have no claim against the company in respect of any work which may be withdrawn but only for work actually completed under this contract. The contractor shall have no objection to carry out work in excess of the quantities stipulated in Part-II if so ordered by the company at the same rates, terms and conditions.

5. The Company reserves the right to cancel this Contract at any time upon full payment of work done and the value of the materials collected by the contractor for permanent incorporation in the work under this contract particularly for execution of this contract up to the date of cancellation of the Contract. The valuation of the work done and the materials collected shall be estimated by the company's Engineer in presence of the contractor. The Contractor shall have no claim to any further payment whatsoever. The valuation would be carried out exparte if Contractor fails to turn up despite reasonable notice which will be binding on the Contractor.

6. The Contractor hereby undertakes to indemnify the Company against all claims which may arise under the under noted Acts:-

- i) The Mines Act.
- ii) The Minimum Wages Act, 1948.
- iii) The Workman's Compensation Act, 1923.
- iv) The Payment of wages Act, 1963.
- v) The Payment of Bonus Act, 1965.
- vi) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under.
- vii) Employees Pension Scheme, 1995.
- viii) Inter-State Migrant (Regulation of Employment and Condition of Service) Act. 1979.
- ix) The Employees Provident Fund and Miscellaneous Provisions Act, 1952.
- x) AGST Act.
- xi) Service Tax Act.

or any other Acts or Statute not here in above specifically mentioned having bearing over engagement of workers directly or indirectly for execution of work. The Contractor shall not make the Company liable to reimburse the Contractor for the statutory increase in the wage rates of the Contract Labour appointed by the Contractor. Such Statutory increase in the wage rates of Contract Labour shall be borne by the contractor.

7. The Contractor shall clear away all rubbish and surplus material from the site on completion of work and shall leave the site clean and tidy.

8. The duration of the contract shall be **104 Weeks** from the commencement date mentioned in the work order. The Contractor must complete the work within the contract period. During the currency of the job, the work progress must be commensurate with the time elapsed. In the event of any delay on the contractor's part, he/she will be liable to pay to the company liquidated damages at the rate of 1/2% (Half p.c) per week of the contract price of the item(s) delayed in completion and the maximum value of the liquidated damage will be 7.5% of the contract price of the item(s) delayed provided the item(s) delayed are not critical for commissioning and final utilization of the work. If, however, the item(s) delayed in completion are critical for commissioning and final utilisation of the work then the contractor will be liable to pay liquidated damages by way of penalty at the rate of 1/2% (Half percent) of the total contract cost subject to a maximum of 7.5% of the total contract cost.

The Chief Engineer's certificate as to the criticality or otherwise of an item shall be final.

The payment of liquidated damages/penalty may be reduced or waived at the sole discretion of the Company whose decision in this regard will be final.

In the event of there being undue delay in execution of the Contract, the Company reserves the right to cancel the Contract and / or levy such additional damages as it deems fit based on the actual loss suffered by the company attributable to such delay. The company's decision in this regard shall be final.

9. In order to promote, safeguard and facilitate the general operational economic in the interest of the Company during the continuance of this contract the Contractor hereby agrees and undertakes not to take any direct or indirect interest and or support, assist, maintain or help any person or persons engaged in antisocial activities, demonstration, riots , or in any agitation prejudicial to the Company's interest and any such even taking shape or form at any place of the Company's works or and its neighborhood.

10. The tendered all-inclusive Price except Service Tax (the Contract price) is **Rs. XXXXXXXXXX** (Not to be filled up by the bidder. This will be entered at the time of Signing of the agreement) but the Company shall pay the Contract or only for actual work done at the all-inclusive rates set down in the Schedule of work part II of this Contract.

On account payment may be made, not oftener than monthly, up to the amount of 92.5% of the value of work done. Final payment will be made only after satisfactory completion of the work. Such final payment shall be based on the work actually done allowing for deviations and any deductions and the measurement shall be checked and certified correct by the Company's Engineer before any such final payment is made.

11. The contractor employing 20 (twenty) or more workmen on any day preceding 12 months shall be required to obtain requisite licence at his cost from the appropriate Licensing Officer before undertaking any Contract work. The Contractor shall also observe the rules & regulations framed under the Contract Labour (Regulation & Abolition) Act.

12. The Company for any reason whatsoever and of which the company shall be sole judge may terminate this Contract with a 24 hours' notice in writing to the Contractor and in the event of Company's so doing the clause 5 here of shall prevail and the accounts between the parties will be in accordance therewith finalised.

13. The Contractor will not be allowed to construct any structure (for storage / housing purpose) with thatch, bamboo or any other inflammable materials within any company's fenced area.

14. The Contractor shall ensure that all men engaged by him/her are provided with appropriate protective clothing and safety wear in accordance with regulation 89(a) and 89(b) in the Oil mines Regulations 1984. The Company's representative shall not allow/accept those men who are not provided with the same.

15. All Statutory taxes levied by the Central & State Government or any other competent authority from time to time will be borne by contractor and the amount of the contract specified in the contract is inclusive of all tax liabilities but excluding Service Tax. Service Tax if applicable shall be, to the company's account. However, Service Tax portion payable directly by the Service provider (if applicable) shall be reimbursed to the Contractor on the basis of the documentary evidence.

16. The Contractor shall deploy local persons in all works.

17. The Contractor shall not engage minor labour below 18(eighteen) years of age under any circumstances.

18. The Contractor and his/her workmen shall strictly observe the rules and regulations as per Mines Act. (latest editions).

19. GENERAL OBLIGATIONS OF COMPANY:

COMPANY shall, in accordance with and subject to the terms and conditions of this contract:

- i) Pay the Contractors in accordance with terms and conditions of the contract.
- ii) Allow access to Contractors and their personnel, subject to normal security and safety procedures, to all areas as required for orderly performance of the work.

20. Special Conditions

- a) The amount of retention money shall be released after 6(six) months from the date of issue of completion certificate from concerned department.
- b) The contractor will be required to allow OIL Officials to inspect the work site and documents in respect of the workers' payment.

c) Contractor(s) whosoever is liable to be covered under the P.F. Act and contract cost is inclusive of P.F., must ensure strict compliance of provisions of Provident Fund and Miscellaneous Provisions Act, 1952 in addition to the various Acts mentioned elsewhere in this contract. Any contractor found violating these provisions will render themselves disqualified from any future tendering. As per terms of the contract, if applicable, the Contractor must deposit Provident Fund Contribution (covering Employee's & Employer's share) with the competent authority monthly under their direct code. The Contractor shall be required to submit documentary evidence of deposit of P.F. Contribution to the Company. In case of failure to provide such documentary evidence, the Company reserves the right to withhold the amount equivalent to applicable P.F. Contribution.

21. FORCE MAJEURE:

21.1 In the event of either party being rendered unable by 'Force Majeure' to perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such 'Force Majeure' will stand suspended for the period during which such cause lasts. The word 'Force Majeure' as employed herein shall mean acts of God, war, revolt, agitation, strikes, riot, fire, flood, sabotage, civil commotion, road barricade (but not due to interference of employment problem of the Contractor), acts of government of the two parties, which makes performance impossible or impracticable and any other cause, whether of kind herein enumerated or otherwise which are not within the control of the party to the contract and which renders performance of the contract by the said party impossible.

21.2 Upon occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing within Seventy Two (72) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

21.3 Should 'force majeure' condition as stated above occurs and should the same be notified within seventy two (72) hours after its occurrence the 'force majeure' rate shall apply for the first fifteen days. Parties will have the right to terminate the Contract if such 'force majeure' conditions continue beyond fifteen (15) days with prior written notice. Should either party decide not to terminate the Contract even under such condition, no payment would apply after expiry of fifteen (15) days force majeure period unless otherwise agreed to.

22. TERMINATION:

22.1 **TERMINATION ON EXPIRY OF THE TERMS (DURATION):** The contract shall be deemed to have been automatically terminated on the expiry of duration of the Contract or the extension period, if exercised by Company under the provision of the Contract.

22.2 **TERMINATION ON ACCOUNT OF FORCE MAJEURE:** Either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article 21.0 above.

22.3 **TERMINATION ON ACCOUNT OF INSOLVENCY:** In the event that the Contractor or its collaborator at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Company shall, by a notice in writing have the right to terminate the Contract and all the Contractor's rights and privileges hereunder, shall stand terminated forthwith.

22.4 **TERMINATION FOR UNSATISFACTORY PERFORMANCE:** If the Company considers that, the performance of the Contractor is unsatisfactory, or not upto the expected standard, the Company shall notify the Contractor in writing and specify in details the cause of the dissatisfaction. The Company shall have the option to terminate the Contract by giving 15 days' notice in writing to the Contractor, if Contractor fails to comply with the requisitions contained in the said written notice issued by the Company.

22.5 **TERMINATION DUE TO CHANGE OF OWNERSHIP & ASSIGNMENT:** In case the Contractor's rights and /or obligations under this Contract and/or the Contractor's rights, title and interest to the equipment/ material, are transferred or assigned without the Company's consent, the Company may at its absolute discretion, terminate this Contract.

22.6 If at any time during the term of this Contract, breakdown of Contractor's equipment results in Contractors being unable to perform their obligations hereunder for a period of 15 successive days, Company at its option, may terminate this Contract in its entirety without any further right or obligation on the part of the Company, except for the payment of money then due. No notice shall be served by the Company under the condition stated above.

22.7 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the Company on giving 30 (thirty) days written notice to the Contractor due to any other reason not covered under the above clause from 22.1 to 22.6 and in the event of such termination the Company shall not be liable to pay any cost or damage to the Contractor except for payment for services as per the Contract upto the date of termination including the De-mob cost, if any.

23. CONSEQUENCES OF TERMINATION: In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

23.1 Upon termination of this Contract, Contractor shall return to Company all of Company's items, which are at the time in Contractor's possession.

23.2 In the event of termination of contract, Company will issue Notice of termination of the contract with date or event after which the contract will be terminated. The contract shall then stand terminated and the Contractor shall demobilize their personnel & materials.

24. SETTLEMENT OF DISPUTES AND ARBITRATION:

24.1 Arbitration (Applicable for Suppliers/Contractors other than PSU) :

Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder :

1. A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.
2. The number of arbitrators and the appointing authority will be as under:

Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Upto Rs. 5 Crore	Sole Arbitrator	OIL
Above Rs. 5 Crore	3 Arbitrators	One Arbitrator by each party and the 3 rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.

3. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.
4. Parties agree that there will be no objection if the Arbitrator appointed holds equity shares of OIL and/or is a retired officer of OIL/any PSU. However, neither party shall appoint its serving employees as arbitrator.

5. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
6. Parties agree that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.
7. The arbitral tribunal shall make and publish the award within time stipulated as under :

Amount of Claims and counter claims (excluding interest)	Period for making and publishing of the award (counted from the date of first meeting of the Arbitrators)
Upto Rs. 5 Crore	Within 8 months
Above Rs. 5 Crore	Within 12 months

The above time limit can be extended by Arbitrator, for reasons to be recorded in writing, with the consent of the other parties.

8. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties.
9. Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator pointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, OIL shall make all necessary arrangements for his travel, stay and the expenses incurred shall be shared equally by the parties.
10. The Arbitration shall be held at the place from where the contract has been awarded. However, parties to the contract can agree for a different place for the convenience of all concerned.
11. The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.
12. Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

24.2 Arbitration (applicable in case of Contract awarded on Public Sector Enterprise) :

In the event of any dispute or difference relating to, arising from or connected with the Contract, such dispute or difference shall be referred by either party to the arbitration of one of the Arbitrators in the Department of Public Enterprises, to be nominated by the Secretary to the Government of India, In-Charge of the Bureau of Public Enterprises. The Arbitration and Conciliation Act 1996 shall not be applicable to the Arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided however; any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, whose decision shall bind the parties finally and

conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

The venue of all arbitrations under both 24.1 & 24.2 will be Duliajan, Assam. The award made in pursuance thereof shall be binding on the parties.

25. I.B. Verification Report and Security Review:

Contractor will be required to submit the verification report to ascertain character and antecedents from the Civil Administration towards the persons engaged under this contract to the Head of the user Department before engagement.

25.1 In case of any doubt or dispute as to the interpretation of any clause herein contained, the decision of the Company's Engineer shall be final and binding on the contractor.

26. Set Off Clause:

Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of a sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

27. Furnishing Fraudulent Information/Document:

If it is found that a Bidder/Contractor has furnished fraudulent document/information the party shall be debarred for period of 3(three) years from date of detection of such fraudulent act, besides the legal action.

28. Liquidated Damages for Delay in Mobilisation and/ or Completion of Works and Services:

In normal case of works /service contracts, liquidated damages will be applicable @ 0.5% of the contract value per week or part thereof, for delay in contract mobilization/completion date subject to a maximum ceiling of 7.5% of contract value. IN WITNESS whereof the parties hereunto set their hands seals the day and year first written above:-

SIGNED & DELIVERED FOR AND

ON BEHALF OF
his legal

-----by the hand of

(Signature of Contractor or
Attorney)

(Full Name of Signatory)

its Partner/Legal Attorney

(Seal of Contractor's Firm)

(Signature of witness)

And in presence of

Date : _____

(Full Name of Signatory)

Address:

(Signature of Acceptor)

SIGNED & DELIVERED FOR & ON
BEHALF OF OIL INDIA LIMITED

Designation

Date_____

B. SCOPE OF WORK:

Plant outline of the 20 MW power plant is given in the attached **Annexure- I** for information.

The scope of work includes Operation and Maintenance Services for Balance of Plants (BOPs) of Duliajan Power Station. A list of BOPs (Equipments/ Systems) is given in the attached **Annexure-II**.

The scope of work has been classified into three parts:

1. Round The Clock Operation
2. Daily Maintenance
3. Breakdown Maintenance (On call duty beyond normal duty hours)

1. Round The Clock Operation: The scope of work shall include:

a) Round the clock trouble free and safe operation and maintenance of the BOP equipments in Two (2) or three (3) shifts of Twelve (12) or Eight (8) hours duration each.

b) Routine checks and maintenance to be carried out in all the shifts.

c) Recording of equipment parameters / data on log sheets [Log Sheets formats shall be approved by OIL's Engineer and such formats can be changed time to time as per OEM recommendations and OIL's operational requirements]

d) Carry out necessary operational checks provided in the operational check list enclosed as per **Annexure- III** [Check List formats shall be approved by OIL's Engineer and such formats can be changed time to time as per OEM recommendations and operational requirements]

e) Assist maintenance personnel as and when required during trouble shooting and during execution of scheduled / unscheduled maintenance programs.

f) Carry out electrical operations like switching on/ off of motors / breakers/ MCCBs etc. or other electrical operation job like connection / disconnection of electrical equipments etc.

g) Carry out mechanical operations like manual on/ off of valves (water/ gas/ air) etc. or other mechanical operation job like checking of pressure/ temperatures/ detecting leakages/ cleaning/ painting of equipments etc.

h) Reporting of any abnormal equipment behaviour that needs the attention of maintenance personnel shall be informed to contractor's supervisor, OIL's Shift- In -Charge, as soon as occurrence is noticed as well as intimating the same to OIL's Installation Manager / Engineer.

i) Maintain all operational and maintenance records and everyday logging of all the critical parameters of equipment, hours run and any specific maintenance / repairs carried out including material / spares consumed.

j) Generate regular/ special operational reports as and when required.

k) Any other operational related services required for O&M of the plant as per OIL Engineer's instructions.

2. Daily Maintenance: The scope of work shall include:

a) Keep continuous vigil on the condition of running/ standby equipments.

b) Carry out Preventive maintenance schedule of all the equipments and all the activities carried out will be recorded in logbook (Equipment History Records).

c) Carry out necessary maintenance checks provided in the maintenance check list enclosed as per **Annexure- IV** [Check List formats shall be approved by OIL's Engineer and such formats can be changed time to time as per OEM recommendations and operational requirements]

d) Fault finding and troubleshooting of the equipment to be carried out and maintain the record of it in logbook (Equipment History Records).

e) The contractor must complete all daily breakdown maintenance reports as per standard practices. No job should be kept pending without OIL Engineer's prior approval.

f) Schedule, preventive, predictive maintenance shall normally be carried out during day time in general shift.

g) Carry out electrical maintenances of motors etc. or other electrical maintenance jobs as instructed by the OIL's Installation Manager/ Engineer like connection / disconnection of electrical equipments etc.

h) Carry out mechanical maintenances of valves (water/ gas/ air) etc. or other mechanical maintenances job as instructed by OIL's Installation Manager/ Engineer like checking of pressure/ temperatures/ detecting leakages/ cleaning/ painting of equipments etc.

i) Carry out OEM recommended preventive maintenance schedule to be followed religiously.

j) The contractor should ensure that all the maintenance jobs are carried out as per Maintenance Schedule of OEM's recommendations and also as per instruction of OIL's engineers from time to time.

k) The Contractor shall prepare the detailed preventive maintenance schedule along with

- (i) Estimated down time required for each type of maintenance schedule.
- (ii) List of spares and their quantities required for each type of maintenance schedule of the BOP equipments.
- (iii) Type and number of man days required for each type of maintenance schedule of the BOP equipments.

l) Up keeping of equipment shall be taken up immediately after completion of maintenance or repair and area shall be kept neat and clean. The waste generated during maintenance shall dump in a designated area.

m) All maintenance jobs are to be carried out under the supervision/ guidance of OIL's Engineer/ supervisor.

n) The contractor personals shall assist OIL's personnel during calibration check & installation/ maintenance of field instruments, electrical meters etc. They shall also assist during record keeping of above maintenance/ calibration jobs.

o) No modification without prior approval from OIL will be allowed in the gas line circuits, lube oil circuits, cooling water circuits, control circuits and electrical power circuits etc.

p) The contractor personals shall prepare necessary reports and checklists, daily reports, equipment availability, outage, Daily, Monthly, Quarterly and Annual reports etc. Any information required by OIL management as and when required shall be submitted by the contractor.

q) The contractor personals shall diagnose variations in important critical parameters and shall take corrective measures / actions thus highlighting their effects on equipments.

r) All daily/ monthly/ annually maintenance / inspection jobs carried out by the Contractor shall be recorded and the report of the same shall be submitted to OIL.

s) Any other maintenance related services as per OIL Engineer's instructions.

3. Breakdown Maintenance (On call duty beyond normal duty hours): The contractor should ensure all time satisfactory working conditions of the equipments included in the service contract. In case of unscheduled breakdown of equipments at any point of time, the contractor should ensure minimum downtime of equipment by mobilizing his team and resources and responding immediately to such unscheduled breakdown and see to it that, production/ generation losses are not accrued on account of such breakdowns.

a) Contractor shall attend all breakdown/ malfunctioning reports immediately.

b) For each breakdown report, job completion report has to be submitted by the contractor or his supervisor to OIL and obtain job completion certificate from OIL's Engineer, properly mentioning breakdown period.

C. Manpower: Deployment Pattern, Qualification & Experiences:

Minimum Manpower Deployment Pattern, Qualification & Experiences required for Contactor's personnel for Operation & Maintenance Services of BOPs shall be as per details given in Annexure V.

D. Roles and Responsibility of Contractor Personnel:

1. Roles and Responsibility of Contractor's Supervisor:

- a) The Contractor's Mechanical Supervisor shall perform as Over-All-In charge for administration of works & personals of contractors employees.
- b) Contractor's Supervisors shall be Responsible for performing all routine, breakdown & scheduled maintenance activities, safety of equipments for safe operations during the O&M service contract period.
- c) All mechanical maintenance jobs shall be carried out under supervision of Contractor's Mechanical Supervisor and all Electrical & Instrumentation maintenance jobs shall be carried out under supervision of Contractor's Electrical Supervisor.
- d) Contractor's Supervisors shall assist OIL's In Charge of Maintenance- in performing his duties.
- e) Contractor's Mechanical Supervisor shall assist the Contractor's Electrical Supervisor in performing his duties and vice versa. They shall take responsibilities of the other supervisor in his absence.
- f) Contractor's Supervisors shall visit the Office of OIL's Engineer every day morning at 7.00 A.M. for necessary instructions and for other administration purpose.
- g) Supervisors shall be responsible for record keeping of all official documents, they shall properly maintain records of daily & periodic maintenance jobs on daily basis and feedbacks shall be given to the OIL's Engineers, Shift In Charge / OIL's on completion of each jobs.
- h) Supervisors shall prepare Preventive Maintenance schedules as per OEM guidelines & same has to be approved by OIL's Engineer. Similarly checklists for daily, monthly, yearly maintenance job schedules shall also be prepared for the various equipments that shall be required to be carried out by the contactor's O&M personnel.
- i) It shall be the responsibility of the Supervisors to ensure that the assigned jobs are carried out properly on time.
- j) Supervisors shall interface with Contractor / OIL on all equipment and system issues; mobilize any Contractor / OIL resources required for scheduled or unscheduled maintenance.
- k) Supervisors shall assist OIL personnel for development and implementation of sound operating and maintenance strategy and procedures, including corrective action guidance.

- l) Supervisors shall carry out Contractor's record keeping, Accounts & Billings etc.
- m) Supervisors shall assess consumables, operational and maintenance spares, OEM services and apprise the same to OIL's Engineers/ Shift in Charge.
- n) Supervisors shall conduct training programs for upgrading knowledge of contractor's personnel and participate in all Contractor / OIL sponsored safety trainings.
- o) Supervisors shall provide all reports as per OIL's O&M practices. They shall collect and provide data as deemed necessary by OIL to analyze equipment performance.
- p) Supervisors shall monitor all essential parameters of the running equipment and report any discrepancy in operational parameters.
- q) Supervisors shall be responsible for Contractor's Store maintenance, issue of PPE to contractor's personnel and they shall ensure that the contractor's personnel use PPE all the time, whenever they are at site.
- r) Supervisors shall be responsible for issue, receipt record keeping of materials/ spares & tools and they shall carry out periodic physical verification & regular maintenance of spares & tools.
- s) Supervisors shall be identify reorder level on monthly basis and inform concerned OIL's Engineer to initiate procurement actions.
- t) Supervisors shall be responsible for attendance and leave records of all contractor employees.
- u) Supervisors shall carry out carryout identification and markings of OIL's BOP assets.
- v) Supervisors shall conduct regular Tools Box Meeting, Job Safety Analysis before any special jobs among contractor's personals.
- w) Supervisors shall raise safety related issues in OIL's Tools/ Pit level safety Meeting.
- x) Supervisors shall raise Fire Alarm Siren in case of emergencies and co-ordinate with OIL engineers/ employees during firefighting.
- y) The Supervisors must be conversant with the safe operating procedures of the equipments & relevant IS / NEC codes/ OEM recommendations.
- z) During the execution of the contract, at least one (1) Maintenance Supervisors should be always present (considering any leave availed by other Maintenance Supervisors), at site or within Duliajan area so that in case on emergency the Maintenance Supervisors can be contacted and he comes & report to the power station without delay.

2. Roles and Responsibility of Maintenance Technician: The functions and responsibilities of Maintenance Technician shall be as listed below:

- a) Carry out daily mechanical, electrical & instrumentation maintenance jobs as per instruction of BOP Maintenance Supervisors.
- b) They shall be responsible for routine checks, minor & major maintenance activities and to ensure that the maintenance jobs are carried out properly and on time.
- c) Monitor all essential parameters of the running/ standby equipments and report any discrepancy in operational parameters.

- d) The maintenance Technicians must be conversant with the safe operating procedures of the equipments & relevant IS / NEC codes/ OEM recommendations.
- e) Raise safety related issues in Tool box/ Pit level safety Meetings.
- f) Ensure safety in all maintenance activities.
- g) Raise Fire Alarm Siren in case of emergencies and carry out firefighting.
- h) During the execution of the contract, at least two (2) Technicians/ Fitters, should be always present (considering any leave availed by other Technicians/ Fitters), at site or within Duliajan area so that in case on emergency the Technicians/ Fitters can be contacted, come and report to the power station without much delay.

3. Roles and Responsibility of Assistant Technicians:

- a) Assist the Technicians during carrying out of daily mechanical, electrical & instrumentation maintenance jobs.
- b) Ensure safety in all maintenance activities.
- c) Raise Fire Alarm Siren in case of emergencies.
- d) During the execution of the contract, at least three (3) Assistant Technicians/ Assistant Fitters should be always present (considering any leave availed by other Assistant Technicians), at site or within Duliajan area so that in case on emergency the Assistant Technicians can be contacted, come and report to the power station without much delay.

4. Roles and Responsibility of Shift Operator: The functions and responsibilities of Operator shall be as listed below:

- a) Take charge from previous operator,
- b) Hourly monitor the healthiness of running/ standby equipments,
- c) Report any abnormalities to OIL's Shift-In-Charge, Engineer & Contractors' supervisor.
- d) Monitor all running parameters,
- e) Assist the Contractors' supervisors/ OIL's Shift In charge/ OIL's representatives on operation & maintenance requirements
- f) Operators must be conversant with the safe operating procedures of the equipments & relevant IS / NEC codes/ OEM recommendations.
- g) Carry out pre start/ stop checks & line ups of Centrifugal Gas Compressors. However Centrifugal Gas Compressors will be started & controlled by OIL's Shift In charge/ operators from Main Control Room through the Distributed Control System (DCS).
- h) Carry out pre start/ stop checks & line ups of the Diesel Engine driven Reciprocating Gas Compressor and start the Gas compressor from local panel in case of blackout and carryout weekly testing of the Reciprocating GBC, after availing permission from OIL's Engineer/ Shift-In-Charge.
- i) Locally Stop the Gas Compressors in case of major abnormalities.
- j) Carry out pre start/ stop checks & line ups of the Emergency Diesel Generator (EDG) and start the EDG from local panel in case of blackout (if the EDG did not start in Auto Mode) and carryout weekly testing after availing permission from OIL's Shift-In-Charge.

- k) Carry out pre start/ stop checks & line ups of the Gas Conditioning Skid, IA-PA & N2 system, Fire Cum Filtered Water Pump house, Cooling Water Pumps & Cooling Water Motors, DM Water Plant, DM Water Wash & Water Injection Skid, Oily Waste Water/ Waste Water Disposal system, Fire & Hazardous Gas Detection System etc.
- l) Carry out open closing of fuel/ water/ air valves as per operational requirements,
- m) Carry out BOP LT Breaker/MCCB Rack In/Out, open/close operations,
- n) Report writing of shift events,
- o) Raise Fire Alarm Siren in case of emergencies and carry out firefighting,
- p) Inform OIL's Shift- In-Charge in case of Fire/ Medical Emergencies,
- q) Raise safety related issues in Tool box/ Pit level safety Meetings,
- r) Ensure safety in shift operations,
- s) During the execution of the contract, at least three (3) Operators should be always present (considering any leave availed by other Operators), at site or within Duliajan area so that in case on emergency the Operators can be contacted, come and report to the power station without much delay.

5. Roles and Responsibility of Shift Assistant Operator: The functions and responsibilities of Assistant Operator shall be as listed below:

- a) Take charge from previous assistant operator,
- b) Take hourly round of site to monitor the healthiness of running/ standby equipments,
- c) Assist OIL's Shift-In-Charge & Contractor's shift operator in performing his duties.
- d) Report any abnormalities to Contractor's operator & OIL's shift in charge,
- e) Hourly logging of running/ standby machine parameters/ loads,
- f) Carry out regular drainage of fuel gas separators & gas filters, gas condensate drain tank etc.
- g) Open closing of fuel/ water/ air valves as per operational requirements
- h) Carry out BOP LT Breaker/MCCB rack in/out, open/close operations,
- i) Report writing of shift events,
- j) Raise safety related issues in Tool box/ Pit level safety Meetings,
- k) Raise Fire Alarm Siren in case of emergencies.
- l) Fight fire with suitable fire extinguishers.
- m) Ensure safety in all shift operations,
- n) During the execution of the contract, at least three (3) Assistant Operators should be always present (considering any leave availed by other Assistant Operators), at site or within Duliajan area so that in case on emergency the Assistant Operators can be contacted, come and report to the power station without much delay.

6. Roles and Responsibility of Helpers: The functions and responsibilities of helpers shall be as listed below:

- a) Report any abnormalities to operator/ maintenance supervisor
- b) Housekeeping, cleaning of GT Hall, GBC Hall, IA-PA-N2 Hall, Control & Switchgear room, office, Fire Cum Filtered Water Pump House, Cooling Tower & Cooling Water Pump House area, DM Plant area etc.

- c) Collect leakage lube oils / water from units, pits, drains etc.
- d) Assist maintenance technicians, shift operators in performing their duties.
- e) Carry out periodic cleaning of GT inlet air filter cartridges,
- f) Carry out switch on/ off area lights within the 20 MW power plant,
- g) Carry out open/ close power house entrance gates,
- h) Assist technicians, shift operators during fire fighting,
- i) Carry out handling of light fittings and assisting Electricians/ Supervisor/ Linesman
- j) Carry out handling of motors, alternators, transformers and earthing wires/strips etc. and providing assistance to Electricians/Supervisor for dismantling and fixing of above.
- k) Assist Electrical technicians during maintenance of earth electrodes.
- l) Carry out loading and transportation of miscellaneous item like equipments, valves, pipes fittings etc.
- m) Placing, removal and transporting of wooden planks.
- n) Laying, removal, coiling and box- up of cables up to 630 sq.mm size.
- o) Carry out placing and dismantling of cable tray and tray covers.
- p) Carry out cleaning of electrical equipments.
- q) Carry out periodic cleaning of water reservoirs, sumps,
- r) Carryout loading/ unloading, storage of chemicals required for DM Water plant,
- s) Carry out periodic jungle cuttings inside power house premise,
- t) Carry out periodic painting of equipments, steel structure, pipings and L.T poles.
- u) Helpers have to render services/ housekeeping in other areas within the plant, as per instruction of OIL's Engineers/ Supervisors.
- v) During the execution of the contract, at least six (6) helpers should be always present (considering any leave availed by other helpers), at site or within Duliajan area so that in case on emergency the helpers can be contacted, come and report to the power station without much delay.

E. GENERAL NOTES:

1. The services will have to be carried out at Duliajan Power Station.
2. All the services/ items under this service contract i.e Daily Maintenance, Round The Clock Operation, Breakdown Maintenance etc. shall be outsourced from same contractor (i.e one contractor only).
3. Duty hours, rest, off, leave etc for the contractor employees shall be as per the relevant Act / Law and/or Rule made there under.
4. The services will be required daily for operation & maintenance of BOP equipments as per following duty timing-
 - a) General duty maintenance personals shall work for 8 hours a day (working hours being 7 AM to 11 AM and 11.30 PM to 3.30 PM with a lunch break of 0.5 hour in between). During ongoing maintenance activities if any, the maintenance personnel will not leave site till completion of the job or till

obtaining necessary approval from OIL's Installation Manager. In case of emergencies, services will have to be provided on Sundays, Holidays and also beyond normal working hours.

b) Shift operation personals shall perform their duties in Two (2) / Three (3) shift pattern (Twelve (12) / Eight (8) hours duration each). For 12 hrs duty pattern morning shift will be from 6AM to 6 PM and night shift will be from 6PM to 6AM. For 8 hrs shift pattern: morning duty will be from 5AM to 1PM, evening shift will be 1PM to 9PM and night duty will be from 9PM to 5AM. The Contractor shall be responsible to provide effective and efficient manpower services in all shifts and assure that there is no disruption in the services for want of any manpower. During shift hours, operating personnel will not leave the site till such time their relievers arrive & take over charge. In case of emergencies, services will have to be provided beyond normal shift duty hours.

5. The Contractor shall deploy adequate number of supervisors/ technician's /operators/ helpers as well as tools & equipments for smooth and proper Operation & Maintenance of the BOP equipments.

6. If any contractor employee avails any kind of leave the contractor shall arrange suitable replacement.

7. If the 20 MW plant is under shutdown/ standby for any reasons, the contractor's manpower shall be engaged in any other similar jobs within the Duliajan Power Station.

8. The workforce deployed by the Contractor for O&M services of the BOP equipments shall be capable, competent and fully conversant with the jobs in this respect. This is also essential from the safety point of view of the Contractor's personnel as well as for the installation.

9. Contractor shall submit along with the bid, a list of personnel, he intends to engage; together with their Bio-Data endorsing qualification, experience (individual) details and their permanent address. Photo copies of relevant documents shall also be submitted along with the bio-data.

10. Contractor shall obtain OIL's approval for all the personals to be engaged; before deployment through this contract. The list of personnel to be engaged by the contractor together with their Bio-Data and other necessary documents endorsing qualification and experience (individual) details, police verification and proof of permanent address, Initial Medical Examination (IME) etc. should be forwarded to OIL minimum 30 days prior to their deployment, for verification, clearance and approval from OIL. Photo copies of relevant documents shall be submitted along with bio-data and original documents should be produced to OIL as & when required for verification. If felt necessary, OIL reserves right to verify their credentials through interview/ test etc.

11. Except during maintenance purposes, all the equipments under this service contract must be kept functional in good working condition at any point of time to ensure smooth operation of the BOP equipments. Information regarding outage of any BOP equipments for maintenance or breakdown should be immediately reported to the OIL's Engineer- In-charge.

12. The contractor's team shall work under instruction/ guidance of OIL's Engineer.

13. All the jobs mentioned under scope of services shall be carried out as per sound engineering practices, work procedure documentation, recommendation of the manufacturer and as per the guidelines / direction of engineer-in-charge of authorized representative. No jobs should be kept pending.

14. In case of major reports beyond their capability, the Contractor or his representative should immediately report the same to the OIL's engineer / Shift -In-Charge mentioning requirement of additional man & materials, shortage of infrastructure etc, so that the job is not suffered.

15. Accommodation / Transportation / Medical:

a) The contractor shall make his own arrangement for the accommodation of his personnel within Duliajan and also contractor shall make his own arrangement for transportation of his personnel, from their place of residence to work place or any other place as required. OIL shall have no obligation in these aspects.

b) No temporary/permanent accommodation for Contractor personnel shall be allowed to make inside OIL industrial area.

c) OIL shall not be responsible for providing any medical assistance to contractor's personnel.

Contractor shall carry out Initial Medical Examination (IME), Periodic Medical Test (PME), Periodic Audiometric Test etc. of his employees at his own cost. The frequency of periodic medical examinations including Periodic Audiometric Test should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.

16. Office/ Office Facilities/ Storage:

a) The Contractor must have an office in Duliajan within its 3 KM radius or in the event of non-availability of the same, the bidder shall give an undertaking that the said office will be set up prior to execution of jobs under this contract.

b) The office should have facility of landline telephone and Mobile phone so that the contractor's representative can be contacted/ called to site in case of any requirements/ emergencies (on 24 hour basis).

c) The details of landline telephone and Mobile phone should be provided to Electrical Department at least two weeks before commencement of the works; without which the contractor will not be allowed to start jobs under this contract. OIL reserves the right to inspect and verify the compliance of the same.

NOTE: Mobile phone cannot be used in hazardous areas like Gas Conditioning Skid, Gas Compressor station etc., where these mobile phones must be kept in switched off mode. Guidelines for use of mobile phone will be provided after award of the contract.

d) The Contractor will not be allowed to construct any structure (for storage / housing purpose) with thatch, bamboo or any other inflammable materials within any company's fenced area.

17. Contractor's representative/ supervisor should daily keep in touch with the OIL's Engineers/ Shift-In-Charge for necessary instructions.

18. Training:

a) The contractor shall arrange to impart adequate safety training to his employees and training shall be in-depth with proper training relating to electrical safety, including First Aid , Electrical Shock Treatment as per relevant IS / NEC codes. The responsibility of providing such training to the operating and maintenance personnel shall lie on the contractor. Documents relating to proof of training provided by the conductor to be kept in readiness for verification as & when required.

b) The Contractor shall arrange to impart basic technical training to his employees relating to the operation & maintenance of BOP equipments at his own cost by deputing instructor from reputed OEM/ institutes or qualified personnel. Documents in this regard to be kept in readiness for verification as & when required.

c) All Contractors' personnel must undergo Mines Vocational Training (MVT) for Contractor's Personnel & other safety & technical orientation programme conducted by Oil India Ltd. Contractor shall bear cost for such trainings as per OIL's company policy.

d) Contactor shall arrange all the necessary trainings for his employees before commencement of the job under this contract and contractor should arrange refresher training for his employees every half yearly or on advice of OIL's Installation Manager.

e) The contractor's personnel shall familiarize themselves to the nature of equipments, their operation & maintenance procedures and safety aspects associated with the jobs, however they can approach OIL Engineers/ supervisors for any clarifications, elaborations etc.

19. Contractor personnel shall arrange to get written permission for all hot work/cold work / vessel entry from OIL's Installation Manager or OIL's shift-in-charge. Where gas testing, portable fire extinguisher, standby fire tender etc. are felt necessary, the contractor shall request OIL for arranging the same.

20. Tool Box Meetings shall be held in the morning of all working days and, Job Safety Analysis shall be carried out prior to any major / non-routine maintenance jobs with representative of OIL and the minutes of such meetings shall be recorded and signed by every persons present.

21. The contractor must ensure that the "Electrical Supervisor's Certificate of Competency" and/or "Electrical Workman Permits" of his work persons are duly renewed regularly.

22. Necessary stationery including log sheets and other reporting formats shall be provided by OIL and shall be property of OIL. Any contractor's person should not produce any OIL's documents without permission from OIL.

23. It shall be mandatory for the contractor to maintain the following documentation at site:

- a) Attendance register,
- b) Daily log sheets of various operation data and historical logs,
- c) Equipment History Records,
- d) Tools and Instruments Register,
- e) Scheduled Maintenance Register,
- f) Breakdown Maintenance Register,
- g) Materials Consumption Register,
- h) IR value and Earth Resistance value recording register,
- i) List of essential spares required for operation and maintenance of BOP equipments,
- j) Training Register,
- k) Initial Medical Examination (IME) Register,
- l) Periodic Medical Examination (PME) Register,
- m) Minutes of Safety Meetings (Tools box, Job Safety Analysis etc.) held; with list of participants,
- n) Leave Record Register

24. QUALITY OF WORK:

a) Contractor shall abide by all instructions of OIL engineer and carry out standard quality jobs/works to satisfaction of OIL Engineer.

b) OIL shall issue report card in approved format, mentioning time of report & time of attending the report by contractor's employees. Contractor or his supervisor has to obtain time of completion & signature of the OIL's authorised engineers/ shift in-charge in the same report sheet.

c) The quality of jobs completed will be ratified by Installation Manager / authorized person.

d) OIL shall reserve the right to ask the contractor to re-do poor quality jobs at no extra cost to OIL.

25. Sub-letting of contract: No part of this contract nor any share or interest therein in any manner or extent, will be transferred or assigned or sub-let, directly or indirectly to any person / firm or Organization without prior permission of OIL.

26. Police verification of Contractor Employees:

Contractor shall submit police verification certificate relating to character and antecedents of his work persons for issuing Gate Pass and other permits etc. The Contractor should not engage any person whose Police verification report has been found adverse.

27. Gate pass / identity card:

a) The Contractor should provide authorized identity card/Photo Pass to all his workmen engaged under this contract mentioning the contract no., their key nos, job role and area of operation. The identity card/Photo Pass shall be provided with photographs of his employees and shall be duly attested by him.

b) The contractor shall apply to OIL in specified format for issue of new or renewal of OIL's Industrial Area Gate Entry Pass along with photographs of all workmen engaged, duly attested by him. This is required by OIL for security or for any other reasons.

c) All the contractor's personnel shall be required to carry their respective identity cards/ gate pass while on duty and produce same on demand.

d) If contractor replaces any work persons, immediately upon of service termination of his employee; his OIL Industrial Area Gate Entry Pass, Identity cards etc shall have to be submitted to OIL, to avoid any miss use.

28. Discipline:

a) The Contractor must ensure that the personnel engaged by him are of good character and integrity. Contractor must instruct his employees to maintain decorum while carrying out jobs. In no case any of his team members shall enter into any argument or dispute with any person.

b) For availing leaves or out-station permission, the contractor personnel must seek permission from the contractor's site in charge (supervisor) and the contractor's site in charge shall inform the same to OIL's Engineer.

c) If any complaint be received against any of his employee or any workmen found indulging in misbehaviour, negligence of duty, misconducts or found violating general rules and regulations inside the industrial area/ work site or not obeying OIL's supervisor's /engineer's instructions, the employee

shall be removed by the contractor on receipt of complaint verbally or in writing from OIL's Engineer within 24 hours of notice. The decision of the OIL's Engineer in this matter shall be final and binding on the contractor.

d) All personnel of the Contractor entering on work premises shall wear PPEs including protective clothing/ Overall while working on premises of the company including work sites.

e) If any of the contractor's persons is found to work under the influence of alcohol (on evidence of Medical examination/certificate and witnesses), he will be immediately debarred from the working place and the contractor shall have to replace him immediately.

f) The workers provided by contractor should be medically fit and should be ready to work upto height of Power house building roof, pipe racks, overhead tanks or LT poles etc.

g) Any workmen found medically unfit due to medical reasons should be removed by the contractor.

h) The contractor/ his supervisor will keep the attendance of his employees on daily basis and the same shall be made available to the Company's Engineer (OIL) as and when asked for. Also maintain records of leaves/ absence/ holiday/ rest day availed etc.

i) The contractor must ensure that all his personnel shall be available at site as per the terms of the contract, both during operation as well as while carrying out preventive and breakdown maintenance of equipments. This will be physically checked and monitored by OIL's Engineer-In-Charge from time to time.

j) The Contractor shall indemnify the company against all losses or damages caused to it on account of acts of the personnel deployed by the contractor. The Contractor shall ensure regular and effective supervision of the personnel deployed by him.

k) The Contractor shall be solely responsible against any damage, loss or act of subversion or unlawful activities, which may be caused or committed, by any one of its workers within OIL's establishment during the contractual period and any loss/damage of Company's property from any assigned areas/sites will have to be made good at the Contractor's cost, if it occurs during the period of the area/site being operated by the contractor.

l) In case any contractor's personnel is arrested on charges of theft/ forgery / subversive/ sabotage/ moral turpitude / unlawful activities etc., then contractor shall debar him from duty till his acquittal from the charges by Court of Law. Contractor is responsible for misconduct of any person employed by him whatsoever. If law authority in connection with any crime, convicts any contractor's personnel, the contractor shall remove such personnel from service.

- m) In case of death (while on duty) of any enlisted person, Contractor shall be responsible for arranging/ settling his claims as per relevant laws/ rules.
- n) The Contractor shall comply with any other instruction which may be issued by the OIL's representative from time to time.
- o) OIL shall have the right to employ external auditing agencies (like ISO auditors etc) for surveillance of jobs under this contract.
- p) All wastes (hazardous, bio-degradable & non-biodegradable, empty barrels / burnt oil barrels) to be stored & disposed off by the contractor as per OIL's documented procedure.
- q) For any O&M services not specified in the contract document, but required for safety, efficiency, energy conservation, statutory rules etc for the plant, the contractor has to carry out such services as and when required.

29. OIL reserves the following rights:

- a) OIL reserves right to modify operational/ maintenance Checklists/ Forms/ O&M Procedures time to time as per recommendation of OEM of the equipments/ OIL's operational & maintenance policies and standards.
- b) Standing Orders as issued from OIL's Office must be displayed in each Contractor's office by the Contractor & comply with.
- c) All the operation/maintenance works carried out by the Contractor shall be under strict surveillance of OIL Engineers and shall be audited for safety & conservation of energy.
- d) In the event of any equipment(s) required to carry out periodic maintenance, the contractor personnel shall have to obtain OIL's consent for the shutdown. OIL reserves the right to alter the work schedule proposed by the contractor due to operational exigencies.
- e) Regarding work completion, the decision of authorised OIL Engineer will be final and binding on contractor.
- f) OIL reserves right to order the Contractor to remove or replace any workman whom the company considers incompetent or unsuitable and opinion of the company's representative as to the competence of any workman engaged by the Contractor shall be final and binding on the contractor.

30. Compliance of Statutory Laws:

- a) The Contractor deploying 20 (twenty) or more workmen as contract labour shall have to obtain licence from appropriate licensing authority, if required. The Contractor (which shall include the contracting firm / company) shall

be solely liable to obtain and to abide by all necessary licenses from the concerned authorities as provided under the various labour laws legislation's including labour license from the competent authority under the Contract Labour ("Regulation & Abolition") Act 1970 and Acts made thereafter.

b) It will be the responsibility of the Contractor to pay as per the minimum wages of the appropriate government applicable under the Minimum Wage Act 1948.

c) The Contractor shall be responsible for necessary contributions towards PF, Gratuity, Family Pension, ESIC (Employees' State Insurance Scheme of India) or any other statutory payments to Government agencies as applicable under the laws in respect of the contract and personnel deployed by the contractor for rendering services to OIL and shall deposit the required amount with the concerned statutory authorities on or before due dates. The contractor shall obtain a separate PF number from the concerned Regional Provident Fund Commissioner and submit necessary proof of having deposited the employees as well as the employer's contribution to the Provident Fund.

d) The Contractor shall not engage / deploy any person of less than 18 years under this contract and the persons to be deployed should be physically and mentally fit.

e) The Contractor shall arrange for insurance of all his workers engaged on the job under this contract as per the relevant Acts, rules and regulations, etc.

31. PERSONAL PROTECTIVE EQUIPMENT (PPE):

a) Contractor's personnel shall not be allowed to work without the following minimum PPEs-

- i. Safety Shoe
- ii. Helmet
- iii. Safety belt
- iv. Ear plugs
- v. Safety Goggles
- vi. Hand Gloves
- vii. Insulation rubber gloves
- viii. Protective Clothing/ Overall

b) Contractor shall replace PPEs to his employees whenever found damaged/ worn out.

c) Contractor shall provide First Aid boxes at site with standard medicines & bandages as recommended by OIL's Medical Department.

32. TOOLS AND TACKLES:

a) The contractor shall arrange all requisite tools, tackles and instruments needed by the operating and maintenance personnel (as per attached

Annexure- VI) to effectively carry out their operation and maintenance activities.

b) All tools and tackles as per above list, must be made available at least two weeks before commencement of the jobs under this contract.

c) Tools and tackles provided by the contractor shall be of standard make and must conform to IS or relevant standard.

d) Contractor should keep all the tools and instruments in good working condition and must replace suitably whenever found defective/ lost during the contract period.

e) Whenever OIL Inspector/ Engineer wishes to inspect, contractor shall produce the tools and tackles for inspection.

f) Intrinsically safe insulation tester/ electronic equipments (DGMS approved) to be used in hazardous areas.

33. SPARES:

a) Spares shall be supplied by OIL.

b) The OIL will supply the spares as and when required only. The contractor's representative shall visit the OIL's office for collection of the materials that may be necessary.

c) If any new materials are supplied by OIL to the contractor for replacement of any defective parts, then the defective parts shall be properly packed and handed over to OIL after replacement.

d) All spares/ materials shall be deemed to be in the custody of the Contractor from the time he signs the receipt of materials till the job is completed, tested to the satisfaction of OIL'S engineer. He shall make good of any of the material lost or damaged while in his custody. Also any discrepancy in quantity of material used shall be made correct by the Contractor; failing which the cost of materials shall be recovered from the Contractor.

34. Employment liability of contractor:

a) The Contractor must engage his permanent employees and shall not carry out the jobs by engaging ad-hoc/ casual/ temporary employees.

b) The Contractor shall be directly responsible and indemnify the company (OIL) against all charges, claims, dues etc. arising out of disputes relating to the dues and employment of personnel deployed by him.

c) PROFORMA UNDERTAKING FROM CONTRACTORS PERSONNEL as per **Annexure- VII** shall have to be submitted by all the work persons engaged in the contract for OIL's approval.

35. Payment Terms:

- a) While quoting for the contract, the contractor must take into consideration all statutory laws for wages, taxes, duties, insurance, Provident Fund, bonus, compensation etc. as per State / Central Government laws applicable from time to time.
- b) While quoting for the contract, Contractor shall quote separately for tools, tackles and instruments (as per **Annexure-VI**) with proper price breakups for each item.
- c) Payment for tools, tackles and instruments shall be made in 24 equal monthly installments only (covering the 2 year contractual term).
- d) At end of the contract, the contractor shall handover all the tools, tackles and instruments (as per **Annexure-VI**) to OIL in good working condition; failing which penalty at 10% per year depreciated cost of the tools, tackles and instruments will be recovered from final bill amount payable to the contractors.
- e) BILLING CYCLE: Payment will be on monthly basis and the billing cycle will be from 21st day of the preceding month, to 20th day of the current month. The contractor will be required to submit his bills with all relevant documents to Head- Electrical latest by 22nd of the current month.
- f) Contractor will make payment to his employees latest by 7th of the month in presence of departmental representatives of OIL.
- g) ISSUE OF WAGE SLIP: Contractor will issue wage slip along with the wages to his employees for the billing month, indicating wages paid and applicable deductions like P.F. etc.
- h) The Contractor has to maintain records of monthly payments made to his employed persons in a register, which he has to get countersigned by his employees and the OIL's representative and same shall be produced to OIL on regular basis or as & when required.
- i) Contractor shall ensure that documentary evidence in the form of statutory payment of wages register/ sheet should be submitted to Head-Electrical within 15th of each month.
- j) Contractor or his representative shall prepare monthly running account bills in triplicate. All bills to be duly signed by the contractor and thereafter submit to OIL. Bills shall be sent for payment only after the verification of employee payment of previous month, certification of attendance verified by the OIL's controlling engineer and subject to carrying out operation & maintenance as per the scope of the contract. The bill should be submitted along with the copies of all reports - preventive maintenance records, statutory testing / calibration reports and training reports as necessary duly certified by OIL's Shift-In-Charge/ Engineer-In-Charge. Payment shall be made from the OIL's F&A Dept., as per OIL's company policy.

- k) Impersonation will be taken care by law of the land.
- l) Income Tax (TDS) at the applicable rate will be deducted at source on the total contract amount of the contract for which TDS certificate will be issued as per law.
- m) Payment to be made to employees by the contractor through cash or direct account transfer payment only. Contractor shall obtain undertaking from its employees regarding acceptability of payment through cash or direct account transfer payment and copies of same shall be submitted to OIL.

36. Liquidated Damages:

- a) The duration of the contract shall be 02 (Two) years. The contractor must complete the work within the contract period. During the currency of the job, the work progress must be commensurate with the time elapsed. In the event of any delay on the contractor's part, he/she will be liable to pay to the company liquidated damages @ 0.5% of the contract value per week or part thereof, for delay in contract mobilisation/ completion date subjected to a maximum ceiling of 7.5% of contract value.
- b) OIL's authorised Engineer's certificate as to the criticality or otherwise of a service/item shall be final.
- c) In the event of equipment damaged due to mishandling by the operating and maintenance personnel, penalty shall be charged against the contractor amounting to the cost of equipment damaged and equivalent amount for loss of production thereof.
- d) The Contractor shall be liable for making good all damages / losses arising out of loss or theft, pilferage, leakage of any office furniture, equipment, fitting and fixtures what-so-ever as may be caused directly by his engaged persons / work carried out by them.
- e) In the event of there being undue delay in execution of the Contract, the Company reserves the right to cancel the Contract.
- f) The payment of liquidated damages / penalty may be reduced or waived at the sole discretion of the OIL; whose decision in this regard will be final.

37. PENALTY:

- a) If the contractor failed to deploy manpower as per requirements under this contract, penalty will be applicable as follows:**

Penalty @ 10% per day per person (based on shortage of manpower from minimum persons required as per the contract) amount of the contracted average per day cost of Daily Maintenance & Round the Clock Operation.

b) Damages of equipment due to contractor/ his employees' negligence will be recovered as per the decision of authorised OIL Engineer, which will be final.

F. CONTRACTOR'S SAFETY:

(i) Safety Requirements:

1. The installation where job is to be carried out is industrial area and has hydrocarbon environment. Contractor shall comply with all safety and security rules and regulations and other rules laid down by OIL for their operation. It shall be the duty / responsibility of the Contractor to ensure the compliance of fire, safety, security and other operational rules and regulations by his personnel. Disregard to these rules by the contractor's personnel will lead to the termination of the contract in all respects and shall face penal / legal consequences.
2. Contractor has to ensure the safety of man and machine all the times.
3. All the safety rules and regulations prevailing and applicable from time to time at the installations as directed by OIL will be strictly adhered to by the contractor.
4. The contractor should ensure that all his personnel engaged under this contract shall abide by all relevant statutory safety and environment rules, regulations, applicable codes and standards (DGMS, OISD and all other applicable Acts).
5. The contractor shall ensure and must take full responsibility of safety of the personnel engaged by him and safety of all the equipments they will handle.
6. Contractor's personnel shall not be allowed to work in operational areas without PPE's (personal protective equipments) like protective clothing, safety boots, safety helmet, hand gloves, ear plugs etc.
7. For any cold / hot work job required to be carried out in any location within premise of Duliajan Power Station, the contractor personnel shall have to take due permission from the Installation Manager/ Concerned Engineer/ Shift-In-Charge of Duliajan Power Station. All the necessary arrangement for the above job has to be done by the contractor.
8. The contractor personnel shall take every possible care to keep the environment clean and free from pollution.
9. The contractor personnel should understand the implication of the known hazards related to the jobs undertaken by them and shall prepare an emergency plan ready to counter them, should anything go wrong.

10. While providing the services, the contractor personnel shall follow safe procedures and systems, taking all control measures in all the stages of works to avoid any untoward incidents/accidents.

11. The company (OIL) shall not be held responsible for any work accident to any of the personnel engaged by the contractor. Appropriate compensation should be paid by the contractor to the person for any work accident.

12. The contractor shall arrange for imparting orientation / induction training and other statutory or technical training required for the persons engaged by him. If required, OIL will provide necessary assistance.

(ii) GENERAL HSE (Health Safety Environment) POINTS:
(As per S&E LETTER No. S&E/G/53/482 dated 17.04.2009)

1. It will be solely the Contractor's responsibility to fulfil all the legal formalities with respect to the Health, Safety and Environmental aspects of the entire job (namely; the person employed by him, the equipment, the environment, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub-contractors hired by him comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub-subcontractors.

2. Every person deployed by the contractor in a mine must wear safety gadgets to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule. Safety appliances like protective foot wear, Safety Helmet and Full Body harness etc. has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available. But in turn, OIL will recover the actual cost of the items by deducting from Contractor's Bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

3. The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with it/ them. The SOP should clearly state the risk arising to men machineries & material from the mining operation/ operations to be done by the contractor and how it is to be managed.

4. The contractor shall provide a copy of the SOP to the person designated by the mine owner who shall be supervising the contractor's work.

5. The Contractor shall keep an up to date SOP and provide a copy of changes to a person designated by the Mine Owner/ Agent/ Manager.

6. Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/ nature, he should develop and provide to the mine owner a site specific code of practice in line.
7. All persons deployed by the contractor for working in a mine must undergo Mines Vocational Training (MVT), Initial Medical Examination (IME), Periodic Medical Examination (PME). They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME & PME.
8. The contractor shall submit to DGMS returns indicating Name of his firm, Registration number, Name and address of person heading the firm, Nature of work, type of deployment of work persons, Number of work persons deployed, how many work persons hold MVT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.
9. The return shall be submitted quarterly (by 10th of April, July, October & January) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.
10. It will be entirely the responsibility of the Contractor/ his Supervisor/ representative to ensure strict adherence to all HSE measures and statutory rules during operation in OIL's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by company's Installation Manager/ Safety Officer/ Engineer/ Official/ Supervisor/ Junior Engineer for safe operation.
11. Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the contractor only.
12. Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the contractor.
13. The contractor shall have to report all incidents including near-miss to Installation Manager/departmental representative of the concerned department of OIL.
14. The contractor has to keep a register of the persons employed by him/ her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.
15. If the company arranges any safety class/ training for the working personnel at site (company employee, contractor worker, etc) the contractor will not have any objection to any such training.

16. The health check up of contractor's personnel is to be done by the contractor in authorized Health Centres as per OIL's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.

17. The contractor shall arrange to held daily tool box meeting and regular site safety meetings and maintain records.

18. Records of daily attendance, accident report etc. are to be maintained in Form B, E, J (as per Mines Rules 1955) by the contractor.

19. A contractor employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.

20. A contractor employee must, while at work, cooperate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.

21. Contractor's arrangements for health and safety management shall be consistent with those for the mine owner.

22. In case Contractor is found non-compliant of HSE laws as required company will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/ Rules/ Regulations.

23. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE measures, company will have the right to direct the contractor to cease work until the non-compliance is corrected.

24. The contractor should prevent the frequent change of his contractual employees as far as practicable.

25. The contractor should frame a mutually agreed bridging document between OIL & the contractor with roles and responsibilities clearly defined.

26. For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/ rules/ regulations/ pertaining to Health, Safety and Environment.

G. OTHER DOCUMENTS

Bidder(s) must furnish the filled up questionnaire as given in **Annexure-VIII.**

OIL INDIA LIMITED
(A Govt. of India Enterprise)

Description of Service: Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.

Part-II Schedule of Work, Unit and Quantity (SOQ): Please do not quote here

S.Line	Description of Services	Quantity	UOM
10	Daily Maintenance	730.00	DAY
20	Round The Clock Operation	730.00	DAY
30	Breakdown Maintenance (On call duty)	1,440.00	MAN HOUR
40	Total Price for Tools & Tackles for O&M	1.00	ACTIVITY UNIT
	GRAND TOTAL ₹		

NOTE

1. Bidder to quote Unit Rate for a particular item as per above price bid format.
2. Bidders are requested to quote exclusive of Service Tax. Service Tax, if applicable shall be to the Company's Account. However, Service Tax portion payable directly by the Service provider (if applicable) shall be reimbursed to the Contractor on the basis of the documentary evidence.
3. Bidder must include all liabilities including statutory liabilities in their quoted rates except Service Tax.
4. To ascertain the inter-se-ranking, comparison of the responsive bids will be made on the GRAND TOTAL Value of the bid as per the Price Bid Format. Purchase preference to MSE's as per BEC Clause No.3 will be provided.

*****End of SOQ*****

Plant Outline of the 20 MW power plant

1. Approach to Site:

Duliajan is well connected to the rest of India by air, rail as well as roads.

The nearest airport is 48 km away in Dibrugarh. Dibrugarh airport is connected by regular flights from Kolkata (the nearest international airport) and New Delhi. Besides there is also an air route to Dibrugarh from Guwahati, the capital city of Assam.

Nearest railway station is Duliajan. Four major inter-state express trains operate on the rail link close to Duliajan. Three of these trains originate from New Delhi and one from Kolkata. The nearest stoppages are at Tinsukia (30 km) and Dibrugarh town (50 Km).

An inter-city shuttle plies daily between Dibrugarh and Guwahati (495 km.)

Duliajan is easily accessible by road by a branch-off (40 km) from the nearest national highway (NH-37). Duliajan is also well connected to the nearest district headquarters of Tinsukia (30km) and Dibrugarh (50 km). The NH-37 traverses across the state of Assam connecting all major towns and cities.

2. Metrological Data:

Northeast Assam, with its unique physiographic elements experiences subtropical monsoon climate with mild winter, warm and humid summer. The climatic condition of Duliajan is also congenial; with monsoon remaining almost half of the year. Rainfall ranges between 180 cm and 250 cm during April to October. Ambient temperature hover around 38 degC at summer and drops to a minimum 7 degC during winter time.

3. Plant Description:

The 20 MW Gas Turbine Plant consist of followings:

- a. 1x 20MW BHEL Frame V Industrial Heavy Duty Gas Turbine Generator Unit, Load Gear System, GT Inlet air system, GT Lubrication & High Pressure Trip Oil System, GT Water Injection & Water Wash System, Exhaust Flue gas Emission control and measurement system and other GT accessories,
- b. Mark VI- Control System for GTG #3, DAVR (Digital AVR for GTG#3), Max-DNA DCS System (Plant Automation).
- c. GT & Generator Fire Detection & CO2 Fire Fighting System.
- d. 11 KV Bus Duct, Gen Phase and Neutral side cubicles including Generator High Impedance Grounding System (with Neutral Grounding Transformer-NGT & Resistors), Generator CT, PT LA, Surge Capacitor etc.
- e. 31.5 MVA, 11/11.5 KV Unity Ratio Generator Transformer and its Neutral Grounding Reactor (NGR).
- f. 11 KV & 6.6 KV switchboard panels with Control & Protection systems and Circuit Breakers.
- g. Plant Auxiliary Transformers [3.5 MVA, 11/6.6 KV Station Service Transformers (2nos) & 1.6 MVA, 6.6/0.4 KV Station Auxiliary Transformers (2nos)], Lighting Transformers etc.
- h. LT Bus ducts and LT Switchboards (PMCC, GTMCC, BOP MCC, AC & Vent MCC, Lighting Switch boards, DC Switchboards, AC Socket Switchboard (ASB) etc.).
- i. Hazardous Gas detection system for Gas Booster Compressors & Gas Condition skids.

- j. GT Exhaust Duct Continuous Emission Monitoring System (EMS).
- k. Battery Banks, Battery Chargers & UPS system.
- l. Black Start Diesel Engine Generator and its AMF panel.
- m. Vibration & Temperature Monitoring System for Gas Booster Compressors.
- n. EOT cranes (for GTG Building & Gas Booster Compressor House) and HOT cranes in BOP area.
- o. Plant Earthing & Lightening Protection System.
- p. CCTV System etc.

The new 20 MW Gas Turbine Plant, apart from the Gas Turbine Generator (GTG) package, Electrical Switchgear, Control & Protection Systems, Security Systems also consists of various other sub systems (Balance of Plants- BOPs). The BOPs are also very critical and complex considering safe and reliable functioning of the new 20 MW plant. List of Balance of Plants (BOPs) are as follows:

- i. Gas Conditioning Systems (Pre & Post Compression Filtration System),
- ii. Gas Booster Compressors (2 nos. Motor Driven Centrifugal Compressors & 1 no. Diesel Engine Driven reciprocating Compressor) along with their accessories,
- iii. Cooling Water system including cooling tower, Service & Potable Water system, water reservoirs and water piping networks and sumps,
- iv. Fire Water Pumps, Hydrant System, Manual Call points, Fire hose houses etc,
- v. De-Mineralised (DM) Water Plant for GT Emission control,
- vi. Plant Air System with Air Compressors, Air Drier & Nitrogen Plant with surge vessels, storage tanks etc,
- vii. Air Conditioning system,
- viii. Ventilation system,
- ix. Various LT drives, pumps, diesel engines, compressors etc of BOP,
- x. LT Bus ducts and LT Switchboards (PMCC, BOP MCC, AC & Vent MCC, AC Socket Switchboard (ASB) etc.).
- xi. LT Normal Lighting Distribution Boards (MLDB), Emergency Lighting Distribution boards (AC-ELDB, AC-DC ELDB), DC Distribution Boards etc,
- xii. Plant & Area Illumination system,
- xiii. Oily Waste water, Waste water & condensate collection and disposal system,

A. Equipments/ Systems under the O& M Service Contract:

The Service Contract will be limited to the equipments of Balance of Plants- (BOPs) of 20 MW Gas Turbine Plant of Duliajan Power Station as per following list:

Sl No.	Name of Equipment & Make	Model & Brief specification	Qty.
1	Fuel Gas Conditioning System	a) Gas Pre Compression Knock out drums (Gas Scrubber) – 2 x Vertical Multi Cyclone Type. Make: Multitex Filtration Engineers Ltd.	2 Units
		b) Filter Separator: 2 x Horizontal Filter section with fiber glass coalescing filter. Make: Multitex Filtration Engineers Ltd.	2 Units
		c) Main Gas Isolation valves, Gas strainer, Safety valves, NRVs of gas lines	1 Set
		d) Emergency Stop Valves one at the inlet to the Gas Scrubber skid and other at the GT inlet. Make: Excel Industries.	2 Units
		e) Gas Condensate Drain Tank: Capacity 2m ³ , Gas condensate drain Pump-Motor (3.7kWx2), Submersible pumps: 5m ³ /hr, Dynamic head : 35MWC.	1 Unit
2	Fuel Gas Boosting Station	a) Centrifugal Compressor: 2 nos, Make: BCL 306, Flow 8155NM ³ /hr (lean), Compressor Speed: 12100 RPM, Inlet Pr: 8.14 Kg/cm ² at 40 degC, Outlet Pr: 18.42 Kg/cm ² at 130.97 degC.	2 Units
		b) Diesel Engine Driven Reciprocating Gas Compressor: 1 no, Make: Bharat Pumps & Compressors Ltd., Model: 2HM 1, Flow Capacity: 3978 Nm ³ /hr. It will boost gas from 7.5-11.5 Kg/cm ² to 17.3 Kg/cm ² .	1 Unit
3	Compressed Air System (IA - PA & N ₂)	Details given below	1 Set
4	Plant Water System	Details given below	1 Set
5	Cooling Water System	Details given below	1 Set
6	Fire Fighting & Protection system	Details given below	1 Set
7	DM Water Injection Skid & GT Water Wash Skid	Details given below	1 Set
8	Oily Waste water, Waste water & condensate collection and disposal system	Details given below	1 Set
9	Ventilation system	Details given below	1 Set
10	LT MCC panels & Transformers of BOP	Details given below	1 Set
11	AC- DC Distribution Boards of BOP	Details given below	1 Set
12	Plant & Area Illumination system	Details given below	1 Set

B. Details of Equipments/ Systems under the O& M Service Contract:

1. Fuel Gas Conditioning System: It consists of followings:

- (i) Main Gas Isolation valves, Gas strainer, Safety valves, NRVs of gas lines.
- (ii) Emergency Stop Valves one at the inlet to the Gas Scrubber skid and other at the GT inlet.
- (iii) Gas Pre Compression Knock out drums (Gas Scrubber) – 2 x 100% capacity, Multi Cyclone Type, Liquid removal efficiency: 10 microns & large 100%, Solid removal efficiency: 8 microns & large 100%. Make: Multitex Filtration Engineers Ltd.
- (iv) Gas Post Compression Filter Separator – 2 x 100% capacity, Horizontal type, Filter section with fiber glass coalescing filter, Liquid removal efficiency: 8 microns & large 100%, Solid removal efficiency: 3 microns & large 100%. Make: Multitex Filtration Engineers Ltd.
- (v) Gas Flow metering devices.
- (vi) Gas Condensate Drain Tank: Capacity 2m³, Gas condensate drain Pump-Motor (3.7kWx2), Submersible pumps: 5m³/hr, Dynamic head : 35MWC. Make: Excel Industries.
- (vii) All blow out vents & safety release valves are connected to a common header, which is finally connected to the gas dispersing unit with flame arrester.

2. Fuel Gas Boosting Station: It consists of followings:

- (i) Two (2) x 100% 6.6 KV Motor driven Centrifugal Compressor, Make: BCL 306, Flow 8155Nm³/hr (lean), Compressor Speed: 12100 RPM, Inlet Pr: 8.14 Kg/cm² at 40 degC, Outlet Pr: 18.42 Kg/cm² at 130.97 degC. Gas compressor is provided with Dry Gas Seal Arrangement Make: Eagle Burgmann with Seal Gas conditioning skid. Gas compressors are provided with individual lubrication system, water cooled Gas Bypass Cooler, suction control valve & Anti Surge Control Valve. Gas Compressor Motor: 620 KW (831 HP) SCIM (6.6 kV), Make BHEL, DOL starting, 6.6 KV, Full Load Current: 63.5A, No Load Current: 17A, Type: TETV 'Ex-d', RPM: 2978.
- (ii) One lower capacity Diesel Engine Driven gas compressor with all drives and accessories for black start condition. Compressor Make: Bharat Pumps & Compressors Ltd., Model: 2HM-1, Flow Capacity: 3978 Nm³/hr. It will boost gas from 7.5-11.5 Kg/cm² to 17.3 Kg/cm². No of Stage: 1, No of Cylinder: 2 nos, Rotational Speed: 600 RPM. Gas compressor is provided closed cycle lubrication system, closed cycle cooling (water + Glycol) system with water- water heat exchanger. Gas compressor is provided suction pressure control valve, Bypass cooler with Bypass flow & pressure control valves.
- (iii) Local compressor control & monitoring panel with necessary instruments, switches, lamps, alarms etc.
- (iv) All interconnecting air, N₂, water piping, valves, hangers and instrumentation including interconnection facility with plant water & air systems.

3. Compressed Air System (IA - PA & N₂): It consists of followings:

- (i) Two (2) x 100% reciprocating type air compressors (oil free type piston) and accessories. Compressor Make Chicago Pneumatic. Model: HX2T 50-60NPD 7-10Kg/cm², 385m³/hr, Output Pressure: 8.5 bar (8.66 Kg/cm²). Compressor Motor: 2 x 45 kW, Crompton Greaves, Frame: ND225M, KW: 45, HP: 60, RPM:1480, Effy%: 93, A=75, Delta,415V,IP:55
- (ii) One 2 m³ capacity wet air receiver tank with safety valve, instruments & auto drain valves. Make: PSA Nitrogen Ltd.

- (iii) Two (2) x 100% adsorbent type heatless driers (adsorbent media Activated Alumina in twin drying towers in each drier), Capacity: 385m³/hr, Make: PSA Nitrogen Ltd.
- (iv) One 21 m³ capacity dry air receiver tank with safety valve, instruments & auto drain valves. Make: PSA Nitrogen Ltd.
- (v) Two (2) x 100% Pressure Swing Adsorption (PSA) type N₂ generation plant (adsorbent media Carbon Molecular Sieve in twin adsorbent towers in each drier), Capacity: 30 NM³/Hr, Instrument Air required by Nitrogen generation plant = 105 NM³/Hr, Make: PSA Nitrogen Ltd
- (vi) One 21 m³ capacity N₂ receiver tank with safety valve, instruments & auto drain valves., Make: PSA Nitrogen Ltd.
- (vii) Service air, plant air & N₂ distribution system from air compressor house to all the new plant equipments & buildings including interconnecting piping, valves and instruments.

4. Plant Water System: It consists of followings:

- (i) One Filtered water reservoir of capacity 630 m³ with two compartments to meet the requirement of plant water and fire fighting water systems
- (ii) Two (2) x 100% service water pumps (2.2 kW each), capacity:6m³/hr, Diff Head:26 mwc, Oil lubrication, Pump: Sulzer, Motor: CG
- (iii) Two (2) x 100% potable water pumps (2.2kW each), capacity:6m³/hr, Diff Head:26 mwc, Oil lubrication, Pump: Sulzer, Motor: CG
- (iv) Two (2) x 100% DM Feed Water Pumps (2.2 kW each), capacity 10.5 m³/hr, Head: 45MWC. Oil lubrication, Pump: Sulzer, Motor: CG
- (v) Service & Potable water distribution system from Fire cum Filtered water Pump house to all the new plant buildings including interconnecting piping, valves and instruments.
- (vi) Service water storage tank (FRP) of 10m³ to be located roof of on the Switchgear & Control Building.
- (vii) Potable water storage tank (FRP) of 10m³ to be located roof of on the Switchgear & Control Building.

5. Cooling Water System: It consists of followings:

- (i) Two (2) x 100% circulating water pumps & motors. Pump Capacity: 572m³/hr, Diff head: 55 mtr, Grease lubrication, Pump: Kirloskar Brother, Model: SCT 200-48 with mechanical seal. Motor: 132 KW, make: CGL, RPM:1485 with 415V Soft Starter,
- (ii) 415V Soft Starter Model: SMC Flex 150-F317NBD, Max 317 A continuous, make: Rockwell Automation, 250 HP @ 460 V.
- (iii) One induced draft FRP cooling tower with water flow capacity: 630 m³/hr, Make: Paharpur Cooling towers.
- (iv) Cooling Tower Fans: 5 x 15 kW SCIM Motor Driven Fan.
- (v) Interconnecting piping, valves, strainers and instruments.

6. Fire Fighting & Protection System: It consists of

- (i) One (1) motor driven fire water pump of 171 m³/hr capacity, make: KBL, model: DE 100/26, head 88 mwc. Pump make: Kirloskar, Motor: 75 KW, make: CGL.
- (ii) One (1) diesel engine driven fire water pump of 171 m³/hr capacity, pump make: KBL, model: DE 100/40, head 88 mwc. Diesel engine make: Kirloskar.
- (iii) One jockey water pump of capacity 12 m³/hr capacity, head 90 mwc, model: CPHM 25/26, Motor: 11 KW (15 HP), make: KBL.
- (iv) 1 no Fire Water Hydro Pneumatic Vessel, capacity 2.5 m³.

- (v) 1 no air compressor with storage vessel 8.8 -9.5 Kg/cm², model: 2340, make: Ingersoll Rand, Motor: 2.2 KW (3 HP), make: Ingersoll Rand.
- (vi) Interconnecting piping, valves, hose houses & fire hoses and instruments for entire fire water distribution system around the new power plant.
- (vii) Automatic fire detection & fire alarm system for main control room, switchgear room & office rooms.

7. DM Water Injection Skid & GT Water Wash Skid: It consists of

- (i) Two (2) x 100% DM Water Transfer Pumps for transferring DM water from DM storage tank to DM Water Injection Skid, Pump: Kirloskar, model: KPD 20/16, flow 6m³/hr, head: 25mwc, Motor: 2.2 KW (3HP) , make: CG
- (ii) Two (2) x 100 % DM Water injection pumps, 41.5 KW
- (iii) GT Compressor Water Wash Pump Motor 1 nos, 11 KW.
- (iv) GT Compressor Water Wash Detergent Pump Motor 1 no, 1.5 KW.
- (v) Water Wash Heater 3 nos, 34 KW
- (vi) Interconnecting piping, valves and instruments for DM Water Injection & GT Water Wash.

8. Oily Waste water, Waste water & condensate collection and disposal system: It consists of

- (i) Transformer Oily water Collection Sump Capacity: 40 m³, Sump Dimension: 4.0 x 4.0x 5.5 M.
- (ii) 2nos Transformer Oily Water Collection Pump(1 working+ 1 standby), Vertical Type Centrifugal Pump, Pump Capacity 10m³/hr, Pump Differential Head: 25MWC, Motor (3.7 kW each).
- (iii) GT Water Wash Collection Sump Capacity: 2 m³, Sump Dimension: 1.5x 1.5 x 4M.
- (iv) 2 nos GT Water Wash Collection Sump Pump (1 working+ 1 standby), Capacity 2m³/hr, Pump Differential Head: 25MWC, Motor: (3.7 kW each).
- (v) Water Disposal Sump pump (2.2 kW x 2), Pres: 6bar, Depth max: 10 m.

9. Ventilation system: It consists of Ventilation system for following buildings:

- (i) GTG building roof air extractor,
- (ii) Gas compressor building roof air extractor,
- (iii) Fire cum Filtered water Pump house,
- (iv) DM Plant building & control room,
- (v) Air compressor building,
- (vi) Black start DG room,
- (vii) Pressurized air system in switchgear building 1st floor (HT cum LT switchgear room),
- (viii) Dry type transformer room,
- (ix) Toilets in various buildings,

10. LT MCC Panels & Transformers: These includes following panels:

- (i) 415 V Power & Motor Control Center (PMCC) supplying LT power to all other panels of the 20 MW pant. Make: Space Age Switchgear Ltd.
- (ii) 415V, Balance of Plant (BOP) MCC supplying power to LT motors of GBC 1 & 2. Make: SpaceAge Switchgear Ltd.
- (iii) 415 V AC & Vent MCC supplying power to Package AC, Split ACs & Ventilation system. Make: SpaceAge Switchgear Ltd.

- (iv) 415V AC-ASB Panel (Auxiliary Switch Boards) for supplying 3 phase power to receptacles placed at various locations in and around the plant. Make: SpaceAge Switchgear Ltd.
- (v) 415 V MCC panel for Diesel Engine driven reciprocating Gas compressor. Make: EICL.
- (vi) Fire protection panels supplying LT power to fire fighting water pumps, jockey water pump & air compressor etc. Make: New Fire Engineers Pvt. Ltd.
- (vii) 2X100 KVA, 415V/415V Main Lighting Transformers & 1X25, 415V/415V KVA Emergency Lighting Transformer

11. AC- DC Distribution Boards of BOP: These includes following AC- DC Distribution Boards:

- (i) Main Lighting Distribution Boards (MLDB) taking LT power from 2X100 KVA Lighting Transformers and supplying normal AC power to all illumination DBs placed at various locations in and around the plant. Make: SpaceAge Switchgear Ltd.
- (ii) 415 V Emergency AC Lighting DB (AC ELDB) taking LT power from 1X25 KVA Emergency Lighting Transformer (which can be fed through Emergency Diesel Gen Set) and supplying power to all Emergency AC illumination of the 20 MW power plant
- (iii) AC-ELDB supplying either Normal AC power during normal condition or Emergency AC power from Emergency Diesel Generator; to all Emergency Lighting DBs placed at various locations in and around the plant. Make: SpaceAge Switchgear Ltd.
- (iv) DC ELDB supplying Emergency DC power from 110 V Station Battery Bank to all Emergency DC Lighting DBs placed at various locations in and around the plant. Make: SpaceAge Switchgear Ltd.
- (v) 230 V UPS distribution boards (2 nos).
- (vi) 110 V DC Distribution Boards for feeding DC control power to various panels in and around the plant. Make: SpaceAge Switchgear Ltd.
- (vii) 24 V Diesel engine starting panel for Diesel Engine driven reciprocating Gas compressor. Make: Amot Controls.

12. Plant & Area Illumination System: These includes followings:

- (i) Lighting panel DBs for Outdoor Area Lighting : 5 nos panel
- (ii) Lighting panel DBs for Cable Cellar room (Ground Floor))
- (iii) Lighting panel DBs for LT & HT Switchgear Room (1st Floor)
- (iv) Lighting panel DBs for Control Room & Office Rooms (2nd Floor)
- (v) Lighting panel DBs for DG room
- (vi) Lighting panel DBs for Transformer Room
- (vii) Lighting panel DBs for Gas Compressor Station
- (viii) Lighting panel DBs for Pipe Rack
- (ix) Lighting panel DBs for Cooling Water Pump Shed
- (x) Lighting panel DBs for Fire cum Filtered Water Pump House
- (xi) Lighting panel DBs for Air compressor House
- (xii) Lighting panel DBs for DM Plant

Plant & Area Illumination system includes various FLP- Non-FLP, lighting fixtures & fittings, Cable Glands etc.

Check List For Operation Personnel

(Note: OIL reserves right to modify Operational Checklists/ Forms/ O&M Procedures time to time as per recommendation of OEM of the equipments/ OIL's operational & maintenance policies.)

1. Equipment: **Gas Pre Compression Knock out drums (Gas Scrubber)** – 2 x Multi Cyclone Type.

Frequency: Each Shift

Activity:

- a) Record fuel gas pressures, both inlet and outlet sides
- b) Drain scrubber vessels & separator etc.
- c) Check for leaks in the valves, regulators and interconnecting fuel gas piping
- d) If liquid level in the scrubber find high, then inform OIL's shift-in-charge and if required carry out changeover of the unit as per instruction of shift-in-charge.
- e) Arrange for maintenance of scrubber, safety valve, pressure gauges as and when required, by taking proper shutdown.

2. Equipment: **Gas Post Compression Filter Separator:** 2 x Horizontal Filter section

Frequency: Each Shift

Activity:

- a) Record fuel gas pressures, both incoming and outgoing
- b) Drain Filter Separator vessels & fine filter etc.
- c) Check for leaks in the valves, regulators and interconnecting fuel gas piping
- d) If liquid level in the scrubber find high or filter differential is found high then inform shift in charge and if required carry out changeover of the unit.
- e) Arrange for maintenance of Filter Separator, safety valve, pressure gauges as and when required, by taking proper shutdown.

3. Equipment: **Centrifugal Gas Compressor:** Two (2) x 100% 6.6 KV Motor driven, Make: BCL 306, Flow 8155NM3/hr (lean), Compressor Speed: 12100 RPM, Inlet Pr: 8.14 Kg/cm² at 40 degC, Outlet Pr: 18.42 Kg/cm² at 130.97 degC.

Frequency: Each Shift

Activity:

- a) Prior to each starting of compressor carry out establishment of instrument air pressure to barrier seal, lube oil circulation & overhead lube oil filling, purging with N₂ (if required), establishment of seal gas pressures (primary, secondary & tertiary), opening of manual gas suction & delivery valves, gas loop filling and N₂ venting, and other pre start checks etc as per safe operating procedure recommended by OEM & OIL.
- b) During running of the Centrifugal Compressor check and record parameters, viz.: Lube Oil header Pressure, Local Lube Oil Pressure & Temperature in each bearings, Gas Inlet & outlet pressures & temperatures, and all parameters mounted on the seal gas skid, lube oil main & overhead tank oil level, cooling water inlet & outlet temperatures in lube oil & bypass coolers, motor current, compressor running hours/ standby hours etc.
- c) After every stop/ trip of the unit, carry out shutdown sequences, closing of manual gas suction & delivery valves, purging with N₂ (if required), stoppage of lube oil pumps after sufficient cool down, stoppage of barrier air pressure as per safe operating procedure recommended by OEM & OIL.
- d) Visually check condition of all gear boxes, couplings etc.
- e) Check for leaks of fuel oil, lube oil, coolant, and exhaust gases.
- f) Check and maintain service water flow in bypass gas cooler, lube oil coolers.
- g) Observe for looseness in securing clamps / bolts in oil, fuel and water lines.
- h) Check for any abnormal sound / vibration in the compressor & motor.
- i) Check condition of flexible couplings, coupling covers.
- j) Check healthiness of the all input/ output signal of the Gas Compressors to DCS control system. Observe and record any abnormality in pre start/ running conditions.

- k) In case of any emergency inform to shift in charge or if required trip the unit pressing emergency trip push button.
- l) Maintain proper housekeeping in & around the Gas Compressor.

4. **Diesel Engine Driven Gas Compressor** [Make: Bharat Pumps & Compressors Ltd., Model: 2HM/1, Flow Capacity: 3978 Nm³/hr. It will boost gas from 7.5-11.5 Kg/cm² to 17.3 Kg/cm²]

Frequency: Each Shift

Activity:

- a) Check and maintain Fuel (Diesel) oil level in tank.
- b) Check and maintain Diesel Engine lube oil level in crankcase of diesel engine & gas compressor.
- c) Check for diesel engine & gas compressor oil dilution / contamination.
- d) Check vacuum indicator for restriction of diesel engine suction air filter element.
- e) Check for diesel engine radiator coolant water level.
- f) Check and maintain service water flow in bypass gas cooler, lube oil cooler & water coolers.
- g) During running of the Diesel Engine Driven Gas Compressor check and record engine parameters, viz.: Engine Lube Oil Pressure, Engine Coolant Temperature, Engine Exhaust Temperature, Engine & compressor lube oil temperatures & pressures, Gas Inlet & outlet pressures & temperatures, and other parameters mounted on the instrument panels.
- h) Visually check condition of gear boxes, motor couplings etc.
- i) Check for leaks of fuel oil, lube oil, coolant, and exhaust gases.
- j) Observe for looseness in securing clamps / bolts in oil, fuel and water lines.
- k) Check for any abnormal sound / vibration in the engine.
- l) Check condition of Compressor flexible couplings.
- m) Check healthiness of the PLC control system for the Diesel Engine Driven Gas Compressor.
- n) Observe and record any abnormality in pre start conditions.
- o) Carry out periodic start of the unit after availing permission from OIL's shift In charge.
- p) In case of black out immediately carry out pre start line up activities and start the unit after availing permission from OIL's shift In charge.
- q) Maintain proper housekeeping in & around the Diesel Engine Driven Gas Compressor.

N.B.: Report any of the following for maintenance services to shift in charge:

- a) Abnormal engine noise or vibration
- b) Low engine oil pressure
- c) Abnormal coolant or oil temperature
- d) Excessive exhaust smoke
- e) Excessive consumption of engine oil
- f) Low engine power
- g) Misfiring or engine hunting
- h) Contamination of engine oil
- i) Malfunctioning of all the instruments / tripping devices.
- j) Any other occurrence needing attention of maintenance personnel.

5. **Plant Air Compressors** [Make: Chicago Pneumatic. Model: HX2T 50-60NPD 7-10Kg/cm², 385m³/hr, Output Pressure: 8.5 bar (8.66 Kg/cm²). Compressor Motor: 2 x 45 kW],

Frequency: Each Shift

Activity:

- a) Check and maintain lube oil level in crankcase
- b) Visually check drive belt condition
- c) Check for water flow in the line
- d) Monitor 1st & 2nd stage temperatures and pressures.
- e) Drain condensate / moisture from air receiver and intercooler
- f) Periodically Clean suction air filter
- g) Check proper functioning of the un-loader and relief valves
- h) Check for any abnormal sound / vibration in the compressor

- i) If both are ready for operation then, interchange compressors after every 12 or 24 hrs running.

N.B.: Report any of the following for maintenance services:

- a) Abnormal noise or vibration of compressor
- b) Low discharge air pressure
- c) Malfunction of un-loader assembly
- d) Any malfunction related to the driven motor's starting system, control system etc.
- e) Any other occurrence needing attention of maintenance personnel.

6. Plant/Equipment: **Air Drier & Nitrogen Generation Plant**

Frequency: Each Shift

- a) Check functioning of Air Drier & carryout changeover if required,
- b) Check functioning Nitrogen Generation units & carryout changeover if required,
- c) Carryout manual drain of filter separators.
- d) Check Air pressure & N2 pressure at the Air Receivers.

7. Plant/ Area: **Fire cum Filtered Water Pump House**

Frequency: Each Shift

Activity:

- a) Ensure proper water level in the Fire cum Filtered Water reservoir.
- b) Ensure maintenance of proper pressure in the fire water hydro-pneumatic tank by jockey water pump & air compressor.
- c) Carry out testing of motor driven fire water pump each day or every week on Friday at 8 Am by hooking up line arrangement for test header.
- d) Carry out testing of diesel engine driven fire water pump each Friday at 8 Am by hooking up line arrangement for test header.
- e) Carry out manual operation of service water pumps, if it cannot be started from remote (DCS).
- f) Carry out manual operation of potable water pumps, if it cannot be started from remote (DCS).
- g) Carry out manual operation of DM feed water pumps, if it cannot be started from remote (DCS).
- h) Arrange for maintenance of pumps, motors, valves, pressure gauges as and when required, by taking proper shutdown.

8. Plant/Equipment: **Cooling Tower** [Water flow capacity: 630 m³/hr, Make: Paharpur Cooling towers] & Cooling Water Pumps 2 x 132 KW, Cooling Tower Fans: 5 x 15 kW Motor Driven Fan

Frequency: Each Shift

Activity:

- a) Check and maintain water level in Cooling Tower Basin.
- b) Drain sediments and debris from Cooling Tower Basin and keep it clean at all times
- c) Check Cooling Tower Fan assembly for proper operation, looseness of bolting /coupling etc.
- d) Check and maintain oil level of Cooling Fan's reducer gear units.
- e) Check raw make up water supply and associated valves and piping for proper operation / leaks
- f) Check condition of cooling water pump & motor, its suction & discharge valves, expansion bellows etc.
- g) Check condition of cooling water pump suction & discharge pressures,
- h) If filter differential pressure goes high then changeover to other unit. Take shutdown of the stopped unit and clean the filter.
- i) If during starting of the cooling water pump, motor current is found high, manually regulate pump discharge valve to avoid tripping of the motor on over current and during running of the motor regulate flow to maintain proper pressure in the discharge line.

N.B.: Report any of the following for maintenance services to shift in charge:

- a) Malfunction of the fan assembly
- b) Damage or looseness of the drive coupling and mounting bolts

- c) Leaks related to circulating water pump, make up water pump & associated piping
 - d) Any other occurrence needing attention of maintenance personnel.
9. Equipment: **Ventilation system**
 Frequency: Each Shift
 Activity:
- a) Cleaning of all the components, inlet outlet ducts etc. of the Ventilation system.
 - b) Check for sign of leaks.
 - c) Motors, Blower, couplings and other drives shall be checked for undue vibration and rectify if required
 - d) Carry out changeover of running fans at regular interval (each day) if the standby fan is ready for operation.
 - e) Air filters shall be cleaned if required.
10. Equipment : **DM Water Plant:**
 Frequency : Daily or as & when necessary
 Activity :
- a) Carryout housekeeping as required.
 - b) Carryout any other jobs as per operational requirements of DM plant.
11. Equipment : **DM Water Injection Skid & GT Water Wash Skid:**
 Frequency : Daily or as & when necessary
 Activity :
- c) Operation of DM Water injection pumps & motors as required.
 - d) Operation of GT Compressor Water Wash Pump Motor as required.
 - e) Operation of GT Compressor Water Wash Heaters as required.
 - f) Operation of GT Compressor Water Wash Detergent Pump as required.
12. Equipment : **Effluent disposal system** (Transformer Oily water Collection Sump & GT Water Wash Collection Sump)
 Frequency : Daily or as & when necessary
 Activity :
- a) Operation of sump water pumps & motors.
 - b) Check operation of liquid level transmitters fitted in sumps.
 - c) Cleaning of sump pits as & when required.
13. **Plant AC system:** Air cooled Package AC with R-22 refrigerant system of capacity 3 x 22 Ton, 17 KW each for Main control room, Mark VI & DCS Room, UPS & Battery Charger Room, Officer's cabinet, rack room etc.
 Frequency: Each Shift
 Activity:
- a) Cleaning of all the components, inlet outlet ducts etc. of the Air Conditioners.
 - b) Refrigerant piping shall be checked for any sign of leaks.
 - c) Motors, compressors and other drives shall be checked for undue vibration and rectify if required
 - d) Air filters shall be cleaned.
 - e) Carry out changeover of running units at regular interval (each day) if the standby units are ready for operation.
 - f) Condensate drain shall be checked for any clogging.
 - g) Blower & motor pulleys shall be checked thoroughly.
14. Equipments: **415 V Power & Motor Control Centre, BOP MCC, MLDB** etc.
 Frequency: Daily
 Activity:
- a) Cleaning of outside parts of the panels by vacuum cleaner/ brush.
 - b) Checking of each modules for proper operation and rectification, replacement, if required

- c) Checking & hourly recording of running parameters shown in meters
- d) Checking of panel illumination and replace lamps if needed.
- e) If area lights auto Turn on/ off is defective then carry out Turn off area lights each morning and restart at evening.
- f) Arrange for shutdown of LT modules (after receiving proper Electrical Shutdown Sheet from shift in charge) for carrying out maintenance jobs.

CHECK LIST FOR MAINTENANCE PERSONNEL

(Note: OIL reserves right to modify Maintenance Checklists/ Forms/ O&M Procedures time to time as per recommendation of OEM of the equipments/ OIL's operational & maintenance policies.)

1. Equipment: Two (2) x 100% 6.6 KV Motor driven Centrifugal Gas Compressor, Make: BCL 306,
Frequency: Each Shift
Activity:
 - a) During running of the Centrifugal Compressor check and record parameters, viz.: Lube Oil header Pressure, Local Lube Oil Pressure & Temperature of each bearings, Gas Inlet & outlet pressures & temperatures, and other parameters mounted on the seal gas skid, lube oil main & overhead tank level, cooling water inlet & outlet temperature in lube oil & bypass coolers, motor current, compressor running hours etc.
 - b) Assist operation person during starting of compressor for purging with N₂, venting, gas loop filling, lube oil circulation & overhead lube oil filling; opening of manual gas suction & delivery valves and other pre start checks etc as per safe operating procedure recommended by OEM & OIL.
 - c) Assist operation person after every stop/ trip of the unit; carry out shutdown sequences, closing of manual gas suction & delivery valves as per safe operating procedure recommended by OEM & OIL.
 - d) Visually check condition of all gear boxes, couplings etc.
 - e) Check for leaks of fuel oil, lube oil, coolant, and exhaust gases.
 - f) Observe for looseness in securing clamps / bolts in oil, fuel and water lines.
 - g) Check for any abnormal sound / vibration in the compressor & motor.
 - h) Check condition of flexible couplings.
 - i) Check healthiness of the all input/ output signal of the Gas Compressors to DCS control system. Observe and record any abnormality in pre start conditions.
 - j) In case of any emergency inform to shift in charge or trip the unit using emergency trip push button.
 - k) Maintain proper housekeeping in & around the Gas Compressor.
2. Equipment: Two (2) x 100% 6.6 KV Motor driven Centrifugal Gas Compressor, Make: BCL 306,
Frequency: 2000 hours or 6 months (whichever is earlier)
Activity:
 - a) Repeat daily checks
 - b) Clean motor fan housing & motor cooling pipes with compressed air
 - c) Check lubrication of motor bearings and apply grease if required.
 - d) Check all wires for frayed / damaged insulation - replace if necessary
 - e) Check all electrical & instrumentation connections to ensure that they are proper
 - f) Check all gauges for proper operation- replace defective gauges
 - g) Check all pipe flanges & foundation bolts for looseness of lock nuts / bolts.
 - h) Lubricate fuel gas valve actuators; seal gas valve actuator, control linkage rod etc.
 - i) Carryout lube oil filtration with centrifuge machine.
 - j) Check all coupling bolts for looseness.
 - k) Check condition of grease lubrication of motor bearings and reapply grease if required.
 - l) Check condition of vibration probes & temperature probes.
 - m) Clean gear box breather.
 - n) Externally clean compressor and surroundings with air/ water/ detergent as necessary.
 - o) Any other reportable condition
3. Equipment: Diesel Engine Driven Gas Compressor
Frequency: Daily
Activity:
 - a) Check the operator's daily reports.
 - b) Investigate and correct reported problems

- c) Check low engine lube oil pressure
 - d) Abnormal water or oil temperature
 - e) Excessive exhaust smoke
 - f) Misfiring during starting
 - g) Unusual engine noise / vibration
 - h) Excessive consumption of engine oil
 - i) Contamination of engine oil
 - j) Leakage of coolant, fuel gas, water, engine oil or air
 - k) Top up of fuel, lube oil, coolant as required
 - l) Coupling wear / damage
 - m) Loose foundation bolting
 - n) Dirty / clogged engine air cleaner element
 - o) Any other reportable condition
4. Equipment: Diesel Engine Driven Gas Compressor
Frequency: 2000 hours or 6 months (whichever is earlier)
Activity:
- a) Repeat daily checks
 - b) Check and adjust belt tension - replace belts if necessary
 - c) Check engine coolant and corrosion resistor / de-scaling additives
 - d) Clean air filter elements and filter housing with compressed air
 - e) Check all wires for frayed / damaged insulation - replace if necessary
 - f) Check all electrical & instrumentation connections to ensure that they are proper
 - g) Check all gauges for proper operation- replace defective gauges
 - h) Check throttle linkages of the diesel engine for looseness of lock nuts / bolts.
 - i) Lubricate actuator control linkage rod and bearings
 - j) Clean crankcase breather
 - k) Externally clean engine and surroundings with water & detergent
5. Equipment: Diesel Engine Driven Gas Compressor
Frequency: 6000 hours maintenance or 2 years (whichever is earlier)
Activity:
- a) Repeat daily and 2000 hr checks
 - b) Drain engine oil, clean crankcase and refill fresh engine oil
 - c) Replace oil filter elements after cleaning the filter housing
 - d) Replace belts if necessary
 - e) Clean / replace air filter elements
 - f) Grease all the bearings
 - g) Service Engine's DC motor starter
 - h) Check functioning of safety system & safety devices
 - i) Check piston ring condition, piston end travel gaps
 - j) Check alignment and tighten all foundation bolts.
6. Equipment: Gas Pre Compression Knock out drums (Gas Scrubber)
Frequency: Daily
Activity:
- a) Inspect & clean knock out drums vessels, skid, liquid separator, liquid level control valves and solenoid valves etc.
 - b) Drain scrubber vessels, skid & liquid separator etc.
 - c) Check for leaks in the valves, regulators and interconnecting fuel gas piping
 - d) If liquid level in the scrubber find high then inform shift in charge and if required carry out changeover of the unit.
 - e) Carry out maintenance of scrubber, safety valve, pressure gauges by taking proper shutdown if required.

- f) Ensure N2 purging lines are closed if not required and carryout N2 purging after depressurization of the vessels as per operational requirements.
7. Equipment: Gas Pre Compression Knock out drums (Gas Scrubber)
Frequency: Every 6 months or as and when required
Activity:
 - a) Drain scrubber vessels & separator etc.
 - b) Check for leaks in the valves, regulators and interconnecting fuel gas piping
 - c) If liquid level in the scrubber find high then inform shift in charge and if required carry out changeover of the unit.
 - d) Carry out calibration of scrubber safety valve, pressure gauges, by taking proper shutdown.
 8. Equipment: Gas Post Compression Filter Separator
Frequency: Daily
 - a) Inspect & clean Filter Separator vessels, skid, moisture separator & fine filter,
 - b) Replace filter cartridges if required
 - c) Inspect & clean pressure regulators, liquid level control valves and solenoid valves
 - d) Check proper tightness of all flange connections and bolting
 - e) Ensure N2 purging lines are closed if not required and carryout N2 purging after depressurization of the vessels as per operational requirements.
 9. Equipment: Gas Post Compression Filter Separator
Frequency: Every 6 months or as and when required
 - a) Repeat daily checks
 - b) Inspect & clean scrubber vessels, moisture separator & fine filter, replace filter cartridges if required
 - c) Inspect & clean pressure regulators and solenoid valves
 - d) Check proper tightness of all flange connections and bolting
 - e) Carry out calibration of Filter Separator safety valve, pressure gauges, by taking proper shutdown.
 10. Equipment: Air compressor, Air drier Units & N2 Plant
Frequency: Half yearly or as & when necessary
Activity:
 - a) Check the operator's daily records
 - b) Check and maintain lube oil level in crankcase.
 - c) Carryout lube oil changing as and when necessary.
 - d) Carryout overhauling of the compressor as and when necessary.
 - e) Visually check drive belt condition.
 - f) Check malfunction of un-loader valve & solenoid assembly
 - g) Check leakage of air in air lines, valves and intercooler
 - h) Carryout alignment of motor & compressor as and when necessary.
 - i) Check for water flow in the line.
 - j) Monitor 1st & 2nd stage temperatures and pressures.
 - k) Drain condensate / moisture from air receiver and intercooler.
 - l) Periodically Clean suction air filter.
 - m) Check proper functioning of the un-loader and relief valves.
 - n) Check for any abnormal sound / vibration in the compressor.
 - o) If both are ready for operation then, interchange compressors after every 12 or 24 hrs running.
 11. Equipment: Air compressor,
Frequency: 2000 hours or 6 months (whichever is earlier)
Activity:
 - a) Repeat daily checks
 - b) Clean & check air cleaner element
 - c) Check un-loader for proper functioning

- d) Check proper tightness of all bolting
 - e) Check tension / wear of v-belts - replace if necessary
 - f) Carry out preventive maintenance (Periodic Inspection) of the driving motor
12. Plant/ Area: Air drier Units & N2 Plant
 Frequency: Daily / as and when necessary
 Activity:
- a) Check functioning of Air Drier, Air filters & Nitrogen Generation units.
 - b) Check and maintain Instrument Air & N2 pressure at the Air Receivers.
 - c) Carryout changing of Activated Alumina bed Air Drier units as and when necessary.
 - d) Carryout changing of Carbon Molecular Sieve bed of N2 generation units as and when necessary.
13. Plant/ Area: Fire cum Filtered Water Pump House
 Frequency: Daily
 Activity:
- a) Ensure proper water level in the Fire cum Filtered Water reservoir.
 - b) Ensure availability of fire water pumps
 - c) Ensure maintenance of proper hydrostatic pressure constantly in hydro-pneumatic vessel & fire hydrants,
 - d) Carryout maintenance of pumps, motors, valves, pressure gauges as and when required, by taking proper shutdown.
14. Equipment: Cooling Tower & Cooling water circulating pumps
 Frequency: Daily
 Activity:
- a) Check and maintain water level in Cooling Tower Basin.
 - b) Drain sediments and debris from Cooling Tower Basin and keep it clean at all times
 - c) Check Cooling Tower Fan assembly for proper operation, looseness of bolting /coupling etc.
 - d) Check and maintain oil level of Cooling Fan's reducer gear units.
 - e) Check raw make up water supply and associated valves and piping for proper operation / leaks
 - f) Check condition of cooling water pump & motor, its suction & discharge valves, expansion bellows etc.
 - g) Check condition of cooling water pump suction & discharge pressures,
 - h) If filter differential pressure goes high then changeover to other unit. Take shutdown of the stopped unit and clean the filter.
15. Equipment : DM Water Plant:
 Frequency : Daily or as & when necessary
 Activity :
- a) Carryout general monitoring, inspection and measurements as required,
 - b) Carryout housekeeping as required.
 - c) Carryout any other jobs as per operational requirements of DM Water plant.
16. Equipment : DM Water Injection Skid & GT Water Wash Skid:
 Frequency : Half yearly or as & when necessary
 Activity :
- a) Inspection of DM Water injection pumps & motors.
 - b) Inspection of GT Compressor Water Wash Pump Motor
 - c) Inspection of GT Compressor Water Wash Heaters
 - d) Inspection of GT Compressor Water Wash Detergent Pump

17. Equipment : Effluent disposal system (Transformer Oily water Collection Sump & GT Water Wash Collection Sump)
Frequency : Half yearly or as & when necessary
Activity :
a) Inspection & maintenance of sump water pumps & motors.
b) Inspection & maintenance of liquid level transmitters fitted in sumps.
c) Cleaning of sump pits as & when required.
18. Equipment: Switchgear/Control Room
Frequency: Daily
Activity:
a) Housekeeping of the Switchgear/Control Room
b) Check healthiness of emergency lights.
c) Checking of normal luminaries.
d) Checking of pressurised ventilation system.
e) Checking & cleaning of insulating mats
19. Equipments: 415 V Power & Motor Control Centre, BOP MCC, MLDB etc.
Frequency: Daily
Activity:
a) Cleaning of outside parts of the panels by vacuum cleaner/ brush.
b) Cleaning of internal components from dust/dirt deposition on its surface.
c) Checking of each modules for proper operation and rectification, replacement, if required
d) Checking of meters and rectification, replacement, if required.
e) Checking of panel illumination and replace lamps if needed.
f) Repair/Break down maintenance of electrical FLP/NFLP motors, generators, control panel, LT panel boards , MCC panel, cabling system, lighting system, FLP/NFLP light fittings and other office and Industrial wiring system including all utilities like Fans/ Switches/Switch sockets/Plugs etc. to be carried out. In case of major reports like replacement of motors/ fans etc which requires infrastructural support like crane service, welding services etc the contractor shall report to Installation Manager / Shift-In-Charge (OIL).
g) FLP equipments to be checked and maintained as per standard check list and guide lines given by OIL.
20. Equipments: Power & Motor Control Centre BOP MCC, MLDB etc.
Frequency: Half Yearly or as and when required
Activity :
a) Cleaning of internal part of the panels by vacuum cleaner.
b) Checking and tightening of terminal block connections.
c) Cleaning of internal components from dust/dirt deposition on its surface.
d) Checking indication meters and rectification, replacement, if required.
e) Checking of contact kits and replace if required.
21. Equipment: LT Panel Circuit Breakers
Frequency: Half Yearly or as and when required
Activity:
a) General maintenance and cleaning of breakers.
b) Check connections.
c) Clean fix contacts.
d) Clean moving contacts.
e) Check all mechanical parts and lubricate.
f) Check trip latch.
g) Checking of tripping / closing of circuit for its healthiness and correcting the problem including the replacement of spares if required.

- h) Tightening of bus bar connection.
- i) Checking and cleaning of power and auxiliary contacts.
- j) Checking of relay setting and making the correction if required.
- k) Maintenance as per OEM's Preventive Maintenance Schedule.

22. Equipment: All LT Motors & Pumps

Frequency: Daily

Activity :

- a) Any abnormal sound/ vibration.
- b) Check physically any abnormal heating of the motor.
- c) Check for any abnormal current drawn.
- d) Checking of pump glands and repair if required.
- e) Overhauling of pumps if required.

23. Equipment : All LT Motors & pumps

Frequency : Half Yearly or as and when required

Activity :

- a) Temperature rise in the motor and cable end gland
- b) Tightness of cable gland.
- c) Check IR values of motor/ incomer cable
- d) Ensure double earthing on each motors
- e) Check abnormal vibrations and heating of the motor
- f) Carry out greasing of motor bearings, replace bearings if required
- g) Check tightness in foundation bolts.
- h) Check pump glands and repair if required.
- i) Check pump flange leakages and replace gaskets if required.
- j) Carryout overhauling of pumps if required.

Manpower: Deployment Pattern, Qualification & Experiences

1. Minimum Manpower Deployment Pattern with qualification & experience required for Operation & Maintenance Services of BOPs of 1x 20 MW GTG Power Plant shall be as per details given below:

Sl. No.	Job Designation	Minimum Qualification	Minimum Experience Required	Manpower Deployment Pattern for BOPs			Remarks
				Daily Maintenance Duty	Shift Operation Duty (12 Hrs)	Total Required	
1	Supervisor	Diploma (Mechanical / Electrical)	Diploma- 3 Yrs	2	0	2	2 Supervisors (1 Mech + 1 Electrical)
2	Technician/ Operator	Diploma/ ITI (Mechanical / Electrical)	Diploma- 2 yrs / ITI- 5 Years	2	6	8	2 persons in General Maintenance duty (1 Mech + 1 Electrical) and 2 persons per 12 Hrs shift operation (total 6 persons in shift operation)
3	Assistant Technicians/ Assistant Operator	ITI (Mechanical / Electrical/ Instrumentation)	3 Yrs	3	6	9	3 persons in General Maintenance duty (1 Mech + 1 Elect + 1 Instrumentation) and 2 persons per 12 Hrs shift operation (total 6 persons in shift duty)
4	Helper	Minimum Class V	NIL	4	6	10	4 persons in General Maintenance duty and 2 persons per 12 Hrs shift (total 6 in shift operation)
Total =				11	18	29	

2. Qualification & Experience required for Operation & Maintenance Crew:

2.1. Supervisor (Mechanical/ Electrical): Qualification & Experience required will be as follows:

- (i) Mechanical Supervisor shall be Multi-Skilled with following
 - a. Candidate should have Diploma (Mechanical) certificate from any Government recognized institute.
 - b. For Mechanical Supervisor minimum 03(three) years of experience is required.
 - c. His experience as supervisor should be in Central Govt./ State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies and their experience should be in the field of operation & maintenance of gas turbines, gas compressors, diesel engines, generator sets, motor driven air compressors, pumps & motors, cooling towers etc.
- (ii) Electrical Supervisor shall be Multi-Skilled with following
 - a. Candidate should have Diploma (Electrical) certificate from any Government recognized institute.
 - b. For Electrical Supervisor minimum 03(three) years of experience is required.
 - c. His experience as supervisor should be in Central Govt./ State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies and their experience should be in the field of operation & maintenance of gas turbines, gas compressors, diesel engines, generator sets, air compressors, pumps & motors, cooling towers, MCC panels, lighting, process instrumentation etc.
 - d. Candidate must have valid Electrical Supervisor's Certificate of Competency [with minimum parts 1,2,3 & 4] issued or recognized by State Electrical Licensing Board, Govt. of Assam.

2.2. Technician/ Operator: Qualification & Experience required will be as follows:

- (i) Candidate shall be Multi-Skilled and should have Diploma (Mechanical / Electrical) or ITI (Mechanical / Electrical) certificate from any Government recognized institute.
- (ii) For Diploma holders experience required will be minimum 2 years and for ITI holders experience required will be minimum 5 years. Their experience as Technician/ Operator should be in Central Govt./ State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies.
- (iii) Their experience should be in the field of operation & maintenance of gas compressors, diesel engines, generator sets, air compressors, pumps & motors, cooling towers, MCC panels, lighting, process instrumentation etc.
- (iv) Candidates must pose Electrical Workman Permit [with minimum parts 1 & 2] issued or recognized by State Electrical Licensing Board, Govt. of Assam.

2.3. Assistant Technician/ Assistant Operator: Qualification & Experience required will be as follows:

- (i) Candidate shall be Multi-Skilled should have ITI (Mechanical / Electrical/ Instrumentation) certificate from any Government recognized institute.
- (ii) Their experience required will be minimum 3 years as Assistant Technician/ Assistant Operator in Central Govt./ State govt./ PSU Organization/ Public Limited Companies/ any other reputed Private Companies.

- (iii) Their experience should be in the field of operation & maintenance of gas compressors, diesel engines, generating sets, air compressors, pumps & motors, cooling towers, MCC panels, lighting, process instrumentation etc.
- (iv) Candidates must pose Electrical Workman Permit [with minimum parts 1 & 2] issued or recognized by State Electrical Licensing Board, Govt. of Assam.

2.4. A Helper shall have minimum class V pass certificate from any Government recognized institute. He should be able to read and write simple English/ Assamese/ Hindi language.

List of Tools & Tackles to be provided by Contractor

A. Mechanical Tools & Tackles:

Sl No.	Item Description	Unit	Qty
1	Metal Tool Box, 3 Tray	Nos.	4
2	Master Box Wrench Set, 150 Piece	Set	1
3	Spanner Ring (mm) All size	Set	3
4	Opener Spanner (mm) All size	Set	3
5	Hammer Drill Machine	Nos.	1
6	Angle Grinder	Nos.	1
7	Bench Vice	Nos.	1
8	Spanner Box size 10mm to 34mm	Nos.	3
9	Punch, Centre Made of High Grade Tool	Nos.	3
10	Chisel, Flat, Cold 1 Inch	Nos.	6
11	Chisel, Flat, Cold 1/2 Inch	Nos.	6
12	Number Punch 0 to 9, Size 1/4"	Nos.	2
13	Number Punch, Letter, 0-9 & A-Z, 1/8"	Nos.	2
14	Number Punch, Letter, A-Z, 1/4"	Nos.	2
15	Long Nose Plier	Nos.	4
16	Slide Wrench, 8"	Nos.	3
17	Slide Wrench, 6", Taparia	Nos.	3
18	Scale, Stainless Steel, 1 m (39")	Nos.	2
19	Scale, Stainless Steel, 30 cm (12")	Nos.	2
20	Scale, Stainless Steel, 15 cm (6")	Nos.	2
21	Hacksaw Frame, 10" Adjustable to 12"	Nos.	2
22	File, Half Round 12"	Nos.	3
23	File, Half Round 6"	Nos.	3
24	Files: Bastard Cut, Flat, Size: 12"	Nos.	3
25	Files, Second Cut, Round Size: 12"	Nos.	3
26	File, Second cut, Round, size: 6"	Nos.	3
27	File, Second cut, Flat, size: 6"	Nos.	3
28	Files, Flat shape, Size: 6"	Nos.	5
29	File, Second Cut, Flat, Size:12"	Nos.	5
30	Feeler Gauge, Length- 12", 26nos. Leaf	Set	3
31	Brush File Cleaning	Nos.	10
32	Calliper, Vernier, 6"	Nos.	2
33	Calliper, Vernier, 12"	Nos.	2
34	Micrometers/ Screw Gauge	Nos.	2
35	Gauge, Filler, Big (Both metric and inch)	Nos.	3
36	Gauge, Filler, Small (Both metric and inch)	Nos.	3
37	Sledge Hammer, wt-5 lbs	Nos.	2
38	Hammer with handle 500G	Nos.	2
39	Tin Snips, Overall Length- 10"	Nos.	2
40	3-m Measuring Steel Tape	Nos.	4
41	30-m Measuring Steel Tape	Nos.	3

42	Pipe Wrench, Adjustable, Size: 600 mm (24")	Nos.	3
43	Pipe Wrench, Adjustable, Size: 450 mm (18")	Nos.	3
44	Pipe Wrench, Adjustable, Size: 250 mm (10")	Nos.	4
45	Screw Driver Set, Taparia 862	Set	4
46	ALLEN KEY SET, MM SIZE	No.	3
47	ALLEN KEY, INCH SIZE	No.	3
48	Callipers, Size: 152.4000 mm (6") Firm Joint Inside,	Nos.	2
49	Callipers, Size: 152.4000 mm (6") Firm Joint Outside	Nos.	2
50	Callipers, Size: 304.00 mm (12") Firm Joint Inside,	Nos.	3
51	Callipers, Size ; 24" Firm Joint Outside	Nos.	2
52	Callipers , Size :24" Firm Joint Inside	Nos.	2
53	Engineer's Scrapers (Bearing Scraper)	Set	2
54	Sharpening Stone, 1" x 2" x 8"	Nos.	2
55	First Aid Box	Nos.	4

B. Electrical Tools & Tackles:

SI No.	Item Description	Unit	Qty
1	Insulation Tester Range 50V to 1000V	Nos.	1
2	4.5 Digit Digital Multimeter, AC/DC voltage upto 1000V, AC/DC current upto 10A, Resistance, Frequency upto 199.99Hz, capacitance upto 9,999 uF etc.	No.	2
3	Digital Clamp Meter upto 1000 A AC & DC and 600 V AC & DC voltage measurement	Nos.	2
4	Hydraulic Crimping Tool: Range : 4 to 70 Sq mm	Nos.	0
5	Hand Crimping Tool, Pliers 10 sq. mm to 185 Sq mm	Nos.	0
6	Hand Crimping Tool, Pliers 0.5 sq. mm to 16 Sq mm	Nos.	1
7	Non Sparking Adjustable wrench, Be free,200mm (8")	Nos.	1
8	Non Sparking Ball Pin Hammer, Size: 450gm	Nos.	1
9	Non-Sparking Hex chisel, 16 x 200mm	Nos.	1
10	Non-Sparking Screwdriver, 200 x 8mm	Nos.	1
11	Non-Sparking Screwdriver, 300x 10mm	Nos.	1
12	SOLDERING IRON 25W	No.	1
13	SOLDERING IRON 65W	No.	1
14	Wire Stripper 2.5 mm Sq MM	Nos.	2
15	LED Hand Lamp for 24 V AC	Nos.	3
16	LED Hand Lamp for 230V AC	Nos.	3
17	Torch Light	Nos.	3

C. Instrumentation Tools & Tackles:

Sl No.	Item Description	Unit	Qty
1	Test Pressure Gauge Range 0-10 kg/cm2	No.	1
2	Test Pressure Gauge Range 0-20 kg/cm2	No.	1
3	Test Pressure Gauge Range 0-60 kg/cm2	No.	1
4	Test Pressure Gauge Range 0-100 kg/cm2	No.	1
5	Test Pressure Gauge Range 0-250 kg/cm2	No.	1
6	Thermometer 0 TO 120 deg C	No.	1
7	THERMOMETER 0 °C TO (+)300 °C	No.	1
8	GAS DETECTOR (0-100% LEL)	No.	1
9	Tube Bender, SS, 1/4" size	No.	1
10	Tube Bender 1/2" size	No.	1
11	SS Tube Cutter SIZE: 1/2" TO 1/16"	Set	1
12	Cutter, Tube for 1/4" Tube	No.	1

PROFORMA UNDERTAKING FROM CONTRACTORS PERSONNEL

I _____ S/o _____
having permanent residence at _____
Dist. _____ am working with M/s. _____
as their employee. Now, I have been transferred by M/s. _____
for carrying out the contract job under Contract No. _____ which
has been awarded in favour of my employer M/s. _____.

I hereby declare that I will not have any claim for employment or any service
benefit from OIL by virtue of my deployment for carrying out contract job in OIL
by M/s. _____.

I am an employee of _____ for all practical
purposes and there is no privity of Contract between OIL and me.

Signature

Place:

Date:

Witness:

1. NAME:
DESIGNATION:
DATE:

2. NAME:
DESIGNATION
DATE:

ANNEXURE – VIII

**Check List of Operation and Maintenance Services for Balance of Plants (BOPs) of
20 MW Gas Turbine Plant of Duliajan Power Station, OIL INDIA LTD.**

This check list must be completed and returned with the offer. Bidder is to ensure that all the following points are covered in the offer. This will ensure proper evaluation of the offer. Bidder is to write "Yes" or "No" to the following questions in the right hand column.

Sl No.	Particulars	Clarification from Bidder
1	Contractors Experience certificate of successful completion of similar nature of job as per BRC clause submitted.	Yes/ No
2	Does the bidder undertake that in case of award of contract, a detailed list of manpower along with documentary evidence of qualification, experience, "Electrical Supervisor's Certificate of Competency" and/or "Electrical Workman Permits" etc. as per statutory requirements will be submitted to OIL?	Yes/ No
3	Does the bidder have a local area office at Duliajan within its 3 KM radius or in the event of non availability of the same, the bidder shall give an undertaking that the said office will be set up prior to execution of jobs under this contract? Has the bidder forwarded any documents in support of the said issue?	Yes / No
4	Shall the BOP area always be manned?	Yes / No
5	Shall the contractor own responsibility for providing accommodation, transportation, medical facilities etc. to the operating and maintenance personnel employed against the contract?	Yes / No
6	Shall the contractor keep available all requisite tools, tackles and instruments needed by the operating and maintenance personnel, at site?	Yes / No
7	Shall the contractor provide operating and maintenance personnel with necessary personal protective equipments (PPEs)?	Yes / No
8	Shall the contractor ensure that, except shut down for maintenance, all BOP Equipments under this contract shall be kept functional at any point of time?	Yes / No
9	Shall the contractor ensure that, , "Electrical Supervisor's Certificate of Competency" and/or "Electrical Workman Permits" etc, of his work persons will be duly renewed?	Yes / No
10	Shall the contractor ensure that any work found defective will be redone, free of cost?	Yes / No
11	Shall the contractor pay liquidated damage as per terms and conditions mentioned in the tender?	Yes / No
12	Shall the operating & maintenance personnel carry out their respective duties as specified in the schedule of works and as per the check lists provided in the tender?	Yes / No
13	Shall the contractor maintain the following documentation at site:- a) Attendance register, b) Daily log sheets of various operation data and historical logs, c) Equipment History Records, d) Tools and Instruments Register, e) Scheduled Maintenance Register, f) Breakdown Maintenance Register, g) Materials Consumption Register, h) IR value and Earth Resistance value recording register, i) List of essential spares required for operation and maintenance of BOP equipments, j) Training Register, k) Initial Medical Examination (IME) Register, l) Periodic Medical Examination (PME) Register, m) Minutes of Safety Meetings (Tools box, Job Safety Analysis etc.) held; with list of participants, n) Leave Record Register	Yes / No
14	Integrity Pact is duly Signed ?	Yes / No
15	Vendor Code Submitted (for existing vendor)?	Yes / No
16	Compliance to all NIT terms & conditions?	Yes / No

OIL INDIA LIMITED
(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN

Schedule of company's Plants, Materials and Equipments: SCPME: PART-IV

Not Applicable

**TO,
HEAD-CONTRACT
OIL INDIA LIMITED
DULIAJAN-786602**

SUB: SAFETY MEASURES

Description of work/service:

Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.

Sir,

We hereby confirm that we have fully understood the safety measures to be adopted during execution of the above contract and that the same have been explained to us by the concerned authorities. We also give the following assurances.

- a) Only experienced and competent persons shall be engaged by us for carrying out work under the said contract.
- b) The names of the authorized persons who would be supervising the jobs on day to day basis from our end are the following:
 - i) _____
 - ii) _____
 - iii) _____

The above personnel are fully familiar with the nature of jobs assigned and safety precautions required.

- c) Due notice would be given for any change of personnel under item(b) above.
- d) We hereby accept the responsibility for the safety of all the personnel engaged by us and for the safety of the Company's personnel and property involved during the course of our working under this contract. Any violation pointed out by the Company's engineers would be rectified forthwith or the work suspended till such time the rectification is completed by us and all expenditure towards this would be on our account.
- e) All losses caused due to inadequate safety measures or lack of supervision on our part would be fully compensated by us and the Company will not be responsible for any lapses on our part in this regard.

(Seal)

Yours Faithfully

Date_____

M/s_____

FOR & ON BEHALF OF BIDDER

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(**Name of the bidder**).....hereinafter referred to as "The Bidder/Contractor"

PREAMBLE:

The Principal intends to award, under laid down organizational procedures, contract/s for

‘Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan’.

(IFB No. CDI0220P16)

The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(A) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
3. The Principal will exclude from the process all known prejudiced persons.

- (B) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicions in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/Contractor

- (A) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (B) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

Section 4 - Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to 3 % of the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.
3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with

any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/Contractor/Subcontractors

1. The Bidder/Contractor undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violating Bidders/Contractors/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - External Independent Monitor/Monitors (Three in number depending on the size of the contract) (To be decided by the Chairperson of the Principal)

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the

Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
7. If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
8. The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section 10 - Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.
4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

INTEGRITY PACT

E-TENDER CDI 0220P16

For the Principal

For the Bidder/Contractor

Place: Duliajan.

Witness 1:

Date:

Witness 2:

[illegible]

PROFORMA - I
BID FORM

To
THE HEAD (CONTRACTS)
OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. DULIAJAN
DIST. DIBRUGARH
ASSAM # 786 602

Sub: IFB No. : CDI0220P16

Dear Sir,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we the undersigned offer to perform the services in conformity with the said conditions of Contract and Terms of Reference for the sum of ____ (Price not to be indicated) ____ stated below or such other sums as may be ascertained in accordance with the Price Bid Form attached herewith and made part of this Bid:

We undertake, if our Bid is accepted, to commence the work within (____) days calculated from the date of issue of Company's LOA.

We agree to abide by this Bid for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated this _____ day of _____ 2016.

Signature and seal of the Bidder: _____

(In the capacity of) : _____

Name of Bidder : _____

PROFORMA – II

LETTER OF AUTHORITY

To,
THE HEAD (CONTRACTS)
OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. DULIAJAN
DIST. DIBRUGARH
ASSAM # 786 602

Sir,

Sub: IFB No. CDI0220P16

We _____ confirm that Mr. _____ (Name and address) as authorized to represent us to Bid, negotiate and conclude the agreement on our behalf with you against Invitation No.: _____ for “*Operation and Maintenance Services for Balance of Plants (BOPs) of 20 MW Gas Turbine Plant, at the premises of Duliajan Power Station inside Main Industrial Area - OIL, Duliajan.*”.

We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Yours Faithfully,

Signature: _____
Name : _____
Designation: _____
For & on behalf of: _____

Note: This letter of authority shall be printed on letter head of the Bidder and shall be signed by a competent person to bind the Bidder.

PROFORMA - III**STATEMENT OF NON-COMPLIANCE****(Only exceptions/deviations to be rendered)**

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the tender stipulations, terms and conditions in respect of each Section of Bid Document in the following format:

Section No.	Clause No. (Page No.)	Non-Compliance	Remarks

Authorised Person's Signature: _____**Name:** _____**Designation:** _____**Seal of the Bidder:**

NOTE: OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, the same should be indicated as per above format and submit along with their bids. If the **"Statement of Compliance"** in the above Proforma is left blank (or not submitted along with the technical bid), then it would be construed that the bidder has not taken any exception/deviation to the tender requirements.

ANNEXURE- A

[TO BE FILLED-UP / SUBMITTED BY THE VENDOR ON ITS LETTER HEAD
FOR E-REMITTANCE]

Name:

FULL Address:

Phone Number :

Mobile Number :

E-mail address:

Fax Number :

Bank Account Number (in which the Bidder wants remittance against
invoices):

Bank Name :

Branch :

Address of the Bank:

Bank Code :

IFSC/RTGS Code of the Bank:

NEFT Code of the Bank :

PAN Number :

Service Tax Registration Number:

Signature of Vendor with Official Seal

Note: This declaration shall be printed on letter head of the Bidder and shall
be signed by a competent person.

ANNEXURE- B**FORM OF BID SECURITY (BANK GUARANTEE FORMAT) or Any other
format acceptable to Oil India Ltd.**

To:
M/s. OIL INDIA LIMITED,
For Head(Contracts),
Duliajan, Assam, India, Pin - 786 602.

WHEREAS, (Name of Bidder) _____ (hereinafter called "the Bidder") has submitted their offer Dated _____ for the provision of certain services (hereinafter called "the Bid") against OIL INDIA LIMITED, Duliajan, Assam, India (hereinafter called the Company)'s Tender No. **CDI0220P16** KNOW ALL MEN BY these presents that we (Name of Bank) _____ of (Name of Country) _____ having our registered office at _____ (hereinafter called "Bank") are bound unto the Company in the sum of (*_____) for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the common seal of the said Bank this ____ day of _____ 2015.

THE CONDITIONS of these obligations are:

- (1) If the Bidder withdraws their Bid during the period of Bid validity specified by the Bidder; or
- (2) If the Bidder, having been notified of acceptance of their Bid by the Company during the period of Bid validity:
 - (a) Fails or refuses to execute the form of agreement in accordance with the Instructions to Bidders; or
 - (b) Fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders;

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter), without Company having to substantiate its demand provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**--/--/--) and any demand in respect thereof should reach the Bank not later than the above date.

Notwithstanding anything contained hereinabove:

- (i) Our liability under the guarantee shall not exceed _____
- (ii) This Bank Guarantee shall be valid only up to __/__/__
- (iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if we receive a written claim or demand on or before __/__/__

SIGNATURE AND SEAL OF THE GUARANTORS _____

Name of Bank & Address _____

Witness _____

Address _____

(Signature, Name and Address)

Date: _____

Place: _____

BANK FAX NO:

BANK EMAIL ID:

BANK TELEPHONE NO.:

IFSC CODE OF THE BANK:

* The Bidder should insert the amount of the guarantee in words and figures.

** Date of expiry of Bank Guarantee should be minimum 30 days after the end of the validity period of the Bid i.e minimum 210 days validity.

Note for the bidders:

Bid Security: If Bank Guarantee is submitted towards 'Bid Security', then bidders have to ensure that the BG issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the BG can be obtained.

Performance Security: If Bank Guarantee is submitted towards 'Performance Bank Guarantee', then bidders have to ensure that the BG issuing bank indicate the name and detailed address (including e-mail) of their higher office from where confirmation towards genuineness of the BG can be obtained.
