

CONTRACTS DEPARTMENT TEL: (91) 374-2800548

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Website: www.oil-india.com
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FORWARDING LETTER

<u>Sub</u>: IFB No. CDO7246P18 – Hiring of Service for 'Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of 02 (Two) years extendable by 01 (One) year.

Dear Sir(s),

- **1.0** OIL INDIA LIMITED (OIL), a "Navaratna" Category, Government of India Enterprise, is a premier Oil Company engaged in exploration, production and transportation of crude oil & natural gas with its Headquarters at Duliajan, Assam. Duliajan is well connected by Air with nearest Airport being at Dibrugarh, 45 km away.
- 2.0 In connection with its operations, OIL invites Local Competitive Bids (LCB) from competent and experienced/approved Contractors/Firms for the mentioned work/service under OPEN E-TENDER SINGLE STAGE TWO BID SYSTEM through OIL's E-Procurement Portal: https://etender.srm.oilindia.in/irj/portal for 'Hiring of Service for 'Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of O2 (Two) years extendable by O1 (One) year.' One complete set of Bid Documents covering OIL's IFB for hiring of above services is uploaded in OIL's E-Procurement Portal. You are invited to submit your most competitive bid on or before the scheduled bid closing date and time through OIL's E-Procurement Portal. For your ready reference, few salient points of the IFB (covered in detail in the Bid Document) are highlighted below:

(i)	IFB No./E-Tender No.	CDO7246P18	
(ii)	Type of Bid	Open E-Tender, Single Stage-Two Bid System	
(iii)	Tender Fee	Rs. 2000.00/- (Rupees Two Thousand only) (non-refundable)	
		a. Tender fee should be paid <i>only</i> through the payment gateway available on OIL's E-Tender Portal. No other mode of payment shall be accepted.	
		b. Bidders claiming waiver of tender fees shall apply to Contracts Department, Oil India Limited, Duliajan with documentary evidence as mentioned in Para. No. 4.0 below, before 07 (Seven) days of bid closing date.	
(iv)	Period of Sale of Bid Document	01.03.2018 to 27.03.2018	

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(v)	Bid Closing Date & Time	03.04.2018 at 11:00 HRS: Server Time	
(vi)	Technical Bid Opening Date & Time	03.04.2018 at 14:00 HRS: Server Time	
(vii)	Price Bid Opening Date & Time	Will be intimated to the eligible bidder(s) nearer time.	
(viii)	Bid Submission Mode	Bids must be uploaded online in OIL's E-Procurement Portal.	
(ix)	Bid Opening Place	Office of CGM-Contracts Contracts Department, Oil India Limited, Duliajan-786602, Assam, India.	
(x)	Bid Validity	120 (One Hundred Twenty) days from Original Bid Closing Date.	
(xi)	Mobilization Time	1. The mobilization of the Personnel along with consumables is to be carried out within 30 days from the receipt of Letter of Award (LOA). This mobilized date will be considered as the start date of the Contract.	
		2. Mobilization of the mandatory spares along with storage godown should be completed within 60 days from the date of issue of LOA.	
(xii)	Bid Security/EMD Amount	Rs. 27,77,600.00 (Rupees Twenty Seven Lakhs Seventy Seven Thousand Six Hundred only).	
		a. The Bid Security should be submitted only in the form of Bank Guarantee as per BG format enclosed herewith (Proforma-V) issued by Nationalized/Scheduled Bank in favour of M/s Oil India Limited and payable at DULIAJAN.	
		b. Alternately, Bid Security can also be paid through the online payment gateway against this tender.	
		c. In case of Bidder(s) submitting Bid Security in the form of Bank Guarantee, the original hard copy of Bid Security should reach the office of CGM-CONTRACTS on or before 12.45 PM (IST) on the bid closing/opening date otherwise bid will be rejected.	
		d. A scanned copy of Bid Security document should also be uploaded along with the Unpriced Techno-Commercial Bid documents.	
		e. This Bid Security Deposit 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. 9.0 below. Bids without Bid Security Deposit in the manner specified above will be summarily	

		rejected.
		No other mode of payment will be accepted by the Company. The Bid Security shall not earn any interest to the bidder from the Company.
		Notes:
		Bidders claiming waiver of Bid Security shall apply to Contracts Department, Oil India Limited, Duliajan with documentary evidence as mentioned in Para. No. 4.0 below before 07 (Seven) days of bid closing date.
		Any offer not accompanied with the Bid Security shall be treated as invalid and summarily rejected. Any subsequent deposit of Bid Security after the bid closing date shall not be permitted. Also, adjustment of Bid Security due against the instant tender, against dues from the Company or on any account shall not be permitted.
(xiii)	Bid Security/EMD	Minimum upto 30.08.2018 (Minimum 150
	Validity	days from the original date of opening of Technical Bid)
(xiv)	Original Bid Security to be submitted	Office of CGM-CONTRACTS, CONTRACTS DEPARTMENT, OIL INDIA LIMITED, DULIAJAN, ASSAM-786602, INDIA
(xv)	Amount of Performance	10% of Annualized Contract value.
	Security	a. Bidders can submit performance Security in the form of Bank Guarantee from any Scheduled Indian Bank as per BG format enclosed herewith (Proforma-VII).
		b. Performance Security Money shall not earn any interest.
(xvi)	Validity of Performance Security	90 days beyond Contract period/duration.
(xvii)	Location of job	Central Tank Farm Duliajan & Moran Tank Farm of Production Services Support Department.
(xviii)	Duration of the Contract	02 (Two) years with a provision for extension by another 01 (One) year.
(xix)	Quantum of Liquidated Damage for Default in Timely Mobilization/ Completion	Refer Clause No. 28 of General Conditions of Contract.
(xx)	Integrity Pact	Must be digitally signed & uploaded along with the Un-priced Techno-commercial Bid.
(xxi)	Bids to be addressed to	CGM-Contracts, Contracts Department,

		Oil India Limited, Duliajan-786602, Assam, India.
(xxii)	Pre-Bid conference	Not Applicable
(xxiii)	Last Date of receipt of Queries	Not Applicable

Note:

The Bank Guarantee issuing bank branch shall ensure the following:

The Bank Guarantee issued by the bank shall be routed through SFMS platform as per the following details:

- i) "MT 760/MT 760 COV for issuance of bank guarantee.
- ii) "MT 760/MT 767 COV for amendment of bank guarantee.

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code: UTIB0001129, Branch address: AXIS Bank Ltd., Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, District Dibrugarh, PIN: 786602.

3.0 GUIDELINES FOR PARTICIPATING IN OIL'S E-PROCUREMENT

3.1 To participate in OIL's E-Procurement tender, bidders should have a legally valid digital certificate of Class 3 with Organizations Name and Encryption Certificate 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). Digital Signature Certificates having "Organization Name" field other than **Bidder's Name** are not acceptable. However, aforesaid Digital Signature Certificates having Bidder's Name in the "Organization Name" field are acceptable.

Encryption certificate is mandatorily required for submission of bid. In case bidder creates response with one certificate (using encryption key) and bidder changes his Digital Signature Certificate then old certificate (used for encryption) is required in order to decrypt his encrypted response for getting the edit mode of the response. Once decryption is done, bidder may use new DSC certificate for uploading and submission of their offer. It is the sole responsibility of the bidder to keep their DSC certificate properly. OIL INDIA LIMITED will not be responsible in case of loss of the certificate.

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.

3.2 For participation, applicants already having User ID & Password for OIL's E-Procurement Portal need to register against the IFB and pay the requisite Cost of Bid Document (**Non-transferable and Non-refundable**) through the online payment gateway provided in OIL's E-Procurement Portal. New vendors/existing vendors not having User ID & Password for OIL's E-Procurement Portal shall obtain User ID &

password through online vendor registration system in E-portal and pay the requisite Cost of Bid Document in the manner as specified above. **NO OTHER MODE OF PAYMENT TOWARDS COST OF BID DOCUMENT WILL BE ACCEPTABLE**.

- **3.3** Parties, who do not have a User ID, can click on **Guest** login button in the E-Portal to view and download the tender. **The detailed guidelines are available in OIL's E-Procurement site (Help Documentation)**. For any clarification in this regard, bidders may contact E-Tender Support Cell at Duliajan at erp mm@oilindia.in, Ph.: 0374- 2807178/4903.
- **3.4** Details of process for submission of Tender Fees & Bid Security (EMD) through the online payment gateway are available in Vendor User Manual under E-Procurement portal. (Note: Important Points for on-line Payment can be viewed at Oil India's website at url: http://oil-india.com/pdf/ETenderNotification.pdf).
- **3.5** The link to OIL's E-Procurement Portal has been provided through OIL's web site (www.oil-india.com).
- **4.0** In case any bidder is exempted from paying the Tender Fee or the Bid security, they should request OIL with supporting documents. The detailed guidelines for exemption of the Tender Fee and the Bid security are given below.

4.1 EXEMPTION OF TENDER FEE

- 1. Micro and Small Enterprises (MSEs) registered with District Industry Centres 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 are exempted from payment of tender fee irrespective of the monetary limit mentioned in their registration certificate provided they furnish evidence that they are **registered** for the **items** they intend to quote against OIL tenders.
- 2. Central Government Departments and Central Public Sector Undertakings (CPSUs) are also exempted from the payment of tender fee.
- 3. Parties registered with DGS&D, having valid certificates are exempted from payment of tender fee.
- 4. 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.
- 5. In case of MSEs/CPSUs/Government Bodies/eligible institutions etc. claiming waiver of tender fees, they shall apply to Contracts Department, Oil India Limited, Duliajan with documentary evidence before **07** (Seven) days of bid closing date.

4.2 EXEMPTION OF BID SECURITY

1. If the bidder is a Micro or Small Enterprises (MSE) registered with District Industry Centres 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 is registered with any of the aforesaid agencies.

- 2. Central Government Departments and Central Public Sector Undertakings (CPSUs) are also exempted from submitting Bid Security.
- 3. 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.
- **5.0** Bid should be submitted online in OIL's E-procurement site up to **11.00 AM** (IST) (Server Time) on the date as mentioned and will be opened on the same day at **2.00 PM** (IST) at the office of the CGM-Contracts in presence of the authorized representatives of the bidders.
- **6.0** The rates shall be quoted per unit as specified in the **"PRICE BIDDING FORMAT"** attached under **"Notes and Attachments"** tab. Bidder should note that no pricing information is furnished in the **"Technical Attachment"** (Un-priced Techno-Commercial Bid) otherwise the bid will be rejected.
- **SYSTEM**. The bidder has to submit both the "TECHNICAL" and "PRICED" bid through electronic form in the OIL's E-Tender portal within the Bid Closing Date and Time stipulated in the E-Tender. For submission of Bids online at OIL's E-Tender Portal, detailed instructions are available in "User Manual" available in OIL's E-Tender Portal. The Technical Bid should be submitted as per Scope of Work & Technical Specifications along with all technical documents related to the tender and uploaded under "Technical Attachment" Tab only. Bidders to note that no price details should be uploaded in "Technical Attachment" Tab Page. The Price Bid rates shall be quoted per unit as specified in the "PRICE BIDDING FORMAT" attached under "Notes and Attachments" tab in the main bidding engine of OIL's E-Tender portal. The price quoted in the "PRICE BIDDING FORMAT" will only be considered for evaluation.
- **8.0** The Company reserves the right to reject any or all the tenders or accept any tender without assigning any reason.
- **9.0** (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 Deposit in full and debar 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.
- **10.0** Conditional bids are liable to be rejected at the discretion of the Company.
- **11.0** 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 Techno-Commercial Bid documents.

- 11.1 In case of Sole Proprietorship Firm, Copies of Telephone/Electricity/Mobile Bill, PAN card, latest Income Tax Return form indicating therein the name, business and residential address, E-mail and telephone numbers of the owner and GSTIN number.
- 11.2 In case of HUF, Copies of Telephone/Electricity/Mobile Bill, 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 GSTIN number.
- 11.3 In case of Partnership Firm, Copies of Telephone/Electricity/Mobile Bill, 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 GSTIN number.
- 11.4 In case of Co-Operative Societies, Copies of Telephone/Electricity/Mobile Bill, 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 GSTIN number.
- 11.5 In case of Societies registered under the Societies Registration Act, Copies of Telephone/Electricity/Mobile Bill, 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 GSTIN number.
- 11.6 In case of Joint Stock Companies registered under the Indian Companies Act, Copies of Telephone/Electricity/Mobile Bill, 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 GSTIN number.
- 11.7 In case of Trusts registered under the Indian Trust Act, Copies of Telephone/ Electricity/Mobile Bill, 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 GSTIN number.

12.0 The tender will be governed by

Forwarding Letter

Instruction to Bidders

BEC-BRC- Bid Evaluation Criteria & Bid Rejection 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 - Not

Applicable

Part-V - Safety Measures (SM)

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Part-VI - Integrity Pact Price Bidding Format & PP-LC Format Proformas & Annexures

SPECIAL NOTE

Please note that all tender forms (<u>Forwarding Letter</u>, <u>BEC-BRC/Bid Evaluation Criteria</u> & <u>Bid Rejection Criteria</u>, <u>Part-I/General Conditions of Contract/GCC</u>, <u>Part-II/Schedule of Work</u>, <u>Unit and Quantity/SOQ</u>, <u>Part-III/Special Conditions of Contract/SCC</u>, <u>Part-V/Safety Measures/SM</u>, <u>Part-VI/Integrity Pact</u>, <u>Price Bid & PP-LC Format</u>) and supporting documents are to be submitted through OIL's E-Procurement site only except following documents which are to be submitted manually in sealed envelope super scribed with Tender No. and due date to CGM-Contracts, Contracts Department, Oil India Limited, Duliajan-786602.

a) ORIGINAL BID SECURITY (Only in case of Bidder(s) submitting Bid Security in the form of BANK GUARANTEE)

A scanned copy of Bid Security should also be uploaded along with the Unpriced Techno-Commercial Bid documents.

b) ANY OTHER DOCUMENT REQUIRED TO BE SUBMITTED IN ORIGINAL AS PER TENDER REQUIREMENT

Scanned copy(s) of the same should also be uploaded along with the Un-priced Techno-Commercial Bid documents.

The above documents including the Original Bid Security (in case of bidders submitting Bid Security in the form of Bank Guarantee) must be received at OIL's CGM-Contract's office at Duliajan on or before 12.45 PM (IST) on the technical bid closing date failing which the bid shall be rejected.

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.

13.0 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. 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.

Note: OIL has appointed Shri Rajiv Mathur, IPS (Retd.), Shri Satyananda Mishra, IAS (Retd.) and Shri Jagmohan Garg, Ex-Vigilance Commissioner as Independent Monitors (IEM) for a period of 03 (three) years to oversee implementation of Integrity Pact in OIL. Bidders may contact the Independent External Monitors for any matter relating to the IFB at the following addresses:

a. Shri Rajiv Mathur, IPS (Retd.), Former Director, IB, Govt. of India;

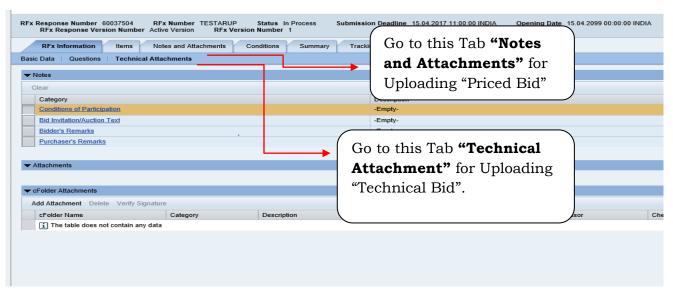
E-TENDER NO. CDO7246P18

E-mail: rajivmathur23@gmail.com

b. Shri Satyananda Mishra, IAS (Retd.),Former Chief Information Commissioner of India & Ex-Secretary, DOPT, Govt. of India E-mail: satyanandamishra@hotmail.com

- c. Shri Jagmohan Garg, Ex-Vigilance Commissioner, CVC E-Mail id: jagmohan.garg@gmail.com
- **14.0** The selected bidder will be required to enter into a formal contract, which will be based on their bid and OIL's Standard Form of Contract.
- **15.0** The successful bidder shall furnish a Performance Security Deposit in the form of 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 Security Money shall not earn any interest.
- **16.0** 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 liquidate damages and/or penalty from the Contractor as per terms of the tender/contract.
- **17.0** The contractor will be required to allow OIL officials to inspect the work site and documents in respect of the workers' payment.
- **18.0 BACKING OUT BY BIDDER:** In case any bidder withdraws their bid within the bid validity period, Bid Security will be forfeited and the party will be put on Holiday as per the Banning Policy (available in OIL's website) of Company.
- **19.0 BACKING OUT BY L-1 BIDDER AFTER ISSUE OF LOA:** In case LOA issued is not accepted by the L1 bidder or the Performance Security is not submitted as per the terms of the contract within the time specified in the Bid Document, the Bid Security shall be forfeited and the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.
- **20.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT:** The information and documents furnished by the bidder/contractor in respect of the subject tender/contract are accepted to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company.
- **21.0 ERRING/DEFAULTING AGENCIES:** Erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be dealt as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website: www.oil-india.com.

22.0 SCREEN SHOTS



On "**EDIT**" Mode, bidders are advised to upload "**Technical Bid**" and "**Priced Bid**" in the respective places as indicated above:

Note:

- * The "Technical Bid" shall contain all techno-commercial details except the prices.
- ** The "**Priced bid**" must contain the price schedule and the bidder's commercial terms and conditions, if any. For uploading Priced Bid, first click on Add Attachment, a browser window will open, select the file from the PC and name the file under Description, Assigned to General Data and click on OK to digitally sign and upload the File. Please click on Save Button of the Response to Save the uploaded files.
- **23.0** OIL now looks forward to your active participation in the IFB.

Thanking you, Yours faithfully, **OIL INDIA LIMITED**

(UPASANA MALAKAR)
SENIOR CONTRACTS OFFICER (OPERATIONS)
For, CGM (CONTRACTS)
For, RESIDENT CHIEF EXECUTIVE

Date: 01.03.2018

OIL INDIA LIMITED (A GOVT. OF INDIA ENTERPRISE) CONTRACTS DEPARTMENT, DULIAJAN DISTRICT: DIBRUGARH (ASSAM), PIN-786602

IFB NO. CDO7246P18

INSTRUCTION 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) Description of Service
 - (iii) Bid closing date and time
 - (iv) Bid opening date, time and place
 - (v) Bid submission place
 - (vi) The amount of Bid Security
 - (vii) The amount of Performance Guarantee
 - b) Instructions to Bidders
 - c) BEC/BRC
 - d) General Conditions of Contract (GCC): Part-I
 - e) Schedule of Work, Unit, Quantities (SOQ): Part-II
 - f) Special Conditions of Contract (SCC): Part-III
 - g) Schedule of Company's Plants, Materials and Equipments (SCPME): **Part-IV-Not applicable for this Tender**.
 - h) Safety Measures (SM): Part-V
 - i) Integrity Pact: **Part-VI**
 - j) Price Bidding Format & PP-LC Format (Attached under "**Notes and Attachments**" tab in the main bidding engine of OIL's e-Tender portal).
 - k) Proformas & 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 without seeking any clarifications.

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 issuance of an Addendum.
- **4.2** The Addendum will be uploaded in OIL's E-Tender Portal in the Tab "Technical RFx" and External Area → "Amendments" folder. The company may, at its discretion, extend the deadline for bid submission. Bidders are expected to take the Addendum into account in preparation and submission of their bid. **Bidders are to check from time to time the E-Tender portal ["Technical RFx" Tab and under the folder "Amendments"] for any amendments to the bid documents before submission of their bids. No separate intimation shall be sent to the Bidders.**

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

(A) UN-PRICED TECHNO-COMMERCIAL BID:

- (i) Bid Documents duly filled up as indicated.
- (ii) Complete technical details/specifications of the equipment with catalogue, etc. as per tender requirement.
- (iii) Documentary evidence established in accordance with BEC/BRC part.
- (iv) Statement of Non-Compliance (if any).
- (v) Bid Security (scanned copy). Hard copy of original Bid Security (Only in case of bidder(s) submitting bid security in the form of Bank Guarantee) should be sent separately to reach on or before 12:45 PM on the bid closing date failing which the bid shall be rejected.
- (vi) Any other document as per tender requirement (scanned copy). Hard copy(s) of the same, if called for in the tender, should be sent separately to reach on or before 12:45 PM on the bid closing date failing which the bid shall be rejected.
- (vii) Integrity Pact.

Note: Please note that no price details should be uploaded in UN-PRICED TECHNO-COMMERCIAL BID under "Technical Attachment" Tab.

(B) PRICED BID:

The Priced Bid shall contain the rates/prices along with the currency and any other commercial information pertaining to the rates/prices. Bidder shall quote their rates/prices in the "PRICE BIDDING FORMAT" attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal. The price quoted in the "PRICE BIDDING FORMAT" will only be considered for evaluation.

6.0 PERIOD OF VALIDITY OF BIDS

6.1 The Bid must be valid for 120 (One Hundred & Twenty) days from the date of opening of the tender.

6.2 In exceptional circumstances, 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.

7.0 FORMAT AND SIGNING OF BID

7.1 The original and all copies of the bid shall be typed or written in indelible inks and shall be signed digitally by the Bidder to bind the Bidder to the contract.

8.0 SUBMISSION OF BIDS

8.1 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 certificate with Organizations Name and Encryption Certificate" 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 while uploading the bid.

Digital Signature Certificates having **"Organization Name"** field other than **Bidder's Name** are not acceptable. However, aforesaid Digital Signature Certificates having **Bidder's Name** in the **"Organization Name"** field are acceptable.

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 used for signing is not of "Class 3 with Organizations Name and Encryption Certificate", the bid will be rejected.

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

- **8.2** 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.
- **8.3** Timely submission of the bids is the responsibility of the Bidder and Bids should be submitted before the bid closing date and time. Company shall not be responsible for any delay.
- **8.4** Physical Bid/E-mail/Fax/Telex/Telegraphic/Telephonic offers will not be accepted.
- **8.5** Bidder shall submit the Bid, duly completed in terms of the Bid Document.
- **8.6** 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.

9.0 DEADLINE FOR SUBMISSION OF BIDS

- **9.1** 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 bid closing date and time as mentioned in the bid except in condition mentioned in clause 12.1 below. But no changes would be allowed by the system once the due date and time for submission of bids has been reached and bids are opened.
- **9.2** No bid can be submitted after the submission deadline is reached. The system time displayed on the E-Procurement web page shall decide the submission deadline.
- **9.3** The documents in physical form must be received by Company at the address specified in the "Forwarding Letter" on or before **12:45 PM on the bid closing date**. Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

10.0 LATE BIDS

10.1 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.

11.0 MODIFICATION AND WITHDRAWAL OF BIDS

- 11.1 Bidders will be permitted by System to withdraw their bid or make any changes in their bid after the bid has been uploaded by the bidder prior to the Bid Closing date and time as mentioned in the forwarding letter. But no changes or withdrawal would be allowed by the system once the due date and time for submission of bids has been reached and bids are opened.
- **11.2** No bid can be modified/withdrawn subsequent to the deadline for submission of bids.
- **11.3** No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity. Withdrawal of any bid within validity period will lead to forfeiture of his/her/their Bid Security Deposit in full and debarred from participation in future tenders, at the sole discretion of the company.

12.0 EXTENSION OF BID SUBMISSION DATE

12.1 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.

13.0 BID OPENING AND EVALUATION

13.1.1 The Technical bid will be opened on scheduled Bid opening date & time in the presence of any attending Bidder(s) or their Authorized Representative, if any. However, an authorized letter (format given in Proforma Section) from the Bidder must be produced by Bidder's representative at the time of opening of Tender, without which such representative won't be allowed to attend the opening of Tenders. Only one representative against each Bid will be allowed to attend the bid opening. Attending Bidder(s) & Authorized Representative(s) will have to sign a register evidencing their presence.

- **13.1.2** In case of two bid system, after the evaluation of the Technical Bids, the Price Bids of the technically qualified Bidders will be opened. The opening Date and Time will be intimated to the technically qualified Bidders in due course. Price bids will be opened in the same procedure as mentioned in Para 13.1.1 above.
- 13.2 In case it happens to be a bundh/holiday, the tender will be opened on the next working day (except Saturday). Accordingly, Bid Closing Date/time will get extended up to the next working day and time (except Saturday).
- **13.3** Bids which have been withdrawn pursuant to Clause 11.0 will not be allowed to be opened by the system. 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.
- **13.4** OIL shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with the sub-clause 13.3.
- 13.5 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.
- 13.6 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, inconsistent 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.
- **13.7** 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.
- **13.8** 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.

14.0 EVALUATION AND COMPARISON OF BIDS

14.1 OIL will evaluate and compare the bids as per Bid Evaluation Criteria (BEC) of the bidding documents.

- **14.2** To ascertain the inter-se-ranking, the comparison of the responsive bids will be made on the basis of total amount quoted inclusive of all liabilities and GST for the items of part-II (i.e. schedule of works, units, quantity, rates) of the tender.
- **14.3 DISCOUNTS/REBATES:** Unconditional discounts/rebates, if any, given in the bid or along with the bid will be considered for evaluation.
- **14.4** 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.
- **14.5** Conditional bids are liable to be rejected at the discretion of the Company.

15.0 CONTACTING THE COMPANY

- **15.1** 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 13.5.
- **15.2** 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.

16.0 AWARD CRITERIA

16.1 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.

17.0 OIL'S RIGHT TO ACCEPT OR REJECT ANY BID

17.1 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.

18.0 NOTIFICATION OF AWARD

18.1 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.

19.0 SIGNING OF CONTRACT

- **19.1** The successful bidders(s) shall be notified by the Company of its intention to enter into an Agreement with him/her/them on the basis of his/her/their acceptance of the offer. Such notification shall be treated as a "Letter of Award (LOA)".
- **19.2** Within 02 Weeks from the date of issue of Letter of Award (LOA), the successful Bidder(s) will be required to pay an interest free Performance Security by way of Bank Guarantee (in specified format) favoring "OIL INDIA LIMITED" payable at "DULIAJAN" from any Nationalized Bank. Upon furnishing of the Performance Security, the

successful Bidder(s) will be required to enter into a formal Service Agreement based on the instant tender on the OIL Standard forms of agreement.

- **19.3** This Performance Security must be valid for 03 (three) months after the date of expiry of the tenure of the contract. In the event of contract being extended within the provisions of the contract agreement, the contractor will have to extend suitably the validity of the "Security Deposit" for the extended period.
- **19.4** The "Performance Security" will be refunded to the contractor after 03 (three) months of satisfactory completion of works/defect liability period (if any) under the contract (including extension, if any), but 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.
- **19.5** Failure of the successful bidders to comply with the conditions as specified in Para 19.2 above would render him liable for rejection and in turn forfeiture of Bid Security apart from any other actions the Company may take against him at its sole discretion. The bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.

20.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENTS

The information and documents furnish by the bidder/contractor in respect of the subject tender/contract are accepted to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company.

21.0 PROVISION FOR ACTION IN CASE OF ERRING/DEFAULTING AGENCIES

Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy available in OIL's website www.oilindia.com.

- 22.0 Purchase preference policy (linked with Local Content) (PP-LC) notified vide letter no.O-27011/44/2015-ONG/II/FP dated 25.04.2017 of MoPNG. (Available in http://oil-india.com/PDF/Circular%20dt%2027062017-PPLC.pdf or http://petroleum.nic.in/policy-provide-purchase-preference-linked-local-content-pp-lc-all-psus)
- **22.1** In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs Order 2012, then the bidders should categorically seek benefits against only **one of the two policies** i.e. either PP-LC or MSE policy. If a bidder seeks free of cost tender document under the MSE policy, then it shall be considered that the bidder has sought benefit against the MSE policy and this option once exercised cannot be modified subsequently.
- **22.2** Bidders seeking Purchase preference (linked with local content) (PP-LC) shall be required to meet/exceed the target of Local Content (LC) of **35%.**

E-TENDER NO. CDO7246P18	INSTRUCTION TO BIDDERS
22.2.1 Such bidders shall furnish following us their techno-commercial bid. The undertaking s	9
"We (Name of the bidder) un minimum Local Content (LC) requirement Enclosure I of the policy) for claiming proceeds to the Govt. policy against to the contents under the Govt.	nt i.e. 35% (to be filled as notified at ourchase preference linked with Local
22.2.2 Above undertaking shall be supported by Auditor engaged by the bidder, on the letter hear	-
"We the statutory auditor of M certify that M/s (name of the Content requirements of the Services i.e. notified at Enclosure I of the policy) quantity.	e bidder) meet the mandatory Local 35% (to be filled by the work center as
<u>Note:</u> In case of bidder(s) for whom Staturequired certificates shall be provided by	tory Auditor is not required as per law
22.2.3 At the bidding stage the bidder shall pro "Imported Component" in the prescribed formate policy and shall be uploaded by the bidder Procurement portal under "Notes and Attachment portal under "Notes and Notes and	t enclosed as Proforma-BB (PP-LC) of the s along with their price bid in the E-
22.3 Eligible (techno-commercially qualified) preference to 10% i.e. where the evaluated proprice of Non Local Content (NLC) bidder, or purchase preference shall be granted to the eligible bidder concerned, at the lowest valid i.e. NLC propries.	rice is with 10% of the evaluated lowest other things being equal. Accordingly, ligible (techno-commercially qualified) LC
22.3.1 Only those LC bidders whose bids are	within 10% of the NLC L1 bid would be

- **22.3.1** Only those LC bidders whose bids are within 10% of the NLC L1 bid would be allowed an opportunity to match L1 bid. All the eligible LC bidders shall be asked to submit their confirmation to match their price in sealed envelopes. Envelopes of the bidders shall be opened and award for the prescribed quantity shall be made to the lowest evaluated TA/CA bidder among the eligible LC bidders. In case the lowest eligible LC bidder fails to match L1 price, the next eligible LC bidder will be awarded the prescribed quantity and so on. In case none of the eligible LC bidders matches the L1 bid, the actual bidder holding L1 price will secure the order.
- **22.4** Order for supply of 50% of the tendered quantity would be awarded to the lowest techno-commercially qualified LC bidder, subject to matching with valid NLC L1 price. The remaining will be awarded to L1 (i.e. NLC bidder). Prescribed 50% tendered quantity for LC bidders shall not be further sub-divided among eligible LC bidders.
- **22.4.1** However, if L1 bidder happens to be a LC bidder, the entire procurement value shall be awarded to such bidder.
- **22.4.2** When the tendered goods/services cannot be divided in the exact ratio of 50%/ 50% then OIL reserve the right to award on lowest eligible PP-LC bidder for quantity not less than 50%, as may be dividable.

For example

In case tendered quantity is 3 (not divisible in the ratio of 50:50), PP-LC bidder shall get order for 2 nos. only and the rest will go to L-1 (NLC bidder).

- **22.5** The tendered quantity is not splitable/non-dividable/cannot be procured from multiple sources. Hence, the entire procurement value shall be awarded to the lowest techno-commercially qualified LC bidder subject to matching with valid NLC L1 rates.
- **22.6** For the purpose of this policy, all terms used vide aforesaid policy shall be governed by the definitions specified at para 2 of the policy document notified by MoPNG vide letter No. O-27011/44/2015-ONG/II/FP dated 25.04.2017.
- **22.7** The successful bidder shall be obliged to fulfill the requirements of quality and delivery time in accordance with the provisions of the Purchase order/contract.
- **22.8** OIL shall have the right to satisfy itself of the production capability and product quality of the manufacturer.

22.9 Determination of LC

- **22.9.1** LC of Services shall be calculated on the basis of the ratio of service cost of domestic component in service to the total cost of services.
- **22.9.2** The total cost of service shall be constituted of the cost spent for rendering of service, covering:
 - a) Cost of component (material), which is used.
 - b) Manpower and consultant cost, cost of working equipment/facility, and
 - c) General Service cost, excluding profit, company overhead cost, taxes and duties.
- **22.9.3** The criteria for determination of cost of local content in the service shall be as under:
 - a) In the case of material being used to help the provision of service, based on country of origin.
 - b) In the case of manpower and consultant based on INR component of the services contract.
 - c) In the case of working equipment/facility, based on country of origin and
 - d) In the case of general service cost, based on the criteria as mentioned in clauses a, b and c above.
 - e) Indian flag vessels in operation as on date.
- **22.9.4** The determination of local content of the working equipment/facility shall be based on the following provision:

Working equipment produced in the country is valued as 100% (one hundred percent) local content, working equipment produced abroad is valued as much as nil (0% percent) local content.

22.10 Calculation of LC and Reporting

22.10.1 LC shall be calculated on the basis of verifiable data. In the case of data used in the calculation of LC being not verifiable, the value of LC of the said component shall be treated as nil.

- **22.10.2** Formats for the calculation of LC of services may be seen at Enclosure-III of the policy document.
- **22.11** <u>Certification and Verification:</u> Bidder seeking Purchase Preference under the policy, shall be obliged to verify the LC of goods as follows:

22.11.1 At bidding stage:

a) Price Break-up

- i. The bidder shall provide break-up of "Local Component" and "Imported Component" along with the price bid as per provisions under clause 22.2.3.
- ii. Bidder must have LC in excess of the specified requirement.

b) Undertaking by the bidder

- i. The bidder shall submit undertaking along with the techno-commercial bid as per clause no. **22.2**, such undertaking shall become a part of the contract.
- ii. Bidder shall also submit the list of items/services to be procured from Indian manufacturers/service providers.

c) Statutory Auditor's Certificate

The Undertaking submitted by the bidder shall be supported by a certificate from Statutory Auditor as per clause **22.2.2**.

22.11.2 After Contract Award

- a) In the case of procurement cases with the value less than Rs. 5 crore (Rupees Five Crore), the LC content may be calculated (self-assessment) by the contractor and certified by the Director/Authorized Representative of the Company.
- b) The verification of the procurement cases with the value Rupees Five Crore and above shall be carried out by a Statutory Auditor engaged by the bidder.
- **22.12** Each supplier shall provide the necessary local content documentation to the statutory auditor, which shall review and determine the local content requirements have been met and issue of local content certificate to that effect on behalf of OIL, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.
- **22.13** The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with invoice while maintaining the overall % of Local Content for the total work/purchase of the pro-rata Local Content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.
- **22.14** Where currency quoted by the bidder is other than Indian Rupee then the bidder claiming benefits under PP-LC shall consider exchange rate prevailing on the date of notice inviting tender (NIT) for the calculation of Local Content.

22.15 OIL shall have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

22.16 Sanctions

- **22.16.1** OIL shall impose sanction on bidder not fulfilling LC of goods/services in accordance with the value mentioned in certificate of LC.
- **22.16.2** If the bidder does not fulfill his obligation after the expiration of the period specified in such warning, OIL shall initiate action for blacklisting such bidder/successful bidder.
- **22.16.3** A bidder who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.
- **22.16.4** In pursuance of the clause No. 22.16.3 above, towards fulfillment of conditions pertaining to Local Contents in accordance with the value mentioned in the certificate of LC, the bidder shall have to submit additional Bank Guarantee (format attached at Annexure-XI) equivalent to the amount of PBG.

1.0 BID EVALUATION CRITERIA (BEC)

The bid shall conform generally to the specifications and terms and conditions given in the Tender Documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Not-withstanding 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 as non-responsive and rejected. All the documents related to BRC must be submitted along with the Techno-Commercial Bid.

1.1 FINANCIAL CRITERIA

- **1.1.1** Annual Financial Turnover of the bidder during any of preceding 03 (Three) financial/accounting years from the original bid closing date should be at least **Rs. 4,44,38,100.00** (Rupees Four Crores Forty Four Lakhs Thirty Eight Thousand One Hundred only).
- **1.1.2** Net worth of the bidder must be Positive for the preceding financial/accounting year.

Notes to BEC Clause 1.1 above:

- **a.** For proof of Annual Turnover & Net worth (refer clauses 1.1.1 & 1.1.2 above), any one of the following documents/photocopies must be submitted along with the bid:
 - (i) Audited Balance Sheet along with Profit & Loss account.

OR

- (ii) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in **Annexure-X**.
- b. Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial/accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year excluding the preceding financial/accounting year will be considered. However, he has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year ______ have actually not been audited so far'.
- **c.** In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be

accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.

1.2 TECHNICAL CRITERIA:

- **1.2.1** The Bidder shall have the experience of successful completion/execution of "Maintenance Services" or "Operation & Maintenance (O&M)" in Central Govt./State Govt./PSUs/State Govt. Enterprises/Any Upstream or Downstream Oil/Gas Company of any one of the following:
 - a. Experience of handling Production Facility/Process Facility/Tank Farm with a minimum work experience Rs. 4,44,38,100.00 (Rupees Four Crores Forty Four Lakhs Thirty Eight Thousand One Hundred only) for a minimum period of 01 (One) year during the last 07 (Seven) years to be reckoned from the original bid closing date.

OR

b. Experience of handling Natural Gas - Production/Gathering/Processing/Compression facility with a minimum work experience of 01 (One) **MMSCUMD or more** during the last 07 (Seven) years to be reckoned from the original bid closing date.

OR

c. Experience of handling Petroleum Production facility for a minimum production of **300 Barrels of Oil per Day** during the last 07 (Seven) years to be reckoned from the original bid closing date

OR

d. Experience of handling "Crude Oil"/"Petroleum Products" of Tank Farm with minimum storage capacity of **10,000 Barrels** during the last 07 (Seven) years to be reckoned from the original bid closing date.

Notes to BEC Clause 1.2.1 above:

- (I) Maintenance Services/O&M Services as referred in 1.2.1 must have to meet the minimum working experience for the following under single contract:
 - a) Maintenance of Process Instrumentation and related control system.
 - b) Maintenance of Fire Fighting Equipments and related control system.
 - c) Maintenance of Electrical Systems including Air Conditioners.
 - d) Maintenance of Mechanical Pumps, Engines, Air Compressors etc.
- (II) (A1) In case the work experience is not with OIL, for proof of requisite Experience as mentioned in 1.2.1 above, bidders shall submit the following document(s) along with the bid:
 - a) Copies of relevant pages of contract document showing Contract Number, period of contract and Detailed Scope of work etc.

- b) Copy of Letter of Award (LOA)/Letter of Intent (LOI) along with Bill Payment/Service Entry Sheet (SES)/Certificate of Payment (COP) for the period of 1 (one) year indicating the value of the job executed.
- c) Copies of completion Certificate(s) or payment certificate(s) or any other documents which substantiate completion/ execution of the jobs, issued by the client(s) with contact details of the issuing person/organization (e-mail address, Phone Number, Fax number etc.). The certificate of payment (COP)/payment certificate should clearly mention the following:
 - **i.** Duration of Contract
 - ii. Gross Value of Job Done
 - iii. Job start & end date
- **(B1)** For proof of requisite Experience as mentioned in 1.2.1, in case Work Experience is against OIL's Contract which is completed, a copy of contract document to be submitted with the Job Completion Certificate mentioning the following:
 - i. Contract No. and Work Order No.
 - ii. Period of Contract indicating start date and end date
 - **iii.** Gross value of the jobs done

OR

- **(C1)** For proof of requisite Experience as mentioned in 1.2.1, in case Work Experience is against running contract with OIL which the bidder has executed for a minimum period of 1(one) year reckoned from the original bid closing date, the following document(s) must be submitted along with the bid:
 - **i.** A Copy of Contract document & work order no.

AND

- **ii.** Copy of SES (service entry sheet) for the jobs executed indicating the gross value of job done during the referred period.
- 1.2.2 Bidder must submit an undertaking, in original, from the OEM/Authorized Dealer of Honeywell, Emerson Rosemount, SIEMENS, PHOENIX, ABB Ltd., Bajaj, Philips, HITACHI HiREL, Greaves Cotton Ltd, Kirlosker Oil Engines Ltd., Kirloskar Pneumatic Pvt., Mather & Platt Pumps Ltd., M/s NK Fire Safety, FIRETECH Equipment & Services Pvt. Ltd., Bluestar and Brady & Morris Engg. Co. Ltd in a letter clearly stating that they (OEM/Authorized Dealer) would facilitate the required services to the bidder on regular basis with Maintenance Crew/Technology/Spares/Product updates etc. & also extend all necessary support during the maintenance period of the contract. In the absence of such undertaking, the bid is liable to be rejected. This undertaking shall be valid for the entire duration of the contract. A format of Undertaking is attached as Annexure XP.
- **1.2.3** A job executed by a bidder for its own organization/subsidiary cannot be considered

as experience for the purpose of meeting BEC. Also, any bidder who is extending support by way of entering into consortium/collaboration agreement or MOU with another party cannot be considered as experience for the purpose of meeting BEC

- **1.3** Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience, Annual turnover and Net worth as mentioned in Para 1.1 & 1.2 above.
- **1.4** The bidders must have their registered office in India; documentary evidence in this connection has to be provided along with the bid. The bid will be rejected if the applicable supporting document is not being provided in this regard.
- **1.5** Price Bid shall be opened in respect of only the techno-commercially acceptable bidders whose bids have been found to be substantially responsive. A substantially responsive bid is one that meets the terms and conditions of the Tender and/or the acceptance of which bid will not result in indeterminate liability on OIL.
- **1.6** Bidders are required to quote for all the items as per Price Bid Format; otherwise the offer of the bidder will be straightway rejected.
- **1.7** If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.
- **1.8** The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.
- **1.9** The bidders are advised not to offer any discount/rebate separately and to offer their prices in the Price Bid Format after considering discount/rebate, if any.
- **1.10** Conditional and unsolicited discount will not be considered in evaluation. However, if such bidder happens to be the lowest recommended bidder, unsolicited discount without any condition will be considered for computing the contract price.
- **1.11** In case of identical overall lowest offered rate by more than 1 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.
- **1.12 PURCHASE PREFERENCE**: 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:

- 1.12.1 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.
- 1.12.2 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.

1.12.3 **Documentation 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.

1.13 PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC)

- 1.13.1 Purchase preference policy-linked with Local Content (PP LC) notified vide letter no. O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoP&NG shall be applicable in this tender. (http://petroleum.nic.in/policy-provide-purchase-preference-linked-local-content-pp-lc-all-psus).
- 1.13.2Bidders seeking benefits, under Purchase Preference Policy (linked with Local Content) (PP-LC) shall have to comply with all the provisions specified all clauses under clause No. 22 of ITB and shall have to submit all undertakings/documents applicable for this policy.
- **1.14** Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST(CGST & SGST/UTGST or IGST).
- **1.15** OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

1.16 Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST.

When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.

- **1.17** Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & the bids will be evaluated based on total price including GST.
- **1.18** Based on the evaluation of techno-commercially qualified bidders, the job will be awarded to L-1 bidder

2.0 BID REJECTION CRITERIA (BRC):

- **2.1** The bids are to be submitted in single stage under 02 (two) bid system i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the Price Bid should contain the quoted price.
- **2.2** The price quoted by the successful bidder must be firm during the performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with adjustable price quotation other than the above will be treated as non-responsive and rejected.
- **2.3** Bid security shall be furnished as a part of the Techno Commercial Un-priced Bid. The amount of bid security should be as specified in the forwarding letter. Any bid not accompanied by a proper bid security will be rejected.
- **2.4** Bid Documents/User Id & Password for OIL's E-Tender portal are not transferable. Bid made by parties who have not submitted the requisite tender fees will be rejected.
- **2.5** Any bid received in the form of Physical document/Telex/Cable/Fax/E-mail will not be accepted.
- **2.6** Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign the bid digitally, failing which the bid will be rejected.
- **2.7** Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.
- **2.8** Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.
- **2.9** Bidders must quote clearly and strictly in accordance with the price schedule outlined in Price Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal; otherwise the bid will be rejected. All other techno-

commercial documents other than price details to be submitted with Un-priced Techno-Commercial Bid as per tender requirement under "Technical Attachment" Tab Page only.

- **2.10** Bidder must accept and comply with the following provisions as given in the Tender Document in toto, failing which offer will be rejected:
 - (i) Firm price
 - (ii) EMD/Bid Bond
 - (iii) Period of validity of Bid
 - (iv) Price Schedule
 - (v) Performance Bank Guarantee/Security deposit
 - (vi) Delivery/Completion Schedule
 - (vii) Scope of work
 - (viii) Guarantee of material/work
 - (ix) Liquidated Damages clause
 - (x) Tax liabilities
 - (xi) Arbitration/Resolution of Dispute Clause
 - (xii) Force Majeure
 - (xiii) Applicable Laws
 - (xiv) Specifications
 - (xv) Integrity Pact
- **2.11** There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.
- **2.12** Bid received with validity of offer less than 120 (one hundred twenty) days from the date of Technical Bid opening will be rejected.
- **2.13** 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. The proforma has to be returned by the bidder (along with the Unpriced 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.

3.0 GENERAL

- **3.1** In case bidder takes exception to any clause of bidding 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 company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BRC.
- **3.2** 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 BEC/BRC also

and such clarifications fulfilling the BEC/BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be will be evaluated based on the submission. However, mere submission of such clarification shall not make the offer responsive, unless company is satisfied with the substantial responsiveness of the offer.

- **3.3** If any of the clauses in the BRC contradict with other clauses of bidding document elsewhere, the clauses in the BRC shall prevail.
- **3.4** Bidders should note that the documents/information submitted by the bidder(s) against the tender are presumed to be genuine, authentic and true copy of the originals. However, in case at any stage of tendering process or during execution of the contract or after expiry of contract, if it is detected that bidder has submitted forged or fabricated documents or furnish false information towards fulfilment of any of the tender/contract conditions, Company shall immediately reject the bid of such bidder(s) or cancel/terminate the contract, as the case may be and forfeit EMD/SD submitted by the bidder. Besides, the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.
- **3.5** Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.
- **3.6** OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.
- **3.7** The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.

OIL INDIA LIMITED

(A GOVT. OF INDIA ENTERPRISE)
CONTRACTS DEPARTMENT, DULIAJAN
DISTRICT: DIBRUGARH (ASSAM), PIN-786602
TEL: (91) 374-2800548, FAX: (91) 374-2803549

Website: www.oil-india.com

DESCRIPTION OF WORK/SERVICES:

Hiring of Service for 'Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of 02 (Two) years extendable by 01 (One) year.

GENERAL CONDITIONS OF CONTRACT (GCC)

A. DEFINITIONS:

In the contract, the following terms shall be interpreted as indicated:

- (a) "**The Contract**" means agreement entered into between Company and Contractor, as recorded in the contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "**The Contract Price**" means the price payable to Contractor under the contract for the full and proper performance of its contractual obligations;
- (c) "**The Work**" means each and every activity required for the successful performance of the services described in Section II, the Terms of Reference.
- (d) "Company" or "OIL" means Oil India Limited;
- (e) "**Contractor**" means the Contractor performing the work under this Contract.
- (f) "**Contractor's Personnel**" means the personnel to be provided by the Contractor to provide services as per the contract.
- (g) "Company's Personnel" means the personnel to be provided by OIL or OIL's Contractor (other than the Contractor executing the Contract). The Company representatives of OIL are also included in the Company's personnel.
- (h) "Gross Negligence" means any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property.
- (i) "Wilful Misconduct" means intentional disregard of good and prudent standards of performance or proper conduct under the Contract with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property.

WITNESSETH:

- 1.0 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 in Central Tank Farm Duliajan & Moran Tank Farm of Production Services Support Department.
- 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.
- **2.0** 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.
- **3.0** 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.
- **4.0** 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.

- **5.0** 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.
- **6.0** 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, 1936.
 - 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.
 - xi) GST 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.

- **7.0** 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.
- 8.0 The duration of the contract shall be initially for a period of <u>02 (Two) years</u> from the commencement of the same i.e. after completion of mobilization. The Contractor must complete the work as mentioned in PART III (SPECIAL CONDITIONS OF CONTRACT: SCC) within the contract period. 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.
- **9.0** 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.

10.0	The tendered price inclusive of all liabilities and GST (i.e. the Contr	act price) i	s Rs
	(Not to be filled up by bidder while submitting the of	fer in c-Fo	lder
This	figure will be filled up by OIL at the time of award of the c	ontract to) the
succe	essful bidder) (only) but	the
Comp	pany shall pay the Contract or only for actual work done at the all-in-	clusive rate	s set
down	in the Schedule of work Part II of this Contract.		

On account payment may be made, not often than monthly, up to the amount of **100**% 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.

- **11.0** The contractor employing **20 (twenty)** or more workmen on any day preceding 12 months shall be required to obtain requisite license 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.
- **12.0** 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.
- **13.0** 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.
- **14.0** The Contractor shall deploy local persons in all works.
- **15.0** The Contractor shall not engage minor labour below 18 (eighteen) years of age under any circumstances.
- **16.0** The Contractor and his/her workmen shall strictly observe the rules and regulations as per Mines Act (Latest editions).

17.0 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.

18.0 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.

19.0 ARBITRATION:

19.1 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:

- a) 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.
- **b)** The number of arbitrators and the appointing authority will be as under:

<u>·</u>		
Claim amount (excluding claim for interest and counter claim, if any)	Number of Arbitrator	Appointing Authority
Up to 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.

- **c)** 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.
- **d)** 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.

- **e)** 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.
- f) 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.
- **g)** The arbitral tribunal shall make and publish the award within time stipulated as under:

Amount of Claims and	Period for making and publishing of the award
counter claims (excluding	(counted from the date of first meeting of the
interest)	Arbitrators)
Up to 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.

- **h)** 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.
- i) 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.
- **j)** The Arbitration shall be held at **Duliajan, Assam**. However, parties to the contract can agree for a different place for the convenience of all concerned.
- **k)** The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.
- 1) 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.

19.2 <u>ARBITRATION (APPLICABLE IN CASE OF CONTRACT AWARDED ON PUBLIC</u> 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, Deptt. 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 19.1 & 19.2 will be **Duliajan, Assam**. The award made in pursuance thereof shall be binding on the parties.

20.0 FORCE MAJEURE:

20.1 In the event of either party being rendered unable by 'Force majeure' to perform any obligations required to be performed by them under the contract the relative obligations of the party affected by such 'Force Majeure' shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by the either party shall be borne by the respective parties.

The term 'Force Majeure' as employed herein shall mean acts of God, earthquake, war (declared/undeclared) revolts, riots, fires, floods, rebellions, explosions, hurricane, sabotage, civil commotions, and acts and regulations of respective Govt. of the two parties, namely the Company and the contractor.

20.2 Upon the occurrence of such cause(s) and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing immediately but not later than 72 (Seventy-two) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim.

Time for performance of the relative obligations suspended by the force majeure shall then extended by the period for which such cause lasts.

20.3 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.

21.0 TERMINATION:

- **21.1 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.
- **21.2 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 20.0 above.
- **21.3 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.

- **21.4 TERMINATION FOR UNSATISFACTORY PERFORMANCE:** If the Company considers that, the performance of the Contractor is unsatisfactory, or not up to 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.
- **21.5 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.
- **21.6** 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 entirely 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.
- **21.7** 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 21.1 to 21.6 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.
- **22.0 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.
- **22.1** Upon termination of this Contract, Contractor shall return to Company all of Company's items, which are at the time in Contractor's possession.
- **22.2** 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.

23.0 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.

24.0 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.

25.0 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)."

26.0 FURNISHING FRAUDULENT INFORMATION/DOCUMENT:

The information and documents furnished by the bidder/contractor in respect of the subject tender/contract are expected to be true and genuine. However, if it is detected during technical scrutiny or after award of the contract or after expiry of the contract, that the bidder had submitted any fake/fraudulent document or furnished false statement, the offer/contract shall be rejected/cancelled, as the case may be and the bidder (if fake document/false statement pertains to such bidder) shall be dealt as per the Banning Policy (available in OIL's website) of Company.

27.0 PROVISION FOR ACTION IN CASE OF ERRING/DEFAULTING AGENCIES:

Action against erring and defaulting agencies like bidder, contractor, supplier, vendor, service provider will be as per OIL's Banning Policy dated 6th January, 2017 available in OIL's website www.oil-india.com.

28.0 <u>LIQUIDATED DAMAGES FOR DELAY IN MOBILIZATION/COMPLETION OF WORKS AND SERVICES:</u>

In the event of the Contractor's default in timely mobilization/completion within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 0.5% of contract value, per week or part thereof of delay subject to maximum ceiling of 7.5% of contract value.

29.0 SUBCONTRACTING:

CONTRACTORS shall not subcontract or assign, in whole or in part, their obligations to perform under this contract, except with COMPANY'S prior written consent.

30.0 MISCELLANEOUS PROVISIONS:

Contractors shall conform in all respects with the provisions of any Statute, Ordinance of Law and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation public bodies and Companies as aforesaid and shall keep OIL indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or byelaw.

31.0 LIABILITY:

- **31.1** Except as otherwise expressly provided, neither Company nor its servants, agents, nominees, Contractors, or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the Contractor and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Company and/or its servants, agent, nominees, assignees, contractors and sub-contractors. The Contractor shall protect, defend, indemnify and hold harmless Company from and against such loss or damage and any suit, claim or expense resulting there from.
- **31.2** Neither Company nor its servants, agents, nominees, assignees, Contractors, subcontractors shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the Contractor and/or of its contractors or sub-contractor irrespective of how such injury, illness or death is caused and even if caused by the negligence of Company and/or its servants, agents nominees, assignees, Contractors and sub-contractors. Contractor shall protect, defend, indemnify and hold harmless Company from and against such liabilities and any suit, claim or expense resulting there from.
- **31.3** The Contractor hereby agrees to waive its right to recourse and further agrees to cause their underwriters to waive their right of subrogation against Company and/or its underwrites, servants, agents, nominees, assignees, Contractors and sub-contractors for loss or damage to the equipment of the Contractor and/or its sub-contractors when such loss or damage or liabilities arises out of or in connection with the performance of the contract.
- **31.4** The Contractor hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Contractor and of its contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the contract.
- **31.5** Except as otherwise expressly provided, neither Contractor nor its servants, agents, nominees, Contractors or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the Company and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, Contractors and sub-contractors. The Company shall protect, defend, indemnify and hold harmless Contractor from and against such loss or damage and any suit, claim or expense resulting therefrom.
- **31.6** Neither Contractor nor its servants, agents, nominees, assignees, Contractors, subcontractors shall have any liability or responsibility whatsoever to whomsoever or injury or illness, or death of any employee of the Company and/or of its contractors or subcontractors irrespective of how such injury, illness or death is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, contractors and sub-contractors. Company shall protect, defend indemnify and hold harmless Contractor from and against such liabilities and any suit, claim or expense resulting there from.
- **31.7** The Company agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for

loss or damage to the equipment of Company and/or its contractors or sub-contractors when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

31.8 The Company hereby further agrees to waive its right of recourse and agrees to cause it underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Company and of its Contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.

31.9 LIMITATION OF LIABILITY

Notwithstanding any other provisions except only in cases of willful misconduct and/or criminal acts,

- (a) Neither the Contractor nor the Company (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs.
- **(b)** Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 100% of the Contract price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the Company with respect to Intellectual Property Rights.

Company shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

32.0 CONSEQUENTIAL DAMAGE:

Except as otherwise expressly provided, neither party shall be liable to the other for special, indirect or consequential damages resulting from or arising out of the contract, including but without limitation, to loss or profit or business interruptions, howsoever caused and regardless of whether such loss or damage was caused by the negligence (either sole or concurrent) of either party, its employees, agents or sub-contractors.

33.0 INDEMNITY AGREEMENT:

- **33.1** Except as provided hereof Contractor agrees to protect, defend, indemnify and hold Company harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Contractor's employees, agents, Contractors and subcontractors or their employees on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.
- **33.2** Except as provided hereof Company agrees to protect, defend, indemnify and hold Contractor harmless from and against all claims, suits, demands and causes of action,

liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Company's employees, agents, Contractor and subcontractors or their employees on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

34.0 APPLICABLE LAW:

- **34.1** This Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the exclusive jurisdiction of Courts situated at Dibrugarh in Assam.
- **34.2** The Bidders shall ensure full compliance of various Indian Laws and Statutory Regulations, to the extent applicable for performing under this Contract.

35.0 TAXES:

35.1 Tax levied as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on Contractor's account.

36.0 SUBSEQUENTLY ENACTED LAWS:

- **36.1** In the event of introduction of any new legislation or any change or amendment or enforcement of any Act or Law, rules or regulations of Government of India or State Government(s) or Public Body which becomes effective after the date of submission of Price Bid or revised price bid, if any, for this CONTRACT and which results in increased/decreased cost of the works under the CONTRACT increased/decreased liability of taxes, (other than personnel and Corporate taxes), duties, the Parties shall agree to a revision in pricing to reflect such change subject to the production of documentary proof to the satisfaction of the COMPANY/CONTRACTOR as applicable to the extent which directly is attributable to such introduction of new legislation or change or amendment as mentioned above and adjudication by the competent authority (applicable when disputed by COMPANY) & the courts wherever levy of such taxes/duties are disputed by COMPANY/CONTRACTOR.
- **36.2** Any increase in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date during the extended period will be to the contractor's account, where delay in completion/mobilization period is attributable to the CONTRACTOR. However, any decrease in net amount of the duties and taxes (i.e. the amount of taxes/duties payable minus eligible credit of taxes/duties paid on input services/inputs) after the contractual completion/mobilization date will be to COMPANY's account.
- **36.3** The Contract Price and other prices given in the Schedule of Prices are based on the applicable tariff as indicated by the CONTRACTOR in the Schedule of Prices. In case this information subsequently proves to be wrong, incorrect or misleading, COMPANY will have no liability to reimburse/pay to the CONTRACTOR the excess duties, taxes, fees, if any finally levied/imposed by the concerned authorities. However, in such an event, COMPANY

will have the right to recover the difference in case the rate of duty/tax finally assessed is on the lower side.

- **36.4** Notwithstanding the provision contained in clause 28.1 to 28.2 above, the COMPANY shall not bear any liability in respect of:
 - i. Personal taxes on the personnel deployed by CONTRACTOR, his sub-contractor/sub-sub-contractors and Agents etc.
 - ii. Corporate taxes and Fringe benefit tax in respect of contractor and all of their subcontractors, agents etc.
 - iii. Other taxes & duties including Customs Duty, Excise Duty and Service Tax in addition to new taxes etc. in respect of sub-contractors, vendors, agents etc. of the CONTRACTOR.
- **36.5** In order to ascertain the net impact of the revisions/enactment of various provisions of taxes/duties, the CONTRACTOR is liable to provide following disclosure to COMPANY:
 - i. Details of each of the input services used in relation to providing service to COMPANY including estimated monthly value of input service and service tax amount.
 - ii. Details of Inputs (material/consumable) used/required for providing service to Company including estimated monthly value of input and excise duty/CVD paid/payable on purchase of inputs.

37.0 GOODS AND SERVICES TAX:

37.1 GENERAL REMARKS ON TAXES & DUTIES:

In view of **GST** Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in **GST**. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax or any other form of indirect tax except of **GST** mentioned in the bidding document shall be ignored.

- **37.2** Bidders are required to submit copy of the GST Registration Certificate while submitting the bids wherever **GST** (CGST & SGST/UTGST or IGST) is applicable.
- **37.3** "**GST**" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "**GST**" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import/interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.
- 37.4 Quoted price/rate(s) should be inclusive of all taxes and duties, except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and cess on GST if applicable) on the final service. However, GST rate (including cess) to be provided in the respective places in the Price Bid. Please note

that the responsibility of payment of GST (CGST & SGST or IGST or UTGST) lies with the Supplier of Goods/Services (Service Provider) only. Supplier of Goods/Services (Service Provider) providing taxable service shall issue an Invoice/Bill, as the case may be as per rules/regulation of **GST**. Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods/Services (Service Provider) with requisite details.

37.4.1 Bidder should also mention the **Harmonised System of Nomenclature** (HSN) and **Service Accounting Codes (SAC)** at the designated place in SOR.

37.5 Where the OIL is entitled to avail the input tax credit of GST:

- **37.5.1** OIL will reimburse the **GST** to the Supplier of Goods/Services (Service Provider) at actuals against submission of Invoices as per format specified in rules/regulation of GST to enable OIL to claim input tax credit of **GST** paid. In case of any variation in the executed quantities, the amount on which the **GST** is applicable shall be modified in same proportion. Returns and details required to be filled under GST laws & rules should be timely filed by supplier with requisite details.
- **37.5.2** The input tax credit of **GST** quoted shall be considered for evaluation of bids, as per evaluation criteria of tender document.

37.6 Where the OIL is not entitled to avail/take the full Input Tax Credit of GST:

- **37.6.1** OIL will reimburse **GST** to the Supplier of Goods/Services (Service Provider) at actuals against submission of Invoices as per format specified in rules/regulation of **GST** subject to the ceiling amount of **GST** as quoted by the bidder. In case of any variation in the executed quantities (If directed and/or certified by the In-Charge) the ceiling amount on which **GST** is applicable will be modified on pro-rata basis.
- **37.6.2** The bids will be evaluated based on total price including **GST**.
- **37.7** Payments to Service Provider for claiming **GST** amount will be made provided the above formalities are fulfilled. Further, OIL may seek copies of challan and certificate from Chartered Accountant for deposit of **GST** collected from OIL.
- **37.8** Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL. In the event that the contractor/vendor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules thereunder, OIL shall not be liable to make any payment on account of **GST** against such invoice.
- **37.9 GST** shall be paid against receipt of tax invoice and proof of payment of **GST** to government. In case of non-receipt of tax invoice or non-payment of **GST** by the contractor/vendor, OIL shall withhold the payment of **GST**.
- **37.10 GST** payable under reverse charge mechanism for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL.
- **37.11** Where OIL has the obligation to discharge **GST** liability under reverse charge mechanism and OIL has paid or is/liable to pay **GST** to the Government on which interest

or penalties becomes payable as per GST laws for any reason which is not attributable to OIL <u>or ITC</u> with respect to such payments is not available to OIL for any reason which is not attributable to OIL, then OIL shall be entitled to deduct/setoff/recover such amounts against any amounts paid or payable by OIL to Contractor/Supplier.

- **37.12** Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the **GST** charged by the Contractor/Vendor is denied by the tax authorities to OIL for reasons attributable to Contractor/Vendor, OIL shall be entitled to recover such amount from the Contractor/Vendor by way of adjustment from the next invoice. In addition to the amount of **GST**, OIL shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL.
- **37.13** TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.
- **37.14** The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/concessions available under tax laws. Any error of interpretation of applicability of taxes/duties by the contractor shall be to contractor's account.
- **37.15** It is the responsibility of the bidder to quote the correct GST rate. The classification of goods/services as per GST (Goods & Service Tax) Act should be correctly done by the contractor to ensure that input tax credit on GST (Goods & Service Tax) is not lost to the OIL on account of any error on the part of the contractor.
- **37.16** In case, the quoted information related to various taxes, duties & levies subsequently proves wrong, incorrect or misleading, OIL will have no liability to reimburse the difference in the duty/tax, if the finally assessed amount is on the higher side and OIL will have to right to recover the difference and in case the rate of duty/taxes finally assessed is on the lower side.
- **37.17** Notwithstanding anything mentioned elsewhere in the Bidding Document the aggregate liability of OIL towards Payment of GST shall be limited to the volume of GST declared by the bidder in its bid & nothing shall be payable extra except for the statutory variation in GST.
- **37.18** Further, it is the responsibility of the bidders to make all possible efforts to make their accounting/IT system GST compliant in order to ensure availability of Input Tax Credit (ITC) to Oil India Ltd.
- **37.19** GST liability, if any on account of supply of free samples against any tender shall be to bidder's account.
- **37.20** In case of statutory variation in **GST**, other than due to change in turnover, payable on the contract value during contract period, the Supplier of Goods/Services (Service Provider) shall submit a copy of the 'Government Notification' to substantiate the rate as applicable on the Bid due date and on the date of revision.

Beyond the contract period, in case OIL is not entitled for input tax credit of **GST**, then any increase in the rate of **GST** beyond the contractual delivery period shall be to Service provider's account whereas any decrease in the rate **GST** shall be passed on to the OIL. Beyond the contract period, in case OIL is entitled for input tax credit of **GST**, then statutory variation in applicable **GST** on supply and on incidental services, shall be to OIL's account.

Claim for payment of **GST**/Statutory variation, should be raised within two [02] months from the date of issue of 'Government Notification' for payment of differential (in %) **GST**, otherwise claim in respect of above shall not be entertained for payment of arrears.

The base date for the purpose of applying statutory variation shall be the Bid Opening Date.

- **37.21** The contractor will be liable to ensure to have registered with the respective tax authorities, wherever applicable and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/E-way Bill, if applicable etc.
- **37.22** In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.
- **37.23** OIL will prefer to deal with registered supplier of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
- **37.24** Procurement of Specific Goods: Earlier, there is no tax incidence in case of import of specified goods (i.e. the goods covered under List-34 of Customs Notification no. 12/2012-Cus dated. 17.03.2012 as amended). Customs duty is not payable as per the policy. However, under GST regime, IGST Plus GST compensation cess (if applicable) would be liveable on such imports. Bidders should quote GST as inclusive considering IGST component for the imported Materials portion while quoting their prices on destination basis. However, GST rate to be specified in the price bid format.

37.25 Documentation requirement for GST:

The vendor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to OIL, and pass on the benefits, if any, after availing input tax credit.

Any invoice issued shall contain the following particulars:

- a) Name, address and GSTIN of the supplier;
- b) Serial number of the invoice;
- c) Date of issue;
- d) Name, address and GSTIN or UIN, if registered of the recipient;
- e) Name and address of the recipient and the address of the delivery, along with the State and its code,

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- f) HSN code of goods or Accounting Code of services[SAC];
- g) Description of goods or services;
- h) Quantity in case of goods and unit or Unique Quantity Code thereof;
- i) Total value of supply of goods or services or both;
- j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
- k) Rate of tax (IGST, CGST, SGST/UTGST, cess);
- Amount of tax charged in respect of taxable goods or services (IGST, CGST, SGST/UTGST, cess);
- m) Place of supply along with the name of State, in case of supply in the course of interstate trade or commerce;
- n) Address of the delivery where the same is different from the place of supply and
- o) Signature or digital signature of the supplier or his authorized representative. GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner
- a) The original copy being marked as ORIGINAL FOR RECIPIENT;
- b) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
- c) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

37.26 ANTI-PROFITEERING CLAUSE:

As per Clause 171 of GST Act it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Supplier of Goods/Services may note the above and quote their prices accordingly.

37.26.1 In case the GST rating of vendor on the GST portal/Govt. official website is negative/black listed, then the bids may be rejected by OIL. Further, in case rating of bidder is negative/black listed after award of work for supply of goods/services, then OIL shall not be obligated or liable to pay or reimburse GST to such vendor and shall also be entitled to deduct/recover such GST along with all penalties/interest, if any, incurred by OIL.

38.0 WITHHOLDING:

Company may withhold or nullify the whole or any part of the amount due to Contractor, after informing the Contractor of the reasons in writing, on account of subsequently discovered evidence in order to protect Company from loss on account of:

- a) For non-completion of jobs.
- b) Contractor's indebtedness arising out of execution of this Contract.
- c) Defective work not remedied by Contractor.
- d) Claims by sub-Contractor of Contractor or others filed or on the basis of reasonable evidence indicating probable filing of such claims against Contractor.
- e) Failure of Contractor to pay or provide for the payment of salaries/wages, contributions, unemployment compensation, taxes or enforced savings with-held from wages etc.

- f) Failure of Contractor to pay the cost of removal of unnecessary debris, materials, tools, or machinery.
- g) Damage to another Contractor of Company.
- h) All claims against Contractor for damages and injuries, and/or for non-payment of bills etc.
- i) Any failure by Contractor to fully reimburse Company under any of the indemnification provisions of this Contract. If, during the progress of the work Contractor shall allow any indebtedness to accrue for which Company, under any circumstances in the opinion of Company may be primarily or contingently liable or ultimately responsible and Contractor shall, within five days after demand is made by Company, fail to pay and discharge such indebtedness, then Company may during the period for which such indebtedness shall remain unpaid, with-hold from the amounts due to Contractor, a sum equal to the amount of such unpaid indebtedness.

Withholding will also be effected on account of the following:

- i) Order issued by a Court of Law in India.
- ii) Income-tax deductible at source according to law prevalent from time to time in the country.
- iii) Any obligation of Contractor which by any law prevalent from time to time to be discharged by Company in the event of Contractor's failure to adhere to such laws.
- iv) Any payment due from Contractor in respect of unauthorized imports.

 When all the above grounds for withholding payments shall be removed, payment shall thereafter be made for amounts so with-hold.

Notwithstanding the foregoing, the right of Company to withhold shall be limited to damages, claims and failure on the part of Contractor, which is directly/indirectly related to some negligent act or omission on the part of Contractor.

39.0 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 sub-contractor, value of sub-contacted work, copy of valid registration certificate etc.) of the sub-contractor to OIL.

40.0	PERFO	RMANCE	SECURITY:	The Contractor has	furnished to	Company a	Bank			
Guara	ıntee	No		dated		_ issued	by			
			for	(being 10% of A	nnualized Co	ntract value)	with			
validit	validity of 3(three) months beyond the contract period. The performance security shall be									
payab	le to Co	ompany as	s compensati	on for any loss result	ing from Conf	tractor's failu	ıre to			
fulfil t	heir obl	igations u	nder the Con	tract. In the event of e	xtension of th	e Contract pe	eriod,			
the va	lidity of	the bank	guarantee sh	nall be suitably extend	led by the Cor	ntractor. The	bank			
guara	ntee wil	l be discha	arged by Com	pany not later than 30	days followin	ng its expiry.				

Section II

SCHEDULE OF QUANTITIES (SOQ)

S1 No.	JOB DESCRIPTION	UNIT	QUANTITY (a)	RATE (INR)	TOTAL (INR)
01	Comprehensive Annual maintenance charge for 1 st year	Quarter	8	b	$A = (a \times b)$
02	Comprehensive Annual maintenance charge for 2 nd year	Quarter	8	С	$B = (a \times c)$
03	Cost of Mandatory Spares*	LSM	1	d	$C = (a \times d)$
	ost including Spares, Manpower, Fooding, Accod supports, all statutory liabilities, but excluding G				T = A + B + C

*The List of the mandatory spare list is being highlighted in the below mentioned Annexure I to VIII. This cost of mandatory spares to be inclusive of applicable GST. Also it is mandatory to quote against each spare which is to remain valid for throughout the tenure of contract.

S1 No. 03	Annexure			
Annexure I	Instrumentation Spares	VII		
Annexure II	Information Technology Spares	I to		
Annexure III	Mechanical Spares	Annexure enclosed		
Annexure IV	Electrical Spares			
Annexure V	Fire Service Spares			
Annexure VI	Cleaning Agent Spares			
Annexure VII	Storage Godown			
Annexure VIII	Air Conditioner Spares			

The price of the quoted spares remains fixed during the tenure of contract. If OIL decides to buy additional spares apart from mandatory spares as listed below, the contractor is bound to provide the same and the cost of the particular spare/spares will be paid as per the quoted price only.

Note:

- a. The rates (s) quoted against Sl no. 01, 02 & 03 including all statutory liabilities. GST, if applicable, shall be to the Company's account. However, GST portion payable directly by the Service Provider (if applicable) shall be reimbursed to the Contractor on the basis of the documentary evidence.
- b. The payment against Sl no. 01 & 02 will be made on quarterly basis i.e. "1 Quarter" quantity each for CTF Duliajan & Moran Tank Farm against each quarter of service availed which will be certified by OIL's Technical Committee Members.
- c. The payment against Sl. No. 03 will be paid once the all the listed spares reaches each installation after inspection and certification by OIL's Technical Committee Members.
- d. All the spares to be supplied must match with the corresponding make/model/part nos. and/or the already installed items at the Central Tank Farm, Duliajan and Moran Tank Farm. In case a prospective bidder(s) wants to visit installation to collect specifications, they may do so at their own cost within two days within the bidding period with due permission from OIL provided the bidder(s) have purchased the bid document before approaching OIL for permission.
- e. The rates shall be quoted per unit as specified in the "PRICE BIDDING FORMAT" (Section III) otherwise the bid will be rejected.
- f. Mobilisation Period: As specified in Clause no. 2.0 of SCC (Part-II).
- g. Tenure of Agreement: 02 (Two) years from the commencement date mentioned in the work order.
- h. The quantity mentioned is purely for evaluation purpose only. However, payment shall be made as per actual.

E-TENDER NO. CDO7246P18 PART-II SOQ

Annexure-I: Mandatory Spare list (Instrumentation Equipment/System as described in Part-I of SCC)

SL No	Field Instruments	Make	Description	Qty each Tank Farm	Total Reqmt. Quantity	UOM
1.0	Field	Instruments				
1.1	Gas Detectors	Crowcon	Model - Irmax	1	2	NOS
1.2	Pressure Transmitter -density measurement Emerson Model:- 3051L3AGOMD21A A DFK5D4T1Q4M5		1	2	NOS	
1.3	Pressure Transmitter -fire water hydrant line	Honeywell	Model:- STG170E1G0000HC SMZSA6LPCCTGMB F 1CA	1	2	NOS
1.4	Flow Transmitter	Honeywell	Model:- STD720E1HS4AS1C AHC11CB11AOF100 00	1	2	NOS
1.5	Level Gauge			1	2	NOS
1.6	Pressure Gauge	H.GURU	Model:- 6PSSSWS2	2	4	NOS
1.7	Temperature Gauge	H.GURU	I.GURU Model:- 68QSWS3 1		2	NOS
2.0	Pressure Relief Valve					
2.1	Disc Spring		Compatible	2	4	NOS
2.2	Bellows Gasket Set		Compatible	2	4	NOS

3.0	Local Control Panels					
3.1	All items like push bottom, hand switches, MCB, lamps, holder, selector switch, Indicator etc. mounted in the local panel	5 nos. of each item mentioned 1		2	NOS	
4.0	PLC E	Based System	s			
4.1	Each type of module used like I/O cards, all type of processor card, all type of power supply cards, communication cards, interface cards, controller cards, etc. as required for the system.					
4.1 a	Analog Input Card	Honeywell	Compatible	1	2	NOS
4.1 b	Digital output Cards	Honeywell	Compatible	2	4	NOS
4.1 c	Digital Input Cards	Honeywell	Compatible	2	4	NOS
4.1 d	Controller - safety PLC	Honeywell	Compatible	1	2	NOS
4.1 e	Power Supply Unit-Safety PLC	Honeywell	Compatible	1	2	NOS
4.1 f	Bulk & Key switch module (BKM)	Honeywell	Compatible	1	2	NOS
4.1g	Field Termina	ation Assemb	lies(FTA)			
	FTA (Field Termination Assembly) - DO	Honeywell	Compatible	2	4	NOS
	FTA (Field Termination Assembly) - DI	Honeywell	Compatible	1	2	NOS
	FTA (Field Termination Assembly) - AI	Honeywell	Compatible	1	2	NOS
	FTA (Field Termination Assembly) - Gas detector input	Honeywell	Compatible	1	2	NOS
4.1 i	IS Isolator Barriers				_	
	a) Analog Input (IS isolator barriers)	Pepperl + Fuchs	Model:- KFD2-STC4- EX1	1	2	NOS

	b) Analog Output (IS isolator barriers)		Compatible	0	0	NOS
	c) Digital Input (IS isolator barriers)	Pepperl +Fuchs	Model:- KFD2-SR2- EX1.WLB	2	4	NOS
	d) Thermocouple			0	0	NOS
	e) Digital Output (IS isolator barriers)	Pepperl + Fuchs	Model:- KFD2-SL2- EX1LK	2	4	NOS
4.2	Isolator/ Signal multipliers		Compatible	1 lot	2	LOT
4.3	Lamps, Selector switches, switches		Compatible	1 lot	2	LOT
4.4	Annunciators, Lamps, fuses		Compatible 1 lot		2	LOT
5.0	Tank Farm Managen	nent System(
5.1	Power Supply Module	Honeywell (Enraf)	1 no's of all types of radar,servo, TSI	1 no's of each	2	NOS
5.2	Communication module		etc.to be kept as spares		2	NOS
5.3	Bearing		-		2	NOS
5.4	TSI				2	NOS
5.5	Prefabricated Cable				2	NOS
5.6	Fuses				2	NOS
5.7	Electronic Cards for level instruments				2	NOS
5.8	Field interface unit (FIU)				2	NOS
F.0		Honeywell	1 - free space	1	2	NOS
5.9	Antenna	(Enraf	1- Still well	1	2	NOS
5.10	Multi element Temperature Sensor	Honeywell (Enraf	UBAN768C1180097 0	1	2	NOS

5.11	Power switch		Compatible	1 lot	2	LOT
6.0	MCT Blocks			1 lot	2	LOT
7.0	Instrumentation valves/fittings/tubes / cables(to be procured of size as per AS-built drawings)			1 lot	2	LOT
7.1	Instrument globe valves(to be procured of size as per as-built drawings)		Compatible	5nos	10	NOS
7.2	Instruments manifold(to be procured of size as per as-built drawings)		Compatible	2nos	4	NOS
7.3	Tube fittings - Male connector(to be procured of size as per as-built drawings)	Champ instrument s	Compatible	11nos	22	NOS
7.4	Tube fittings - female connector(to be procured of size as per as-built drawings)		Compatible	3nos	6	NOS
7.5	Tube fittings -union(to be procured of size as per as-built drawings)		Compatible	3nos	6	NOS
7.6	Tube - cap(to be procured of size as per as-built drawings)		Compatible	2nos	4	NOS
7.7	Tubes(to be procured of size as per as-built drawings)		Compatible	11 meters	22	Meters
8		Cables				
8a	3C X 2.5 Sq mm -Black		in meters	300	600	Meters
8b	12C X 2.5 Sq mm -Black		in meters	290	580	Meters
8c	24c X 1.5 Sq mm -Black	Thermocab le	in meters	550	1,100	Meters
8d	4C X 1.5 Sq mm -Orange		in meters	90	180	Meters
8e	8C X 1.5 Sq mm -Black		in meters	450	900	Meters

8f	12C X 1.5 Sq.mm -Black		in meters	70	140	Meters
8g	1P X 1.5 Sq mm -Black		in meters	90	180	Meters
8h	1P X 1.5 Sq mm -Blue		in meters	530	1,060	Meters
8i	2P X 1.5 sq mm -Black		in meters	70	140	Meters
8j	6P X 1.5 Sq mm -Black		in meters	160	320	Meters
8k	6P X 1.5 sq mm - Blue		in meters	62	124	Meters
81	2C X 2.5 sq mm -Orange		in meters	210	420	Meters
8m	24C X 1.5 sq mm -Orange		in meters	390	780	Meters
8n	1T X 2.5 Sq mm		in meters	90	180	Meters
80	8T X 2.5 sq mm		in meters	90	180	Meters
9	Junction Boxes	Flexpro	Minimum 1 Nos of each type	4	8	NOS
10	Ca	ble glands				
10 a	3/4" ET - Control room			1	2	NOS
10 b	1" ET			2	4	NOS
10 c	1.1/4" ET			3	6	NOS
10 d	1.1/2" ET	Flexpro	Minimum 1 no of each type or higher	1	2	NOS
10 e	1/2" NPT		caen type or mgner	14	28	NOS
10f	3/4" NPT			4	8	NOS
10 g	1" NPT			1	2	NOS

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10 h	1.1/4" NPT		2	4	NOS	
10i	3/4" ET - Radar		8	16	NOS	

Annexure-II: Mandatory Spare list (Information Technology System as described in Part-I of SCC)

SL NO	Field Instruments	Make			Total Reqmt Quantity	UOM
1.0	CCTV syst					
1.1	Each type of module use in the control unit of the system	Honeywell	NEXPTZ364PA	1 no.	2	NOS
1.2	DVD tapes		Compatible	5nos.	10	NOS

Annexure-III: Mandatory Spare list (Mechanical Equipment/System as described in Part-I of SCC)

(a) Centrifugal FW Pumps:

	PUMP MODEL: 8/10 DME							
	SERIAL NO 81240173/550/1-6, 81240173/590/1-5, 81240173/630/1-6							
SI			Qt	У				
No	Description	M.O.C	Duliajan	Moran	UOM	Total Reqmt Qty		
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	4		
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	2		
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	4		
4	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	4		
5	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	4		

6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS	4
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS	4
8	IMPELLER, P.N. 1500	CFB	1	1	NOS	2
9	NECK RING, P.N. 1181	CFBM	2	2	NOS	4
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS	4
11	GLAND, P.N. 2310	CI	2	2	NOS	4
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS	4
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET	2
14	LOCK NUT, P.N. 3010	STEEL	1	1	NOS	2
15	LOCK WASHER, P.N. 3020	STEEL	1	1	NOS	2
16	THRUST COLLAR, P.N. 2884	EN8	1	1	NOS	2

S1	D	35.0.0	Qt	y	77034	// / 1 D					
No	Description	M.O.C	Duliajan	Moran	UOM	Total Reqmt Qty					
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	4					
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	2					
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	4					
4	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	4					
5	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	4					
6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS	4					
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS	4					
8	IMPELLER, P.N. 1500	CFB	1	1	NOS	2					
9	NECK RING, P.N. 1181	CFBM	2	2	NOS	4					
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS	4					
11	GLAND, P.N. 2310	CI	2	2	NOS	4					
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS	4					
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET	2					

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1	14 LOCK NUT, P.N. 3010	STEEL	1	1	NO	2
1	LOCK WASHER, P.N. 3020	STEEL	1	1	NO	2
1	16 THRUST COLLAR, P.N. 2884	EN8	1	1	NO	2

PUMP MODEL: ET - ISO 17H

SERIAL NO 81240173 / 950 / 1 - 2, 81240173 / 1000 / 1 - 2, 81240173 / 1050 / 1 - 2

SI			Qt	y	UO	
No	Description	M.O.C	Duliajan	Moran	M	Total Reqmt Qty
1	O RING FOR CASING, P.N. 775 - 1	NITRILE RUBBER	1	1	NOS	2
2	O RING FOR SLEEVE, P.N. 775	NITRILE RUBBER	1	1	NOS	2
3	WATER DEFLECTOR, P.N. 729	EN8	2	2	NOS	4
4	LIP SEAL, P.N. 584	RUBBER	2	2	NOS	4
5	GLAND, P.N. 026	C.I.	1	1	NOS	2
6	LOGGING RING, P.N. 044	GFN	1	1	NOS	2
7	GLAND PACKING, P.N. 057	G.R. COTTON	1	1	SET	2
8	BEARING(IMP END),P.N. 464-1	SKF/FAG	1	1	NOS	2
9	BEARING(IMP END), P.N. 464	SKF/FAG	1	1	NOS	2
10	EXTERNAL CIRCLIP[, P.N. 454	STEEL	1	1	NOS	2
11	IMPELLER NUT, P.N. 442	CF8	1	1	NOS	2
12	SPACER SLEEVE, P.N. 287	SS 316	1	1	NOS	2
13	SHAFT SLEEVE, P.N. 286	SS 410	1	1	NOS	2
14	KEY IMPELLER, P.N. 084	SS 410	1	1	NOS	2
15	KEY COUPLING, P.N. 054	SS 410	1	1	NOS	2
16	SHAFT, P.N. 049	SS 410	1	1	NOS	2
17	NECK RING, P.N. 032	CF8M	1	1	NOS	2
18	IMPELLER, P.N. 031	CF8	1	1	NOS	2

(b) Fire Water Engine Spares:

S1			Qt	y	UO	
No	PART NO	DESCRIPTION	Duliajan	Moran	M	Total Reqmt Qty
1	605411880009	Lub oil filter v6/v8	4	4	NOS	8
2	1200240911/12	Filter element (micro + prime)	2	2	SET	4
3	10690000014/ 15	Air filter (inner + outer)	1	1	SET	2
4	123200198518	Coolant additive 5 ltr pack	1	1	NO	2
5	To match with Fire Water Engine	Injector	10	10	NO	20
6	To match with Fire Water Engine	Gasket set kit	2	2	SET	4
7	To match with Fire Water Engine	Washer set kit	2	2	SET	4
8	To match with Fire Water Engine	"V" Belts set kit	2	2	SET	4
9	To match with Fire Water Engine	Adaptors with 'O' ring & gaskets	2	2	SET	4
10	To match with Fire Water Engine	Exhaust flexible spool	2	2	NO	4
11	To match with Fire Water Engine	Pressure Gauge	2	2	NO	4

61				QT'	Y	UO		
	S1 No	PART NO	DESCRIPTION	Duliajan	Moran	M	Total Reqmt Qty	
	1	To match with the Foam	Lube Oil Filter	2	2	NO	4	

	Paris -					1
	Engine					
2	To match with the Foam Engine	Fuel Filter	2	2	NO	4
3	To match with the Foam Engine	Injector	10	10	NO	20
4	To match with the Foam Engine	Injector line, excess line, support clamp, gasket etc.	6	6	SET	12
5	To match with the Foam Engine	Pressure gauge line(lube oil)	2	2	NO	4
6	To match with the Foam Engine	Pressure gauge benzo bolts & washers	4	4	SET	8
7	To match with the Foam Engine	Blower fan	2	2	NO	4
8	To match with the Foam Engine	Air filter/cleaner assembly	2	2	SET	4
9	To match with the Foam Engine	Exhaust flexible spool	2	2	NO	4
10	To match with the Foam Engine	Exhaust gasket & 'O' rings	2	2	SET	4
11	To match with the Foam Engine	Tappet cover gasket	2	2	SET	4
12	To match with the Foam Engine	Gasket kit	2	2	SET	4
13	To match with the Foam Engine	V' Belts	4	4	SET	8

(d) Air Compressor:

SI			ŢΩ	Y	UO	
No	PART NO	DESCRIPTION	Duliajan	Moran	M	Total Reqmt Qty
1	271.01.432.5 0	Oil Filter Element	2	2	NO	4
2	273.03.772.5 0	Air Filter Element	2	2	NO	4
3	273.01.868.5 0	Air-Oil separator element with gaskets	1	1	NO	2
4	273.01.044.5 0	Gasket for Air intake valve	1	1	NO	2
5	273.50.109.5 0	Gasket for Air end delivery1	1	1	NO	2
6	273.01.491.5 0	'O' ring ID 56 x 3.55 DIA	3	3	NO	6
7	271.00.532.5 0	'O' ring 1/4"	1	1	NO	2
8	271.00.534.5 0	'O' ring 3/8"	7	7	NO	14
9	271.00.536.5 0	'O' ring 1/2"	3	3	NO	6
10	271.00.538.5 0	'O' ring 3/4"	3	3	NO	6
11	271.00.540.5 0	'O' ring 1"	4	4	NO	8
12	271.00.544.5 0	'O' ring 1-1/2"	2	2	NO	4
13	273.01.904.5	Service Kit for MPVL-40	1	1	NO	2
14	271.00.283.5 0	Service Kit for BDV 3/8" BSP	1	1	NO	2
15	273.01.453.5 0	Service Kit for intake valve -4"	1	1	NO	2

(e) Air Dryer:

C1			QT	Y	UO	Total Reqmt Qty	
S1 No	PART NO	DESCRIPTION	Duliajan	Moran	M		
1	To match with the Air Dryer	Main Valve Spare Kit	2	2	NO	4	

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2	To match with the Air Dryer	Exhaust Valve Kit	1	1	NO	2
3	To match with the Air Dryer	Solenoid Valve	3	3	NO	6
4	To match with the Air Dryer	Pre-Filter Element	1	1	NO	2
5	To match with the Air Dryer	After- Filter Element	1	1	NO	2
6	To match with the Air Dryer	Activated Alumina	1	1	Pack	2

(f) Rotary gear type Foam Pumps:

S1			TQ	Y		Total Reqmt Qty	
No	PART NO	DESCRIPTION	Duliajan	Moran	UOM		
1	To match with the Pump/s	DE and NDE bearing	2	2	NO	4	
2	To match with the Pump/s	Set of wear plates	2	2	SET	4	
3	To match with the Pump/s	V seal	2	2	NO	4	
4	To match with the Pump/s	Oil seal / Z pack	2	2	NO	4	
5	To match with the Pump/s	Paper packing	2	2	NO	4	
6	To match with the Pump/s	R.V.Spring	2	2	NO	4	
7	To match with the Pump/s	Coupling Spider	1	1	NO	2	
8	To match with the Pump/s	Rotor Stator Assembly	1	1	NO	2	
9	To match with the Pump/s	Relief Valve piston	1	1	NO	2	

Annexure-IV: Mandatory Spare list (Electrical Equipment/System as described in Part-I of SCC)

A. For Panel Equipment:

	n: Switch Room							
List of	Electrical Component S	Spares				Qty		UOM
S1 No	Component	Model	Make	Rating	Specification	each Tank Farm	Total Reqmt Qty	
1	Soft Starter	PSTX72-600-70	ABB Ltd.	37KW	415V, Control Voltage 240V	1	2	NOS
2	Soft Starter	PSTX142-600-70	ABB Ltd.	75KW	415V, Control Voltage 240V	1	2	NOS
3	Motor Protection Relay	REM 610	ABB Ltd.			2	4	NOS
4	Fedder Protection Relay	REF 615	ABB Ltd.			1	2	NOS
5	Air Circuit Breaker	3P E00, MS Type	ABB Ltd.	800 A	MS Type	1	2	NOS
		T4S 320PR221D5- LS/1	ABB Ltd.	320A	415V	1	2	NOS
		T4S 250 PR221DS- LS/1	ABB Ltd.	250A	415V	2	4	NOS
	Mach in h	T4S 250 PR221LS/1 R160A	ABB Ltd.	160A	415V	1	2	NOS
6	MCCB with Rotary handle add on	T2S160 PR221DS-1	ABB Ltd.	100A	415V	1	2	NOS
	nandle add on	T2S 160 PR221DS- 1	ABB Ltd.	63A	415V	2	4	NOS
		T2S 160 PR221DS- 1	ABB Ltd.	25A	415V	1	2	NOS
		T2S160FF 3P PR221-LS/1R10	ABB Ltd.	16A	415V	4	8	NOS
7	Potential Transformer (PT)	,			415/V3/110/V 3 cl-1, 110VA	1	2	NOS
8	Control Transformer				415/240V, INSULATION CLASS B, 2KVA	1	2	NOS
9	Current Transformer			100/1A,	Cl 1.0	1	2	NOS

				5VA				
				150/1A , 15VA	Cl 1.0	1	2	NOS
				100/5A , 15VA	Cl 1.0, 5P10	1	2	NOS
				50/1A, 15VA	Cl 1.0	1	2	NOS
				30/1A 15VA	Cl 1.0	2	4	NOS
				150/5A , 15VA	Cl 1.0, 5P10	1	2	NOS
				250/1A, 15VA	Cl 1.0	2	4	NOS
				800/5A , 15VA	Cl 5P10	1	2	NOS
				300/1A, 15VA	Cl 1.0	2	4	NOS
				60/1A, 15VA	Cl 1.0	1	2	NOS
				400/1A, 15VA	Cl 1.0	1	2	NOS
			ABB Ltd.	2A	TPN	2	4	NOS
		S202M	ABB Ltd.	6A	DP	10	20	NOS
			ABB Ltd.	63A	TP	3	6	NOS
			ABB Ltd.	32A	TP	1	2	NOS
10	MCB		ABB Ltd.	63A	DP	2	4	NOS
			ABB Ltd.	10A	DP	4	8	NOS
			ABB Ltd.	32A	DP	2	4	NOS
			ABB Ltd.	16A	DP	1	2	NOS
			ABB Ltd.	125A	DP	1	2	NOS
11	Fuse			25A	415Vac	2	4	NOS
12	Switch Disconnector	OT16F3	ABB Ltd.	16A	415Vac, 3phase	1	2	NOS
14	Switch Disconnector	OT400E03 P	ABB Ltd.	400A	415Vac, 3phase	1	2	NOS
13	ELR with CBCT	EL-02	Prok Device Pvt Ltd.	30- 300mA	85-275Vac	5	10	NOS
				0-250A		1	2	NOS
14	Ammeter			0-300A		1	2	NOS
				0-400A		1	2	NOS
15	Voltmeter			0-500A		1	2	NOS
16	Selector Switch	4S39AP	KAYCEE	240V Ac		5	10	NOS

		E16DU18. 9	ABB Ltd.		415Vac	1	2	NOS
17	OLR	E45DU45	ABB Ltd.		415Vac	1	2	NOS
		E80DU80	ABB Ltd.		415Vac	1	2	NOS
			ABB Ltd.	50A	220-240V COIL VOLTAGE 3P	3	6	NOS
			ABB Ltd.	16A	220-240V COIL VOLTAGE 3P	10	20	NOS
			ABB Ltd.	75A	220-240V COIL VOLTAGE 3P			NOS
18	TP Contactor		ABB Ltd.	145A	220-240V COIL VOLTAGE 3P	1	2	NOS
			ABB Ltd.	95A	220-240V COIL VOLTAGE 3P	2	4	NOS
			ABB Ltd.	185A	220-240V COIL VOLTAGE 3P	2	4	NOS
			ABB Ltd.	260A	220-240V COIL VOLTAGE 3P	1	2	NOS
19	Multi Function Meter	Rish EM 3490 SS	Rishabh Instruments			1	2	NOS
20	LED indicator Lamp	SPLBRL	TEKNIC	240V Ac	10 each of Red, Yellow Green	1	2	NOS
21	Push Button Switch			415V ac	Compatible	10	20	NOS

B. HVLF	RM System Spares: Motor \$	Spares			Qty		
Sl No	Description	Make	Ratings	Specification	each Tank Farm	Total Reqmt Qty	UOM
	Jet/ Spray movement	Laxmi Hydraulic Ltd	0.18 KW,	3 Ph FLP Induction Motor, Ex-d			
1	Motor		415V±6%,	IIA, IIB, T6, IP-65, S3 duty cycle,	3	6	NOS
			50Hz	rpm: 1350, Frame: 71, Insulation			
2	Right Left Movement	Laxmi Hydraulic Ltd	0.37KW,	Class F			
	Motor		415V±6%,		3	6	NOS
			50Hz				
3	Up/Down movement	Laxmi Hydraulic Ltd	0.37KW,				
	Motor		415V±6%,		3	6	NOS
			50Hz				
4	MOV Motor	Larmi Hydraulia I td	0.75KW,	3 Ph induction motor, 415V,	3	6	NOS
4	MOV MOTOL	Laxmi Hydraulic Ltd	415V,	Duty:S2,IP: 67, Insulation class: F	3	O	NOS

<u>E-TENDER NO. CDO7246P18</u> | 50Hz | PART-II SOQ

Spares f	or HVLRM panel				Qty		
Sl No	Component	Make	Rating	Model	each Tank Farm	Total Reqmt Qty	UOM
1	MCB	ABB	2A	S202M C2	5	10	NOS
2	OLR	SIEMENS	240V, 50/60HZ	SIRIUS	5	10	NOS
3	SMPS	Trio Power	240Vac/2 4VDdc	Compatible	3	6	NOS
4	Switch Amplifier	Pepperl+Fuchs	24Vdc	KFD2 SR2-Ex.2w	3	6	NOS
5	Selector Switch	KAYCEE	16A/440V ac, 50Hz	N2U3920	5	10	NOS
6	Push Button			ZB2-BE102	5	10	NOS
7	LED indicator lamp, Red, Yellow, Blue, geen		110Vdc		5	10	NOS

C. LightingEquipments:

Item	Description	Qty Reqd each Tank Farm/yr	Qty Total (2yr)	UOM
HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12	48	NOS
HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8	32	NOS
Metal Halide	Type: BS/MH-400, Make: Bajaj	10	40	NOS
Choke	220V, Tube light chock, 36/40W, Make: Bajaj, Copper	20	80	NOS
Starter	220V, Tube light starter, Make: Phillips	30	120	NOS
Capacitor	20 MFD	10	40	NOS
Capacitor	33 MFD + - 5%,250V	20	80	NOS
	HPMV Ballast HPSV Ballast Metal Halide Choke Starter Capacitor	HPMV Ballast 400 W HPMV Ballast, Make : Bajaj HPSV Ballast 400W HPSV Ballast, Make : Bajaj Metal Halide Type : BS/MH-400, Make : Bajaj Choke 220V, Tube light chock, 36/40W, Make : Bajaj, Copper Starter 220V, Tube light starter, Make : Phillips Capacitor 20 MFD	ItemDescriptioneach Tank Farm/yrHPMV Ballast400 W HPMV Ballast, Make : Bajaj12HPSV Ballast400W HPSV Ballast, Make : Bajaj8Metal HalideType : BS/MH-400, Make : Bajaj10Choke220V, Tube light chock, 36/40W, Make : Bajaj, Copper20Starter220V, Tube light starter, Make : Phillips30Capacitor20 MFD10	ItemDescriptioneach Tank Farm/yrTotal (2yr)HPMV Ballast400 W HPMV Ballast, Make : Bajaj1248HPSV Ballast400W HPSV Ballast, Make : Bajaj832Metal HalideType : BS/MH-400, Make : Bajaj1040Choke220V, Tube light chock, 36/40W, Make : Bajaj, Copper2080Starter220V, Tube light starter, Make : Phillips30120Capacitor20 MFD1040

D. UPS Spares List of Spares for the UPS

S1 No.	Item Description	Make	Rating	Quantity /Tank Farm	Qty Total	UOM
1	Sysytem Manager Card	HITACHI HiREL	Compatible	1	2	NOS
2	System Control Card	HITACHI HiREL	Compatible	1	2	NOS
3	Rectifier Control Card	HITACHI HiREL	Compatible	patible 2		NOS
4	SMPS	HITACHI HiREL	Compatible	1	2	NOS
5	IGBT gate drive card	HITACHI HiREL	Compatible	4	8	NOS
6	Heat Sink Cooling Fan	REXNORD/NA D/NISIKI	Compatible	1	2	NOS
7	Inverter IGBT	SEMIKRON/EU PEC	400A/120 0V	4	8	NOS
8	Thyristor Module	SEMIKRON/E UPEC	Compatible	3	6	NOS
			200A	5	10	NOS
9	Fuse	BUSSMANN	250A	3	6	NOS
			160A	3	6	NOS
10	DC Filter Capacitor	EPCOS/ELECT ROCION	Compatible	4	8	NOS
11	AC Filter Capacitor	EPCOS/ALCON /BHC-RIPA	Compatible	4	8	NOS
12	Metal Oxide Varistor		Compatible	3	6	NOS

E. Lighting Spares for CTF Duliajan & CTF Moran

LIGHTING SPARES OF CTF DULIAJAN

S1 No	Location		Manufacture/T	DEMARKS	Required	Otv	
	Outdoor Flood Light	Model	уре	REMARKS	Qty (Nos)	Total	UOM

E-TENDER NO. CDO7246P18 PART-II SOQ

1	Control Room / FWPH / Switch Room	FD1 (1 X250 w) HPMV	Philips SNF- 14/250 Bajaj BJEF - 14CAT Crompton FAD- 1314	Complete fitting with controlgear box and lamp-3 nos. Additionally lamp-6 Nos; Ballast-4 Nos.	3	6	NOS
2	Street lighting	ST- 10 with 1 X 125w HPMV		HPMV Lamp-6 Nos.	6	12	NOS
Indoor	Lighting	123W HFMV					
Indoor	Lighting	IND1 (1X40W)	Philips- TMC501/136 Crompton - IGP13-24HSB Bajaj - BJIR- 136140	Crompton - GP13-24HSB Bajaj - BJIR- Fluorescent tube		8	NOS
		IND2 (2X40W)	Philips- TMC501/236 Crompton - IGP13-24HSB Baja-BJIR-236	Fluorescent tube	3	6	NOS
3	Control Room /FWPH /Switch Room	RSD6 (2X40W)	Philips-HDK- 225HPL250 Darklite. Crompton- CRFD24HSB Bajaj BJDL 236	Fluorescent tube	15	30	NOS
		CFL3 (2X11W)	Crompton TLE211 Philips FCS-518/211 Bajaj BJMS 211	CFL	2	4	NOS
		CFL4 (2X11W)	Crompton TLD211 Philips FBS-518/211 Bajaj BJMR 212	CFL	4	8	NOS
		HB1 (1X250W)	Philips HDK- 225HPL250 Crompton IMB1325IH Bajaj BJHBI-	HPMV	4	8	NOS

			250				
		LB2 (1X125W)		HPMV	3	6	NOS
		IND4 (2X40W)	Philips- TKC 203/236 Crompton - IGE1324/RSE2 4 Baja-BJIV- 236	Fluorescent tube	3	6	NOS
		BK1 (1X100W)		GLS LAMP	1	2	NOS
High Ma	ast						
4	High Mast Light	RPV302 2 X SON-T 400W		Complete fitting with controlgear box and lamp- 4 nos. Additionally lamp- 10Nos; Ballast-4 Nos., Ignitor-10 nos.	olgear box and lamp- 4 s. Additionally lamp- 4 DNos; Ballast-4 Nos.,		NOS
Power F	Plug/Switch Socket						
		5A,240V, RECEPTACLE			12	24	NOS
5	Control Room / FWPH /	5A,240V, PIANO TYPE			20	40	NOS
	Switch Room	5A/15A, 240V, RECEPTACLE WITH SWITCH			12	24	NOS
МСВ							
6	Control Room / FWPH / Switch Room	40A MCB TP 10A MCB DP 20A MCB DP	Legrand DX3 Legrand DX4 Legrand DX5		5 10 10	10 20 20	NOS NOS NOS
	es for High Mast Panel.	Make	Model No.	Ratings	Quantit	Total Qty	UOM
Sl. No.	Item				y	£-J	
1	TP Contactor	L&T	MNX45	85A	2	4	NOS
_		Havels		63A	2	4	NOS
2	DP Contactor	L&T	MNXA2	4A	4	8	NOS

3 Fuse		Bussmann	FA	32A, 3W	14	28	NOS
3	ruse		HF 14X	16A, 3pole	6	12	NOS
4	Timer	GIC		Compatible	2	4	NOS
5	3P MCB			6A,	4	8	NOS
6	Selector Switch	Recom		10A/16A	2	4	NOS

G. Day to	Day Electrical Maintenan	ce Spares:	Qty		
Sl. No.	Item	Description	Reqd/Yr /Tank Farm	Total Qty Reqd (2 yrs)	UOM
1	HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12	48	NOS
2	HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8	32	NOS
3	Metal Halide	Type: BS/MH-400, Make: Bajaj	10	40	NOS
4	Choke	215V, Tube light chock, 36/40W, Make: Bajaj, Copper	20	80	NOS
4	Starter	215V, Tube light starter, Make : Phillips	30	120	NOS
5	Capacitor	20 MFD	10	40	NOS
6	Capacitor	33 MFD + - 5%, 250V	20	80	NOS
7		LED T/L Fittings	15	60	NOS
7	LED Lights	Driver for the LED T/L	20	80	NOS
		HRC, SS type - 4A, 6A, 10A	12	48	NOS
	Fuse	HRC, E.I.T. Type - 32	10	40	NOS
8		HBC Fuse link-125A, Type: TSDS, Make: GE	8	32	NOS
		HBC, 200A, Type: TSF 200, GE	4	16	NOS

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		400W, HPSV, Bajaj(HM), Type : BJR	12	48	NOS
		400W, HPSV, Bajaj (Threaded)	8	24	NOS
9	Bulb	400W, HPSV, 220V Bajaj (Threaded), SON-T	8	24	NOS
9	Buib	20W Fluorescent Lamp, Phillips	20	80	NOS
		400W HPMV Lamp	6	24	NOS
		40W Fluorescent Lamp, Phillips	12	48	NOS
10	Panel Indicator Lamp	Red, Yellow, Blue: LED Type	12	48	NOS
1.1	MOD	DP-6A, 10A,16A, 25A& 32A, Make: Havells	6	24	NOS
11	MCB	SP- 32A, Make: Havells	6	24	NOS
12	Cleaning agents	CRC 2-26/ Equivalent	4	16	NOS

Annexure-V: Mandatory Spare list (Fire Service Equipment/System as described in Part-I of SCC)

(a) Spare Part list for HVLR										
S1. No.	Spare Part	Vendor	мос	Qty DJN	Qty MRN	Total Qty	UOM			
1	Nozzle		SS-316	2	2	4	NOS			
2	Swivel Joints		SS-316	2	2	4	NOS			
3	Worm		SS-316	2	2	4	NOS			
4	Gear		SS-316	2	2	4	NOS			
5	Spindle for worm		SS-316	2	2	4	NOS			
6	Hand-wheels for Nozzle, horizontal/vertical movement		SS-316	10	10	20	NOS			
7	Drain connection		SS-316	4	4	8	NOS			

PART-II SOQ

8	Drain valve	M/s NK Fire	SS-316	4	4	8	NOS
9	Nuts/bolts at Monitor	Safety	SS-316	20	20	40	NOS
10	Mounting Brackets for Motors/Limit switches		SS-316	4	4	8	NOS
11	Deflector Set			4	4	8	NOS
12	Pressure gauge		SS-316	4	4	8	NOS
13	Push Button	_		6	0	6	NOS
14	Limit Switch	-		6	0	6	NOS
15	Proxy Sensor			6	0	6	NOS

(b) S S1. No.	pare Part list for MEFG Spare Part	Vendor	МОС	Qty DJN	Qty MRN	Total Qty	UOM
1	Glycerine filled S.S. Pressure Gauge(1-10kg/cm2)	M/s NK Fire Safety		2	2	4	NOS
2	Flexible tube connected to inline inductor	Salety		10	10	20	NOS

(c) Spare Part list of Hydrant

S1. No.	Spare Part	Vendor	мос	Qty DJN	Qty MRN	Total Qty	UOM							
1	Lugs			20	20	40	NOS							
2	Blank Cap with chain	M/s NK Fire	•	•	•	•	•	M/s NK Fire Safety	•		10	10	20	NOS
3	Washer	Safety		30	30	60	NOS							
4	Hydrant Wheel		SS-316	10	10	20	NOS							

(d) Spare Part list of Inline Balanced Foam Proportioner

E-TENDER NO. CDO7246P18 PART-II SOQ

S1. No.	Spare Part	Vendor	мос	Qty DJN	Qty MR N	Total Qty	UOM
1	Foam Proportioner		SS-304	2	2	4	NOS
2	Pressure balancing Valve		SS-304	4	4	8	NOS
3	Pressure Gauge-Water	M/s FIRETECH Equipment &	SS-316	4	4	8	NOS
4	Pressure Gauge-Foam		SS-316	4	4	8	NOS
5	Gasket		Nitrile	10	10	20	NOS
6	Nut, Bolt	Services Pvt.Ltd.	SS-304	20	20	40	NOS
7	Ferrule Fitting		SS-304	6	6	12	NOS
8	Drain Valve		SS-304	6	6	12	NOS
9	Flexible Tube			10	10	20	NOS

Annexure-VI: Mandatory Spare list (Cleaning Agent Equipment/System as described in Part-I of SCC)

The spares for Clean Agent system for each Tank Farm:

S1 No	Item details	Part no.	Model	Specification	Qty	Total Qty	UOM
1	N2 storage cylinder (Capacity-20.3 cum)	U4011	NN83CU-E	50 Mpa (HYDROSTATIC)	40 nos	80 nos	NOS
2	Cylinder valve(For N2 storage cylinder)	U2101	PC30BU	27.9 Mpa (operating)	40 nos	80 nos	NOS
3	N2 pilot cylinder (Capacity -8.2 cum)	U4002	NN82.5CU	24.5 Mpa (HYDROSTATIC)	2 nos	4 nos	NOS
4	Cylinder valve(For N2 pilot cylinder)	U2201	PH10NU	10 Mpa (opearting)	2 nos	4 nos	NOS

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5	Pressure Gauge 0-400 bar(For N2 storage cylinder)		PGS21		38 nos	76 nos	NOS
6	Pressure Gauge 0-250 bar (For pilot cylinder)		PGS21		2 nos	4 nos	NOS
7	Connecting Device (For PH10NU)				2 nos	4 nos	NOS
8	Releaser(For cylinder valve Model PH10NU)	U2501	PH10-N3	10 Mpa (operating)	2 nos	4 nos	NOS
9	LOOP PIPE (Pipe Dia- 18.4Xt 2.2 mm . Nut- G 3/4)	U2901	14QSU		38 nos	76 nos	NOS
10	NON RETURN VALVE	U3101	14SU	10 Mpa (operating)	38 nos	76 nos	NOS
11	CO2 actuating cylinder	U0210	AC2.1U	24.5 Mpa (HYDROSTATIC)	6 nos	12 nos	NOS
12	Cylinder Valve(For CO2 actuating cylinders)	U0015	PH5CU	5.6 Mpa (Operating)	6 nos	12 nos	NOS
13	Cylinder Valve Solenoid(For cylinder valve Model PH5CU)	U0060	R85M14		6 nos	12 nos	NOS
14	Non RETURN VALVE	U0095	4S-B		6 nos	12 nos	NOS

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15	Non RETURN VALVE	U3001	LCV4A	10 Mpa (Oprating)	3 nos	6 nos	NOS
16	Relief Valve (Small leakage valve)	U0090	4BLA	0.098 Mpa (Max relief Pr.)	6 nos	12 nos	NOS
17	Safety Vent	U3201	SAV94U	11.9 to 16.2 Mpa (Opearting)	1 nos	2 nos	NOS
18	Selector Valve	U0073	PD 50KU	10.0 Mpa (Operating)	3 nos	6 nos	NOS
19	Pressure Switch		PR79-1MT		3 nos	6 nos	NOS
20	Discharge Nozzle	U3621 U3341	20ZMTU,25 ZMTu	3/4" (20A) 12 nos 1"(25A)9 nos	21 Nos	42 Nos	NOS
21	Resetting Tool		TCR65B		1 set	2 set	SET
22	Spanner(For PH type cylinder valve releaser)		PH14D		1 set	2 set	SET
23	Fire alarm control panel (which is an intelligent addressable fire alarm system)		S508	S508 fire alarm control panel.	1 no	2 nos	NOS
24	Miniature contact module		FRRU004- MCM		3 nos	6 nos	NOS
25	Single contact Module		FRRU004- SCM4		3 nos	6 nos	NOS
26	Dual Contact Module		FRRU004- DCM4		3 nos	6 nos	NOS
27	Monitored Output Module		FRRU004- MOM4		3 nos	6 nos	NOS
28	MCP Indoor call point range MCP3 NO/NC Contact Model (Red Version)		MCP3A- R00SF- K013-01		3 nos	6 nos	NOS

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29	MCP Indoor call point range MCP3 NO/NC Contact Model (Yellow)	MCP3A- Y000SF- K013-11		3 nos	6 nos	NOS
30	System Sensor (SPECTR Alart)		2-Wire Horn Strove, standardcd, red	1 no	2 nos	NOS
31	Pressure relief Damper (500x415 mm)	UL. KUL		3 nos	6 nos	NOS

Annexure-VII: Storage Godown (Specifications as per Clause no. 3.8, Part-I of SCC)

S1 No	Item details	Specification	Quantity	Total Quantity	UOM
1	Storage Godown	As per Specification, Clause no. 3.8 of TOR	2	4	NOS

Annexure-VIII: Cost of Mandatory spares of Air Conditioners System as described in Part-I of SCC

Make: Bluestar. Model No: DPAP1983R1 - I

Capacity: 16.56 TR (3 compressor of 5.5TR capacity) Air Cooled

Total No. of units: 12 nos. (6 No. at CTF Duliajan and 6 No. at Moran Tank

farm)

Indica	Indicative list of spares and quantity to be maintained by the contractor for two years AMC given below:						
S1.	Commonant	36 - 4 - 1	Mr. L.	Datina	Total	пом	
No.	Component	Model	Make	Rating	Quantit y	UOM	
1	Compressor Specifications: 5.25KW, 2900rpm motor, Hermitically sealed	DPAN (BLUESTAR)	Emersen	5.5TR	3 nos.	NOS	

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2	Blower Motor Specification: 415V, 3 phase IM, Duty S1, Encl TE, rpm 1430, Frame:100L		Hindustan Electric Motor	ЗКW	lno.	NO
3	Air Filter: 1255X688mm2	Blue Star	Blue Star		18 nos.	NOS
4 (a)	V Belt (Wet Grinder Belt)	A28	Ecodrive		10 nos.	NOS
4 (b)		A199L LP/A77	Flexer		10 nos.	NOS
5	Refrigerant Filter Drier		Danfoss		4 nos.	NOS
6	мссв	DL100	L&T	63A	4 nos.	NOS
7	MCB		L&T	6A	6 nos.	NOS
8	CT - 60/1A 5VA, Class -1		Kappa Electrical	60/1 A	4 nos.	NOS
9	Controlling PCB				2 nos.	NOS
10	Running capacitor				6 nos.	NOS
11	HPLP switch (8nos HP + 8nos LP switch)				16 nos.	NOS
12	Expansion valve				2 nos.	NOS
13	Outdoor fan blade				4 set	SET
14	Condenser fan motor				6 nos.	NOS
15	R22 refrigerant, 61 kg (per cylinder)				1 cylinder	CYLINDE R
16	Leak Test (detector) N2 cylinder				4 nos.	NOS
17	Contactor 3phase				10 nos.	NOS

PART-I

TERMS OF REFERENCE AND SCOPE OF SERVICES FOR COMPREHENSIVE ANNUAL MAINATENANCE CONTRACT (CAMC) FOR CENTRAL TANK FARM (CTF), DULIAJAN AND MORAN TANK FARM (MTF)

1.1 GENERAL DESCRIPTION OF CTF DULIAJAN:

Central Tank Farm (CTF), Duliajan Oil India Limited (OIL), is a premier Indian National Oil company engaged in the business of exploration, development and production of crude oil and natural gas, transportation of crude oil and production of LPG. OIL has over 1 Lac sq. Km of PEL/ML areas for its exploration and production activities, most of it in the North East India, which accounts for its entire crude oil production and majority of gas production. Rajasthan is the other producing area of OIL, contributing 10% of its total gas production. Additionally, OIL's exploration activities are spread over onshore areas of Ganga valley and Mahanadi. OIL also has participating interest in NELP exploration blocks in Mahanadi offshore, Mumbai Deepwater, Krishna Godavari Deepwater etc. as well as various overseas projects in Libya, Gabon, USA, Nigeria and Sudan. OIL's present level of crude production stands at around 3.2million tonnes per annum.

Central Tank Farm (CTF) with 54,836 M3 storage capacities is located at Duliajan, Assam near OIL's Field Headquarters. Crude oil produced at different OIL Installations of Greater Hapjan, Greater Chandmari, Naharkatya Field, Jorajan Field and CBUS flow to CTF. CTF is situated inside the industrial area of Duliajan adjacent to a Pump Station, a Captive Power Plant and a LPG Bottling Plant of OIL. OIL shall supply electrical power from the adjacent power plant at a single point inside the plant boundary for plant operation.

At CTF crude oil will be supplied to the suction of booster pump of the pump station and the formation water is sent to OCS-3. The plant is also used as a storage facility of crude oil to tide over fluctuations of uplift of crude by OIL's customers. CTF has 54,836 M3 holding capacity consisting of four (4) nos. of fixed cone roof storage tanks each of 1109 M3 holding capacity and five (5) nos. of floating roof storage tanks each of 10,080 M3 holding capacity.

1.1.1 **DESCRIPTION OF PROCESS**

- a. **Incoming Crude**: The incoming crude from various OIL Installations is received at a common manifold from 07 (Seven) nos. of delivery lines from different fields including ITF-Tengakhat. From the manifold there is two header (8" and 14" line) interconnected with each other. 8" line is for the fixed roof tanks are earmarked for Digboi Refinery and the 14" line is for the floating roof tanks.
- b. **Storage Tanks**: Out of 04 nos. of fixed roof tanks and 05 nos. of floating roof tanks, one or two fixed roof and one floating roof tank is used to collect and retain the incoming crude oil being pumped from OIL's different installations. The temperature of the crude storage tanks are maintained at an average of 40° C with the help of steam coil. The other Tanks are used as:
 - Filled up Tank.

- Dispatch Tank for custody transfer to Pump Station-1.
- For handling crude in Emergency Situation.
- **c. Formation Water Handling:** Formation water separates out by settling process at the tanks and is further pumped to OCS-3 for further disposal process.
- **d. Fire Fighting Facility**: Firefighting facility is in conformity to revised OISD-STD-117 and MB Lal Committee recommendations, OMR and TAC norms. CTF-Duliajan has:
 - 06 (Six) number of diesel engine driven Fire water drenching pumps with 616KL/Hr capacity at 105m water Head.
 - 02 (Two) nos. of motor driven Jockey Pumps for maintaining the ring main pressure with 130 m3/hr capacity and 110 meter head.
 - 02 (Two) nos. of motor driven Foam pumps with 26.6 KL Foam availability.
 - Foam Monitors & Foam Pourers at the tanks. Each storage tank has its own insitu foam generating arrangement, water drenching system to fight accidental fire. An integrated fire protection and fire-fighting facility are available for the plant in accordance with OISD-STD-117.
 - Standby static water storage facility comprising of 7200 KL ground water reservoir and 02 (Two) nos. of over ground tanks of 1930KL each is available in accordance with OISD norms for catering to bulk firefighting water requirement during emergencies
 - 16 (Sixteen) numbers of Medium Expansion Foam Generators.
 - Differential Pressure Inductor Foam system.
 - 10 (Ten) numbers of Remote operated High Volume Long Range Monitors.
 - 06 (Six) numbers of manual operated High Volume Long Range Monitors
 - Fire Detection & Suppression System. Any other changes to meet OISD 117 and MB Lal committee recommendations
 - Clean Agent System for Control Room.
- 1.1.2 **Description of Facilities**: Following facilities/infrastructure are available at CTF:
 - i) Tank Farm (i.e. Crude Oil Storage Tanks) of 54,836 M3 holding capacity consisting of 04 (Four) nos. of fixed cone roof storage tanks each of 1109 M3 capacity and 05 (Five) floating roof storage tanks each of 10080 M3 holding capacity complete with accessories, safety implements & corrosion prevention system.
 - ii) Effluent Collection System for collection of separated formation water out of the Tanks. The effluents are collected and are pumped to the storage tanks and further the separated formation water is dispatched to OCS-3 for disposal.
 - iii) There are two Oily Water Separator (OWS) systems one with closed network of MS pipes of diameter 10 inches around tank farm and the other (New) is an underground closed network of MS pipes of diameter 10 inches around tank farm.
 - iv) Fire Protection & Fire fighting System.
 - v) Electrics and Illumination –High Masts, street lights, peripheral lighting.

vi) Instrumentation, Control & Communication system for plant management & fail-safe operation through control room operation

Civil infrastructure-Buildings & sheds, utility buildings, control room, garden, roads, drainage & OWS

1.1.3 Other ancillary-facilities available for smooth running of the plant

- i) Interconnection of the fire network with OCS-5, Pump Station-1 and LPG Plants.
- ii) Outside motor able peripheral road for security patrolling
- iii) 02 numbers of watch towers.
- iv) Parking space.
- v) CCTV System
- 1.2 **General Description of Moran Tank Farm**: Moran Tank Farm (MTF) is located within OIL Industrial area at a distance of 6 km from the Moran Railway station. Nearest Airport is Mohanbari (Dibrugarh) Airport about 55 km from the MTF. Moranhat Police Station is located at a distance of 5 km and Fire Service Station of OIL, Moran is just 0.3 km from MTF. The NH-37 is passing nearby at a distance of 2.25 km.

Crude Oil from various field installations (OCSs & EPS) after treatment is pumped to the Moran Tank Farm for further onward process. From here crude oil is then handed over to PIPELINE department for onward transportation to three refineries namely Numaligarh (NRL), Guwahati refinery & Bongaigon (BRPL) through our trunk pipeline after properly drained out water and getting satisfactory TMB sample result (within 0.5%). The crude oil distribution to the refineries is based on OCC allocation. There are five no. of crude oil tanks out of which four are FLOATING ROOF and one is FIXED ROOF type. There are two no. formation water tanks of capacity 160 KL each tank and one no. skimmed oil tank of capacity 18 KL.

1.2.1 **DESCRIPTION OF FACILITIES**

a. **OIL TANKS**

- i) 04 (Four) nos. Floating Roof welded tanks of 5000 KL capacity of each & 01 no. Fixed Roof welded tank 2500 KL capacity for storage of crude oil. The floating roof tanks are enclosed with a suitable earthen bund of adequate capacity (equal to the capacity of the tank) to arrest crude oil if any leakage appear.
- (One) no. 2500 KL capacity welded tank for storage of crude oil. iii) 01
 (One) no. 18KL capacity welded tank for collecting skimmed oil from formation water tanks.

b. **FORMATION WATER TANKS**: 02 (Two) no. formation water tanks of capacity 160 kl each to collect formation water from oil storage tanks, which is coming with crude oil.

c. **PUMPS**

- i) 04 nos. centrifugal pumps (3 no. motor driven & 1 no. engine driven) are installed for Fire Fighting. Capacity of the pumps is 300 kl/Hr.
- ii) 01 no. motor driven centrifugal formation water pump for disposing formation water at 02 no. F/W disposal wells.
- iii) 01 no. reciprocating type oil soluble de-emulsifier pump of capacity 0.5 HP for dozing OSD at crude oil incoming line.
- iv) 02 no. vertical centrifugal pumps for charging (pumping) crude oil from tank to EET.

d. **FIRE FIGHTING**

- i) 06 (Six) number of diesel engine driven Fire water drenching pumps with 616KL/Hr capacity at 105m water Head.
- ii) 02 (Two) nos. of motor driven Jockey Pumps for maintaining the ring main pressure with 120 m3/hr capacity and 110 meter head.
- iii) 02 (Two) nos. of Foam pumps (1 diesel + 1 motor driven) with 17.70 KL Foam availability.
- iv) Foam Monitors & Foam Pourers at the tanks. Each storage tank has its own in-situ foam generating arrangement, water drenching system to fight accidental fire. An integrated fire protection and fire-fighting facility are available for the plant in accordance with OISD-STD-117.
- v) Standby static water storage facility in 02 (Two) nos. of over ground tanks of 4050 KL each is available in accordance with OISD norms for catering to bulk firefighting water requirement during emergencies.
- vi) 10 (Ten) numbers of Medium Expansion Foam Generators.
- vii) Differential Pressure Inductor Foam system.
- viii) 12 (Twelve) numbers of manual operated High Volume Long Range Monitors.
- ix) Fire Detection & Suppression System. Any other changes to meet OISD-STD-117 and MB Lal committee recommendations.

Clean Agent System for Control Room.

e. **EMULSION TREATER**: Emulsion Treater has been installed at Moran Tank Farm to separate oil-water emulsion stored in the crude oil storage tanks and for breaking or resolving emulsified crude oil into water and saleable clean oil components. At present CTF receive crude oil from OCS Moran, 2nos OCS's from Shalmari and also from Deroi

EPS which is being collected in 4nos tanks. After settling, separated water from crude is disposed and remaining hydrated crude pumped to the Emulsion Treater, where BS&W content is processed down to desirable limit. After that the crude is handed over to Pump Station-2 for onward dispatch to refineries.

- **2.0 BROAD SCOPE OF WORK**: The broad scope of work under this **COMPREHENSIVE ANNUAL MAINTENACE CONTRACT** is to maintain the following Equipments/Facilities/Systems along with making provision of spares as per terms of this contract for **CTF Duliajan and Moran Tank Farm**.
 - a) Safety PLC system & consoles and their associated systems and subsystems.
 - b) Complete Tank Farm Management system (TFMS) with temperature and water cut measurement.
 - c) CCTV systems , subsystems and field installed cameras
 - d) Clean agent system,
 - e) Fire alarm panel & detectors,
 - f) Packaged AC system,
 - g) UPS system for Power Backup,
 - h) Control Room Internal lighting system
 - i) SIL certified RADAR and SERVO Level gauges in each tank
 - j) ROSOV & MOV systems for automatic isolation of tank inlet & outlet. ROSOV ARE FAIL SAFE AND FIRE SAFE TYPE.
 - k) Online Gas Detector System ESD (Emergency shutdown system) from centralized control room & field.
 - l) PLC based Rim seal fire protection system (Presently under AMC with the OEM. The scope of this contract is to check and maintain the interface between the Safety PLC and the Rim Seal fire protection system)
 - m) HVLRM High velocity long range monitors Remote & Manual type Both in Moran & Duliajan with control panels, MOV etc.
 - n) Fire water pumps, Jockey pumps & associated sub-systems inside pump house, related control system, electrical system and equipment/valves installed in the hydrant line.
 - o) Fire water tanks, sprinkler system and related valves/instruments
 - p) Foam system & Piping Network- pumps, tanks, valves and related E&I
 - q) Electrical Switch room with PMCC, ELDB, ACDB & MLDB panels, Transformers etc.
 - r) Electrical Earthing System of Tank Farms CTF Duliajan and Moran Tank Farm.
 - s) All Field Instruments like PT, TT, Solenoid Valve, and Pressure switch, Pressure Gauge etc.
 - t) Compressed Instrument Air System Compressor, dryer, related E&I, valves etc.
 - u) High Mast Lighting system and outdoor lighting near ROSOV/MOV panels outside dyke
 - v) OWS system
 - w) Control Room, Fire pump house, Switch room, all sheds etc. in totality-Civil, AC & Lighting.

3.0 DETAIL SCOPE OF WORKS:

3.1 **INSTRUMENTATION**

FOR CTF DULIAJAN & MORAN TANK FARM

Comprehensive Annual Maintenance Contract (CAMC) shall include maintenance services for all instrumentation systems of Central Tank Farm (CTF) Duliajan and Moran Tank Farm including spares and consumables, tools/tackles as required for regular maintenance/preventative maintenance/breakdown maintenance if any for the following systems during the entire period of the contract and its extension, if any.

3.1.1 PLC (PROGRAMMABLE LOGIC CONTROLLER) BASED CONTROL SYSTEM: Complete PLC system including barriers, multiplexers, hardware, other device interfaces, PLC Servers, TFTs, PCs& printers, marshalling panels etc. including supply of spares, consumables.

The PLC system is SIL-3 (Safety Manager) and supplied by **M/s Honeywell Automation India Ltd.** with redundant controller along with redundant I/O cards. The each PLC system have two terminal servers, two operator stations, one Engineering Station, One History Note PC with printers, one TFMS server and one TFMS SCADA Server, their subsystems and their interconnections as per system architecture designed and commissioned under MB Lal recommendation Project for CTF Duliajan and Moran Tank Farm.

The Safety Manager PLC user for emergency shutdown for any Fire & Gas. PLC is interfaced with Honeywell SCADA package i.e. Experion Process Knowledge System (EKPS) through 10/100mpbs LAN connectivity.

The PLC has dual redundant processors with hot standby capability and redundant I/O system configuration. PLC has in built feature of self-diagnostics of hardware and program. The application of PLC system is as below.

For communication between processor and I/O, I/O-Extender is placed in I/O rack. Communications between PLC Processor and I/O modules have redundancy.

Honeywell Make Safety Manager PLC system with QPP-2 CPU's are used to executive action & alert plant persons in case of fire detection/Gas leakage. This PLC is mainly used for fire & Gas detection and alarming of various gas detectors. The operational logic is stored in this PLC. The operator station and Engineering station take the data from the PLC. USI (Universal Safety Interface) modules are installed in the processor racks. All I/O's are connected to the CPU through Daisy Chain topology.

Safety Manager typically consists of the following main components:

- Cabinet enclosure with swing frame
- Power supply consisting of power supply unit(PSUs) generating 24VDC, main switches and power distribution rails
- Controller chassis with 02 Nos QPPs (Quadruple Processor Packs), 2 Nos of USI(Universal Serial Interface) communication modules, 2 Nos of PSU/s(Power Supply Units 24 V to 5 V supply modules) and 1 No of BKM(Battery and Key switch Module)
- Input/output chassis

• Field Termination assemblies(FTA) and/or terminals

Communication Network comprises of two Westermo switches in redundant state which are connected to the project LAN. TCP/IP is the protocol used for communication between the stations and PLC. Operator station and Engineering Station has one number dual port NIC Card for communication over the redundant LAN. Each node on the network has two TCP/IP addresses except printers.

Power supply to PLC system is through one set of redundant UPS system with battery backup installed in the control room. The PSU-UNI2450U power supply in Safety Manager (SM) is a UL approved switch mode DC power supply which accepts wide range of input voltages to provide 24VDC/28 VDC.

The major field instruments/systems connected to SIL - 03 PLC systems are the following:

- 1) Servo Level Transmitter with Tank side indicators 09 Nos for CTF Duliajan and 05 Nos for Moran Tank Farm
- 2) Fire Water Radar Tank Level Transmitter with Tank side indicators 02 Nos each for CTF Duliajan and Moran Tank Farm
- 3) Hydrocarbon Gas Detector 09 Nos for CTF Duliajan and 05 Nos for Moran Tank Farm
- 4) Fire Water Flow Transmitter 02 Nos each for CTF Duliajan and Moran Tank Farm
- 5) Fire Water Pressure Transmitter 02 Nos each for CTF Duliajan and Moran Tank Farm
- 6) TFMS Pressure Transmitter 09 Nos for CTF Duliajan and 05 Nos for Moran Tank Farm
- 7) Inlet Line Pressure Transmitter 03 Nos for CTF Duliajan & 02 Nos for Moran Tank Farm
- 8) Air compressor Pressure Tranmsitter 02 Nos each for CTF Duliajan and Moran Tank farm
- 9) Air Flow transmitter- one each for CTF Duliajan and Moran Tank Farm
- 10) Actuators of Remote operated shut off valve (ROSOV) Total 19nos for CTF Duliajan and 10 Nos for Moran Tank Farm
- 11) Actuators of Motor operated Valve (MOV) for Auto/Remote operation from Control Room -22 Nos for CTF Duliajan and 12 Nos for Moran tank Farm
- 12)Complete ESD(Emergency Shutdown systems) interlocks for CTF Duliajan & Moran Tank Farm.

Note to Clause No. 3.1.1: The above list is not exhaustive, indicative only. The maintenance of all the PLC I/O Loops along with the field instruments terminated to it shall be in the contractor's scope. The control Room Servers, PCs, Display units and all accessories along with PLC controllers, Power supply units, I/O Cards, all Marshalling Panel Items, their maintenance, repair/replacement/upgradation etc. as and when required during the tenure of the contract shall be under contractor's scope. The preventive and breakdown maintenance of field instruments, their connecting junction boxes (JBs), terminal blocks and their accessories including the interconnecting cables/cable glands from PLC control panel through Junction boxes to field instruments shall be under the scope of this contract.

3.1.2 **TFMS system:** Total Tank Farm Management System (TFMS) and its sub-systems, TFMS servers including supply of spares, consumables.

Brief Description of TFMS System: The Tank Farm Management System (TFMS)is comprised of the following equipment including their interconnections.

(a) Field equipment:

- (i) Radar Tank Level Transmitters -11 Nos for CTF, Duliajan and 7 Nos for Moran Tank Farm
- (ii) Multi-element averaging type Temperature elements (VITO) for each Radar Level Transmitter.
- (iii) Tank side Indicator at the tank bottom for each Radar Tank Level Gauges
- (iv) Associated Field mounted Junction boxes and Power isolation switch and their interconnecting signal, power cables and cable glands etc.

b) Control room mounted Equipment:

- (i) Common interface Unit-CIU Prime: 2 Nos each for Duliajan and Moran
- (ii) Common interface Unit-CIU PLUS: 2 Nos each for Duliajan and Moran
- (iii) TFMS Servers (02 Nos.) with all required software packages including peripherals such as TFT, Keyboard, Printers.
- (iv) Hand Held configurator/calibrator for programming & configuration of Radar Gauges.

Note to Clause No.3.1.2: The scope of the contractor shall include but not limited to the following:

- 1) The contractor shall carry out routine calibration & Configuration as required as per Original Equipment Manufacturer (OEM) recommendation and shall be included in each preventative maintenance jobs.
- 2) TFMS database software upgradation during the tenure of the contract as and when upgrade is issued by the OEM.
- 3) Calibration report shall be submitted to OIL for record after each calibration.

- 4) The spares as and when required for maintenance during the tenure of the contract including minor/major repair or replacement of a part or whole shall be under the scope of contractor.
- 5) Any decommissioning/re-commissioning jobs related to TFMS System if required owing to undergo maintenance activities of the crude oil Tanks as planned by the Installation Manager (IM) during the tenure of the contract.

The broad scope of work under the maintenance contract shall include but not limited to Routine/Preventive/Breakdown maintenance, configuration, calibration/checking, software updates, decommissioning/re-commissioning if required for maintenance purpose etc. including repair/replacement of a part or whole as required during the tenure of the contract to keep the system functional.

3.1.4 THE CONTRACTOR MUST INCLUDE THE FOLLOWING IN THE MAINTENANCE PLAN:

(I) **PREVENTIVE MAINTENANCE**: Contractor shall depute their qualified service engineers as per terms of this contract to installation site (CTF Duliajan & Moran Tank Farm)for regular system check-ups, general healthiness of the system (H/W, S/W, Power supply, calibration checks, solving of any reported problems etc.) as part of periodic maintenance including consumables required for normal maintenance purpose. Contractor shall also carry out complete overhaul of the system, inspection of HW/SW, major repairs, replacement and reporting. The contractor shall also give any other checks required for preventive maintenance and the same shall be included. Generation and submission of diagnostic reports shall also be done by the contractor. Any other jobs as recommended by OEM or as per statutory requirements during the period of the contract shall be also be included into the preventive maintenance plan.

Such preventive maintenance shall be carried out minimum four times in a year for each and every equipment under this contract (Quarterly).

The regular Routine preventive maintenance also includes Software Maintenance/Support as described below:

- (a) The Contractor shall maintain the existing operating & application software to improve upon performance of the system. Software modification and up gradation as & when required shall also be covered under this scope at no extra cost. During the contract period and its extension if any, if the systems require software release up gradation and same is necessarily required then same shall be provided without any additional cost implication to OIL. During the contract period and its extension if any, the system shall be also upgraded to its desired release to meet any requirement of OIL without any additional cost implication to OIL by the Contractor. The modifications required for taking care of statutory requirements shall also be Contractor's responsibility at no extra cost to OIL.
- (b) **SOFTWARE ENHANCEMENT & SOFTWARE SUPPORT INCLUDING MINOR CHANGES IN GRAPHICS:** The Contractor will provide a comprehensive software maintenance and enhancement program for on-going support of the system under this contract. All updates, new releases of the software during the contract period and its extension if any shall be provided without any additional cost. Minor changes

in existing graphics including pertaining addition of few equipment / facilities shall be also executed by Contractor at no extra cost.

- (c) **ANTIVIRUS SOFTWARE SUPPORT:** The Contractor will provide necessary antivirus software support if the system software gets affected by any kind of viruses under this contract without any additional cost.
- (II) **BREAKDOWN MAINTENANCE:** The contractor shall keep his maintenance team ready to attend any breakdown maintenance round the clock 365 days in a year. In this regard, the contractor shall maintain an office in Duliajan and Moran to attend any on call breakdown maintenance services 24/7 basis 365 days in a year for CTF Duliajan and Moran Tank Farm respectively. The contractor must submit contact details of the persons with office address to respective the Installation Managers of CTF Duliajan and Moran Tank Farm before commencement of this contract.
- (III) The contractor's Instrumentation crew shall visit the site both CTF Duliajan and Moran Tank Farm daily during general shift for routine maintenance, inspections, and preventive maintenance adjustments and carry out corrective actions for Systems.

The contractor shall depute their experienced service engineers to installation site to attend the engineering calls round the clock on receipt of the information from operation crew. The engineers deputed to the site shall be well qualified and experienced and as per terms of this contract.

- (IV) **REGULAR MAINTENANCE:** The contractor should keep his maintenance team ready to attend any regular maintenance as on when required as assessed by the contractor or OIL for smooth running of the PLANT.
- (V) **REGULAR SOFTWARE UPGRADES:** Contractor's scope shall include supply of all software upgrades released by OEM for system performance enhancement and system performance improvement at no extra cost.

Note: Replacement of all spares, consumables as required during preventative or breakdown maintenance shall be in contractor's scope.

3.1.5. To provide the comprehensive maintenance services described under clause Nos 3.1.1, 3.1.2, 3.1.3 & 3.1.4 for all the instrumentation Systems and their accessories installed and commissioned under MB Lal Recommendation project for CTF Duliajan and Moran Tank Farm, the contractor shall depute experienced competent instrumentation personnel.

In addition, the contractor shall also obtain a Comprehensive Annual Maintenance Contract with the OEMs or shall have tie up/arrangements with the OEMs for the following two vital instrumentation systems:

- (i) Safety PLC systems make M/s Honeywell,
- (ii) TFMS system Make Honeywell Enraf and

For OEM services as required which shall be valid during the period of the contract and its extension if any so as to ensure trouble free maintenance as per terms of this contract.

In case the contractor's service Engineer fails to restore the systems/subsystems and OEM services are required the contractor must obtain services from OEM competent Engineers within 24 hours of reporting of such incident by operation Engineer of CTF Duliajan and Moran Tank Farm, failing which penalty shall be imposed as per contract clause No.9.0. In this regard, the contractor must make arrangements with OEMs for AMC/on-the-call-services as a part of this maintenance contract.

3.1.6 Spares Management:

- (i) The contractor shall store minimum number of spare modules at site for the OIL's usage under normal plant running or used during preventive and breakdown maintenance. The details of activity for any type of maintenance are to be mentioned by the contractor.
- (ii) The contractor shall prepare explicitly a maintenance Plan, the various checks to be carried out by the engineer for the above listed items. Also a standard document consisting of standard procedures and formats for carrying out various activities of this Maintenance Contact shall be furnished for OIL's approval.
- (iii) The contractor service engineer shall maintain a Service Logbook at the site indicating the activities carried out during preventive & breakdown maintenance and also submit service reports based on the maintenance/repairs carried out, modules/parts repaired/replaced along with fault analysis. The contractor shall submit such report on monthly basis.
- (iv) Tools and Tackles: All tools and Tackles including measuring & calibrating equipment as required for carrying out the jobs as per detailed maintenance plans shall be in contractor's scope.
- (iv) The Contractor shall maintain a stock of necessary spares required. In event of breakdowns, immediate repairing or replacement should be possible without any lead-time for procurement of spares. The contractor shall identify all critical spares and keep a readily available stock in CTF Duliajan and Moran Tank Farm to attend breakdown maintenance if any.
- (v) The contractor shall find a copy of the following documents with the respective Installation Manager
 - (a) Datasheets of the all the instrumentation systems like PLC system, TFMS and their associated systems/subsystems, Field instruments and packaged instruments installed under MB Lal recommendation projects in CTF Duliajan and Moran Tank Farm
 - (b) P& ID of Instrumentation systems
 - (c) Operation & Maintenance Manuals
 - (d) Cable schedules, Cable termination details etc.

Based on above data, the contractor shall prepare a detail maintenance plan (routine/preventive/breakdown) as per terms of this contract for OIL's approval.

3.1.7 The details of clauses described above are general guideline of the comprehensive maintenance contract and does not limit the scope of work of the contract under

Comprehensive Annual Maintenance contract to include any other jobs/services as required for trouble free maintenance of both of Tank Farms i.e. CTF Duliajan & Moran Tank Farm. Any further works/spares required for smooth functioning of PLC/TFMS system along with all its associated systems, subsystems, field instruments etc. shall be executed/arranged by the contractor to minimize the overall breakdown of the system and thereby enabling smooth trouble free operation of the Tank Farms at no extra cost to OIL.

3.1.8 Instrumentation Equipment/Field Instruments list

I. Field Instruments:

					Quanti	ty
S1 No	Instrument Description	Make	Model	Range	CTF DJN	Moran Tank Farm
	Pressure Transmitter-		STA74L-E1G000-1-C-			
	Water line		AHC-11C-B-31A6-F1-			
1		Honeywell	000	0-35Kg/cm2	2	2
	Pressure Transmitter-	Emerson	3051TG2A2B21AI1D4			
	TFMS(With Remote	Rosemount	M5Q4S1+1199WDA95	0-10		
2	Seal Type)		ARTW30DAA7	KG/CM2	3	3
3	Temperature Gauge	H. Guru	68QSWS3	0-100 Deg C	9	5
4	PRESSURE TRANSMITTER(TFMS)	EMERSON(R OSEMOUNT)	3051L3AG0MD21AAD FKSD4T1Q4M5	(-)2.5 to 2.5 Bar	9	5
	FLOW TRANSMITTER with Flow Element 101-FE-1201(PITOT Tube Make Star-		STD720-EIHS4AS-1- C-AHC-11C-B-11A0- F1-0000	130-3826		
5	Meck)	HoneyWell		cum/hr	2	2
6	PRESSURE GAUGE	H.GURU	6PSSSWS2	0-25 kg/cm2	11	11
7	SERVO LEVEL GAUGE with displacer Model No. S0815350	HoneyWell- Enraf	UIAV854C11A2*K*W/ Z	- Gr	9	5
8	RADAR TANK LEVEL GAUGE with TSI	HoneyWell- Enraf	RHVBVRZ-ASF0830/Z		4	1
9	RADAR TANK LEVEL GAUGE with TSI	HoneyWell- Enraf	RHVBVRZ-ASS0805/Z		5	4
10	RADAR TANK LEVEL GAUGE for Fire water Tanks with TSI	HoneyWell- Enraf	RHVBVRZ-ASS0805/Z		2	2
	Temperature Sensor		UBAN768C11800950/			
11	(VITO)	Honeywell	Z		9	5
12	ROSOV Pneumatic Actuator	PENTAIR	SL NO:- 14138314P05530GP		19	10
13	MOV Actuators	AUMA			22	12
14	Gas Detector	CROWCON	IRmax		9	5
15	Pressure Switch(Set Point 6 Kg/sq.cm)	SWITZER			2	2

Note: DJN: Duliajan, MRN: Moran

II. **Packages Instruments**: Air Compressor and Air Dryer Package- CTF Duliajan and Moran Tank Farm both have two instrument air compressor and one air dryer package. All the instrumentation systems of air compressor and air dryer package instruments are in the scope of this maintenance contracts. An indicative list of the instruments are given below:

II.A: Instrument Air Compressor area-Wet & Dry Air Receiver Vessel and Air

Discharge Line

S1 No	Description	Make	Model	Range	Quantity	
SINO	Description	Make	Woder	Range	DJN	MRN
	Pressure			0 to 16		1
1	gauge	H.Guru	HGI 370.V.E 016 1666	kg/cm2	1	
	Flow		STD720E1AC4AS-1-C-	-400 to 400 In		1
2	transmitter	Honeywell	AHC-11CB-61A6-F1-0000	H2O	1	
	Pressure		3051CG4A22A1AM5B4DF	0 to 16		2
3	transmitter	Rosemount	E8D424	kg/cm2	2	
	Pressure					1
5	gauge	H.Guru	HGI.285(R)V.D.015.249	0 - 25 kg/cm2	1	
	Temperature					1
6	gauge	H.Guru	HGI.373 V.F.016.2621	0 - 100 Deg C	1	
	Pressure					1
7	gauge	H.Guru	HGI.372.V.E.016.1673	0 - 16 kg/cm2	1	
	Pressure					1
8	gauge	H.Guru	HGI.285(R)V.D.015.245	0 - 25 kg/cm2	1	

II.B: Instrument Air Dryer Package ModeL:SA0200MN Make-Summits

SL NO	Name of Inst.	Model No	Make	Range	Qunatity	
					DJN	MRN
1	Pressure gauge	HGI.285(R)V.D.015.245	H.Guru	0 - 25 kg/cm2	1	1
2	Pressure Switch	ZDDW	Baumer	0.1 - 1 kg/cm2	2	2
4	Pressure Gauge	2243PG140030	Baumer	0-16 kg/cm2	8	8
12	Diff Pressure Gauge	2243PG140035	Baumer	0-1 kg/cm2	2	2
14	Temperature gauge	2243TG140007	Baumer	0-100 Deg C	7	7
17	Temperature gauge	HGI.2851(R).V.F015.21 95	H.Guru	0-100 Deg C	1	1
22	Pneumatic Actuator	ECF80	Rotex	Max Pressure = 8 Bar	3	3
25	Limit Switch	DXLW1A2-4R	Rotex	Contact Rating =5 amp.	3	3
28	Solenoid Valve	M45H,24 V	Avcon	2 -10 Bar	3	3
31	Solenoid Valve	M50H,24 V	Avcon	0-7 Bar	5	5
36	Auto Drain Valve		Summits	Max Pressure = 10 Kg/cm2	1	1
37	Air Filter Regulator		Janatics	Max Pressure = 10 Bar	1	
38	Lubricator		Janatics	Max Pressure = 10 Bar	1	

III. SERVERS/WORKSTATIONS/PRINTERS:

Sr.	Description		Model	Quantity	
No		Make	Model	Duliajan	Moran
1	TERMINAL SERVER	MOXA	CN2650I-8	2	2
	HISTORY NOTE PC with 22"		DELL Optiples 2020		
2	Colour TFT Monitor	DELL	DELL Optiplex 3020	1	1
	PLC ENGG STATION with 22"		DELL Optimles 2000		
3	Colour TFT Monitor	DELL	DELL Optiplex 3020	1	1

E-TENDER NO. CDO7246P18

	PLC OPERATOR STATION with 22"		DELL Ontinley 2000		
4	Colour TFT Monitor	DELL	DELL Optiplex 3020	1	1
	PLC OPERATOR STATION with 22"		DELL Optiplex 3020		
5	Colour TFT Monitor	DELL	DELL Optiplex 3020	1	1
	CCTV PROGRAMMING PC with		DELL Optiplex 3020		
6	52" LED TV	DELL	DELL Optiplex 3020	1	1
	TFMS PC with 22" Colour TFT		DELL Optiplex 3020		
7	Monitor	DELL	DELL Optiplex 3020	1	1
	TFMS SCADA with 22" Colour TFT		DELL Optiplex 3020		
8	Monitor	DELL	DELL Optiplex 3020	1	1
	LASER PRINTER-A3(Connected to		LBP3500		
9	History Note PC)	CANON	LDF3300	1	1
10	LASER PRINTER A-4	HP	LaserJet Pro P1108	2	2

IV. CIU & CIU Software:

Sr.	Description	Make	Model	Quantity	
No	Description	Make		DJN	MRN
1	CIU PRIME with TFMS Software	Honeywell-Enraf	U**T8808BZZZZZZ	2	2
2	CIU PLUS with TFMS Software	Honeywell-Enraf	U*SP8808RRZZZZ	2	2
3	Portable Enraf terminal	Honeywell	U**847AA	1	1
4	HART Calibrator	Honeywell	MCT404-XI-00-UM	1	1

V. Components of PLC systems:

A. PLC Panel 101-SC#01 (CTF Duliajan)

Sr. No	Description	Make	Model Code	Qty.
INO	CABINET SECTION			
1	Swing Frame Rittal2342.200, RAL 7035	RITTAL	SRTL10002342.35	1
2	Swing Frame MTG kit SR1997.200	RITTAL	SRTL10001997.35	1
3	Swing Fame Locking Bracket 135 mm	RITTAL	PS4808009-AVP-DH35	1
4	Cabinet Fan Assembly	Honeywell	SMOD3611001	1
	SYSTEM-CP			
1	Chassis for Control processor	Honeywell	FS-CPCHAS-001	1
2	Enhanced Performance Quad Processor Pack	Honeywell	FC-QPP-0002	2
3	Universal Safety Interface	Honeywell	FC-USI-0002	2
4	Power Supply Unit 24/5 VDC, 16 A	Honeywell	FC-PSU-240516	2
5	Battery and Keyswitch Module	Honeywell	FC-BKM-0001	1
	SYSTEM-IO			
1	Chassis for redundant I/O Modules	Honeywell	FC-IOCHAS-0001R	6
2	FC-HD Analog I/P Module(24VDC,16 CH)	Honeywell	FC-SAI-1620m	6
3	FC-Digital I/P Module(24 VDC,16CH)	Honeywell	FC-SDI-1624	38
4	FC-Digital O/P Module	Honeywell	FC-SDO-0824	46
5	Coverplate for I/O Chassis(FS-BLIND-CHAS1HE)	Honeywell	FS-BLIND-CHAS1HE	1
6	Coverplate for I/O Chassis(FS-BLIND-CHAS3HE)	Honeywell	FS-BLIND-CHAS3HE	1
7	Coverplate for I/O Chassis(FS-BLIND-CHAS4HE)	Honeywell	FS-BLIND-CHAS4HE	2
8	Blind Module for NOT USED Slots in CPCHAS	Honeywell	FS-BLIND-COM	2
9	Blind FRNT for unused slots IOCHAS, Wide 4TE	Honeywell	FS-BLIND-IO	24
10	IO Extender	Honeywell	FC-IO-0001	12
	COMMUNICATION BUS			
1	Communication Cable Internal between DCOM-CPCHAS	Honeywell	4217015	2
2	Set Ethernet Cable Internal SFTP, 1Y/1G	Honeywell	FS-CCI-HSE-02	2

3	Power Distribution Cable	Honeywell	FS-PDC-MB24-2	1
4	Power Distribution Cable	Honeywell	FS-PDC-CPSET	1
	CPCHAS24VDC(PDC-CPSET)			
5	Power Distribution cable Set IOCHAS-001 24	Honeywell	FS-PDC-IOSET	6
	VDC INT PWR+EXT PWR			
6	I/O BUS from CPCHAS to IOCHAS	Honeywell	FS-IOBUS-CPIO	2
7	Power Distribution Cable IOCHAS-0001R	Honeywell	FS-PDC-IOR05	6
	5VDC WD			
8	Bus Terminator for Redundant I/O	Honeywell	FC-TERM-0002	1
9	System Interconnection Cable term. On PIN	Honeywell	FS-SICC-0001/L8	45
	(SIC interface Cable)			
	NETWORK			
1	Communication Interface FTA for RS232 and	Honeywell	FC-DCOM-232/485	1
	RS 485			
2	WESTERMO Ethernet Switch-5 Port	WESTERMO	SDW-550EC	2
	OTHERS			
1	System PS I/P 115/230VAC, O/P	Honeywell	FC-PSU-UNI2450U	2
_	24VDC,50A230VAC input from UPS		100101010	
2	Earth Leakage Detector	Honeywell	10310/3/ICC	2
3	Power Busbar Max. 200A 24/48/110VDC,	Honeywell	FS-MB-001	1
	150CM			
4	10A DP MCB for 240V AC system Power	SIEMENS		2
	Supply(M1, M2)	arn rnya		
5	6A DP MCBfor 230V AC NON UPS Fan	SIEMENS		1
-	Supply(Q1) UK5 HESI Terminals for ELD Power + Terminal	DUCENIN		1.0
6	Server+ Westermo Switch(IPT)	PHOENIX		16
7	UK10N-E(GREY) for 240 AC UPS Power Supply	PHOENIX		12
'	to PS01(ICB1, ICB2)	THOENIX		12
8	UKION-E Terminal for 230V AC Non UPS	PHOENIX		3
	Power Supply(UT1)GREY	THODIVIX		
9	UK2.5B-E GREY Terminals for Alarm	PHOENIX		16
	wiring(ATB-1)	THOBINA		
10	DFBK#12 Type Bus Terminal for 24VDC Power	PHOENIX		1
-	distribution(BT-4)			SET
11	Door Switch(DS-1)			1
12	Tubelight(TL-1)	PARISHRAM		1
13	Fan assembly230 V	PARISHRAM		1
14	Utility Board(UTB)	UL		1
15	Thermostat			1
	SOFTWATE			
1	SAFETY BUILDER R151 Software BASIC	Honeywell	FS-SMSB-ST-151	1
	+KB140			

B. PLC Panel 101-MC#01(CTF Duliajan)

Sr.	Description	Make	Model Code	Qty.
No				
1	Rittal Cabinet	RITTAL		1
2	DI FTA for DI Module -24VDC,16 CH(A01-	HONEYWELL	FC-TSDI-1624	16
	A16)			
3	DI RTP(RA08-RA15)	UL	UL24D16DIFI-2C-TB	8
			MY2-VF	
4	Utility Board	UL		1
5	230V Tubelight(TL1, TL2)	PARISHRAM		2
6	230V Fan Assembly	PARISHRAM		2
7	Door Switch			2
8	Terminals for Non-UPS 230V AC	PHOENIX	UK10N	3
9	DP MCB of 6A for 230V AC	SIEMENS		1
10	DFBK-12 Power Terminals for 24 VDC	ELMEX	DBFK-12	1 Set

	Distribution			
11	Grey Terminals for Alarm wiring	PHOENIX	UK2.5B-E	4
12	Field Terminals for Signals(Fused)-TB A01-	PHOENIX	UK5 HESI(500mA)	124
	A07 & TB A16			
13	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	124
	A01-A07 & TB A16			

C. PLC Panel 101-MC#02(CTF Duliajan)

Sr.	Description	Make	Model Code	Qty.
No				
1	Rittal Cabinet	RITTAL		1
2	DO FTA Safe Digital Output FTA(24VDC,08 Channels)-B01-B17	HONEYWELL	FC-TSDO-0824	17
3	AI FTA for AI Module(24VDC,16 CH)-C01	HONEYWELL	FC-TSAI-1620M	1
4	AI FTA for AI Module(24VDC,16 CH)-C02	HONEYWELL	FC-TSGAS-1624	1
5	DO RTP(RB 07-RB17)	UL	UL24D08(OFI)- 2CMY2N(24VDC)	11
6	SIL3 Relay(RB01- RB06)	P&F	KSDO-RSH-1.4S.PS2	48
7	Utility Board	UL		1
8	230V Tubelight(TL1, TL2)	PARISHRAM		2
9	230V Fan Assembly	PARISHRAM		2
10	Door Switch			2
11	Terminals for Non-UPS 230V AC	PHOENIX	UK10N	3
12	DP MCB of 6A for 230V AC	SIEMENS		1
13	DFBK-12 Power Terminals for 24 VDC Distribution	ELMEX	DBFK-12	1 Set
14	Grey Terminals for Alarm wiring	PHOENIX	UK2.5B-E	4
15	Field Terminals for Signals(Fused)-TB B01-B06	PHOENIX	UK5 HESI(500mA)	48
16	Field Terminals for Signals(Non-Fused)-TB B01-B06	PHOENIX	UK2.5B-E	48
17	Field Terminals for signals (Fused)-TB C01& C02	PHOENIX	UK5 HESI(500mA)	24
18	Field Terminals for signals (Fused)-TB C02	PHOENIX	UK5 HESI(100mA)	11
19	Field Terminals for Signals(Non-Fused)-TB C01& C02	PHOENIX	UK2.5B-E	24

D. PLC Panel 101-MC#03(CTF Duliajan)

Sr.	Description	Make	Model Code	Qty.
No				
1	Rittal Cabinet	RITTAL		1
2	AI FTA for AI Module(24VDC,16 CH)-C03	HONEYWELL	FC-TSAI-1620M	1
3	DI FTA for DI Module(24VDC,16 CH)-A17-	HONEYWELL	FC-TSDI-1624	3
	A19			
4	DO FTA for DO Module(24VDC,08 CH)-B18-	HONEYWELL	FC-TSDO-0824	6
	B23			
5	AI Barrier –ZC03	P&F	KFD2-STC4-Ex1	11
6	DI Barrier(ZA17- ZB23)	P&F	KFD2-SR2-Ex1.W.LB-	48
			Ex1	
7	DO Barrier(ZB18-ZB23)	P&F	KFD2-SL2-EX1.LK-Ex1	46
8	Utility Board	UL		1
9	230V Tubelight(TL1, TL2)	PARISHRAM		2
10	230V Fan Assembly	PARISHRAM		2
11	Door Switch(DS1,DS2)			2
12	Terminals for Non-UPS 230V AC	PHOENIX	UK10N	3
13	DP MCB of 6A for 230V AC	SIEMENS		1
14	DFBK-12 Power Terminals for 24 VDC	ELMEX	DBFK-12	1 Set

	Distribution			
15	Grey Terminals for Alarm wiring	PHOENIX	UK2.5B-E	4
16	Field Terminals for Signals(Fused)-TB C03	PHOENIX	UK5 HESI(500mA)	11
17	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	11
	C03			
18	Field Terminals for signals (Fused)-TB A17-	PHOENIX	UK5 HESI(500mA)	48
	A19			
19	Field Terminals for signals (Non-Fused)- TB	PHOENIX	UK2.5B-E	48
	A17-A19			
20	Field Terminals for Signals(Fused)-TB B18 -	PHOENIX	UK5 HESI(500mA)	46
	B23			
21	Field Terminals for signals (Non-Fused)- TB	PHOENIX	UK2.5B-E	46
	B18-B23			

E. PLC Panel 103-SC#01(Moran Tank Farm)

Sr. No	Description	Make	Model Code	Qty.
	CABINET SECTION			
1	Swing Frame Rittal2342.200, RAL 7035	RITTAL	SRTL10002342.35	1
2	Swing Frame MTG kit SR1997.200	RITTAL	SRTL10001997.35	1
3	Swing Fame Locking Bracket 135 mm	RITTAL	PS4808009-AVP-DH35	1
4	Cabinet Fan Assembly	Honeywell	SMOD3611001	1
	SYSTEM-CP			
1	Chassis for Control processor	Honeywell	FS-CPCHAS-001	1
2	Enhanced Performance Quad Processor Pack	Honeywell	FC-QPP-0002	2
3	Universal Safety Interface	Honeywell	FC-USI-0002	2
4	Power Supply Unit 24/5 VDC, 16 A	Honeywell	FC-PSU-240516	2
5	Battery and Keyswitch Module	Honeywell	FC-BKM-0001	1
	SYSTEM-IO			
1	Chassis for redundant I/O Modules	Honeywell	FC-IOCHAS-0001R	4
2	FC-HD Analog I/P Module(24VDC,16 CH)	Honeywell	FC-SAI-1620m	4
3	FC-Digital I/P Module(24 VDC,16CH)	Honeywell	FC-SDI-1624	24
4	FC-Digital O/P Module	Honeywell	FC-SDO-0824	28
5	- ,		FS-BLIND-CHAS1HE	1
6	Coverplate for I/O Chassis(FS-BLIND-CHAS3HE)	Honeywell	FS-BLIND-CHAS3HE	1
7	Coverplate for I/O Chassis(FS-BLIND-CHAS4HE)	Honeywell	FS-BLIND-CHAS4HE	4
8	Blind Module for NOT USED Slots in CPCHAS	Honeywell	FS-BLIND-COM	2
9	Blind FRNT for unused slots IOCHAS, Wide 4TE	Honeywell	FS-BLIND-IO	20
10	IO Extender	Honeywell	FC-IO-0001	8
	COMMUNICATION BUS	<u> </u>		
1	Communication Cable Internal between DCOM-CPCHAS	Honeywell	4217015	2
2	Set Ethernet Cable Internal SFTP, 1Y/1G	Honeywell	FS-CCI-HSE-02	2
3	Power Distribution Cable	Honeywell	FS-PDC-MB24-2	1
4	Power Distribution Cable CPCHAS24VDC(PDC-CPSET)	Honeywell	FS-PDC-CPSET	1
5	Power Distribution cable Set IOCHAS-001 24 VDC INT PWR+EXT PWR	Honeywell	FS-PDC-IOSET	4
6	I/O BUS from CPCHAS to IOCHAS	Honeywell	FS-IOBUS-CPIO	2
7	Power Distribution Cable IOCHAS-0001R 5VDC WD	Honeywell	FS-PDC-IOR05	4
8	Bus Terminator for Redundant I/O	Honeywell	FC-TERM-0002	1
9	System Interconnection Cable term. On PIN (SIC interface Cable)	Honeywell	FS-SICC-0001/L8	28

	NETWORK			
1	Communication Interface FTA for RS232 and	Honeywell	FC-DCOM-232/485	1
	RS 485			
2	WESTERMO Ethernet Switch-5 Port	WESTERMO	SDW-550EC	2
	OTHERS			
1	System PS I/P 115/230VAC, O/P	Honeywell	FC-PSU-UNI2450U	2
	24VDC,50A230VAC input from UPS			
2	Earth Leakage Detector	Honeywell	10310/3/ICC	1
3	3 Power Busbar Max. 200A 24/48/110VDC, H		FS-MB-001	1
	150CM			
4	10A DP MCB for 240V AC system Power	SIEMENS		2
	Supply(M1, M2)			
5	6A DP MCBfor 230V AC NON UPS Fan	SIEMENS		1
	Supply(Q1)			
6	UK5 HESI Terminals for ELD Power +	PHOENIX		16
	Terminal Server+ Westermo Switch(IPT)			
7	UK10N-E(GREY) for 240 AC UPS Power	PHOENIX		12
	Supply to PS01(ICB1, ICB2)			
8	UKION-E Terminal for 230V AC Non UPS	PHOENIX		3
	Power Supply(UT1)GREY			
9	UK2.5B-E GREY Terminals for Alarm	PHOENIX		16
	wiring(ATB-1)			
10	DFBK#12 Type Bus Terminal for 24VDC	PHOENIX		1
	Power distribution(BT-4)			SET
11	Door Switch(DS-1)			1
12	Tubelight(TL-1)	PARISHRAM		1
13	Fan assembly230 V	PARISHRAM		1
14	Utility Board(UTB)	UL		1
15	Thermostat			1
	SOFTWATE			
1	SAFETY BUILDER R151 Software BASIC	Honeywell	FS-SMSB-ST-151	1
	+KB140			

$F.\ \ \textbf{PLC Panel 103-MC\#01(Moran Tank Farm)}$

Sr.	Description	Make	Model Code	Qty.
No				
1	Rittal Cabinet	RITTAL		1
2	DI FTA for DI Module -24VDC,16 CH(A01-	HONEYWELL	FC-TSDI-1624	10
	A16)			
3	DO FTA for DO Module-24VDC, 08CH(B01-	HONEYWELL	FC-TSDO-0824	6
	B06)			
4	DI RTP(RA04-RA09)	UL	UL24D16DIFI-2C-TB	6
			MY2-VF	
5	DO RTP((RB01-RB06)	UL	UL24D08(OFI)-	6
			2CMY2N(24DC)	
6	Utility Board	UL		1
7	230V Tubelight(TL1, TL2)	PARISHRAM		2
8	230V Fan Assembly	PARISHRAM		2
9	Door Switch			2
10	Terminals for Non-UPS 230V AC	PHOENIX	UK10N	3
11	DP MCB of 6A for 230V AC	SIEMENS		1
12	DFBK-12 Power Terminals for 24 VDC	ELMEX	DBFK-12	1 Set
	Distribution			
13	Grey Terminals for Alarm wiring	PHOENIX	UK2.5B-E	4
14	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	58
	A01-A03& TB A10			
15	Field Terminals for Signals(Fused)-TB A01-	PHOENIX	UK5 HESI(500mA)	58
	A00& TB A10			

G. PLC Panel 103-MC#02(Moran Tank Farm)

Sr.	Description	Make	Model Code	Qty.
No				
1	Rittal Cabinet	RITTAL		1
2	AI FTA for AI Module(24VDC,16 CH)-C01	HONEYWELL	FC-TSAI-1620M	1
3	AI FTA for AI Module(24VDC,16 CH)-C02	HONEYWELL	FC-TSGAS-1624	1
4	DO FTA Safe Digital Module(24VDC,08	HONEYWELL	FC-TSDO-0824	8
	Channels)-B07-B14			
5	DI FTA for DI Module(24VDC,16CH)	HONEYWELL	FC-TSDI-1624	2
6	DO RTP(RB 07-RB08)	UL	UL24D08(OFI)-	2
			2CMY2N(24VDC)	
7	Relay(RB09- RB11)	P&F	KSDO-RSH-1.4S.PS2	24
8	Barrier(ZA11-ZA12)	P&F	KFD2-SR2-Ex1.W.LB	28
9	Barrier(ZB12-ZB14)	P&F	KFD2-SL2-Ex1.LK	24
10	Barrier(ZC02)	P&F	KFD2-STC4-Ex1	11
11	Utility Board	UL		1
12	230V Tubelight(TL1, TL2)	PARISHRAM		2
13	DFBK-12 Power Terminals for 24 VDC	ELMEX	DBFK-12	1 Set
	Distribution			
14	230V Fan Assembly	PARISHRAM		2
15	Door Switch			2
16	Terminals for Non-UPS 230V AC	PHOENIX	UK10N	3
17	DP MCB of 6A for 230V AC	SIEMENS		1
18	Grey Terminals for Alarm wiring	PHOENIX	UK2.5B-E	4
19	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	28
	A11-TB A12			
20	Field Terminals for Signals(Fused)-TB A11-	PHOENIX	UK5 HESI(500mA)	28
	A12			
21	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	26
	C01& C02			
22	Field Terminals for signals (Fused)-TB C01&	PHOENIX	UK5 HESI(500mA)	26
	C02			
23	Field Terminals for signals (Fused)-TB C01	PHOENIX	UK5 HESI(100mA)	8
24	Field Terminals for Signals(Non-Fused)-TB	PHOENIX	UK2.5B-E	48
	B09-TB B14			
25	Field Terminals for signals (Fused)- TB B09-	PHOENIX	UK5 HESI(500mA)	48
	TB B14			

H. PLC Power Distribution Panel 101-PDB#01(CTF Duliajan), 103-PDB#01(Moran Tank Farm)

Sr.	Description	Make	Model Code	Qty.	
No					
				DJN	MRN
1	Rittal Cabinet	RITTAL		1	1
2	Cabinet Fan assembly with alarm	Honeywell	SMOD3611001-01	2	2
3	Digital Current Meter			2	2
4	Digital Voltage meter			1	1
5	Indicator			2	2
6	Current Transformer			2	2
7	MCCB	SEIMENS		2	2
8	4A 2P MCB	SEIMENS		2	2
9	2A 2P MCB	SEIMENS		49	38
10	10A 2P MCB	SEIMENS		3	3
11	Bus Bar for 240 VAC			2	2
12	Door Switch			2	2
13	HRC Fuse			1	1
14	Terminals	ELMEX		108	86
15	Short Link			2	2

I. Networking Panels 101-NW#01(CTF Duliajan) & 103-NW#01(Moran Tank Farm)

Sr.	Description	Make	Model Code	Qty.	
No					
				DJN	MRN
1	Rittal Cabinet	RITTAL		1	1
2	Cabinet Fan assembly with alarm	Honeywell	SMOD3611001-01	2	2
3	1U Blanking Plate	RITTAL		7	7
4	1U Cable Management	RITTAL		4	5
5	19" Mounting	RITTAL		7	7
6	Ethernet Switch	D-Link	D-Link-DES-3200-18	3	3
7	Terminal Server	MOXA	CN2650I-8	2	2
8	CIU Prime	Honeywell-	U**T880BBBBZZZ	2	2
		Enraf			
9	CIU Plus	Honeywell-	U**SP880RRZZZZZ	2	2
		Enraf			
10	DVR	Honeywell	HD-DVR-7016	1	1
11	Utility Socket			10	10
12	Terminals for UPS 110VAC	PHOENIX	UK10N	30	30
13	Terminals for Non-UPS 230VAC	PHOENIX	UK10N	6	6
14	Alarm Terminals	PHOENIX	UK2.5B-E	8	8
15	Utility Board	UL		1	1
16	Door Switch			2	2

3.1.9 **Mandatory Spare list:** The contractor must maintain mandatory spares as per the following list for each Tank Farm (CTF Duliajan & Moran Tank Farm). However the contractor shall assess the requirement and add more spares to this list as required as per maintenance plan.

SL	Field Instruments	Make	Description	Quantity per
NO.				Tank Farm
1.0	Field Instruments	1		
1.1	Gas Detectors	Crowcon	Model – Irmax	1
1.2	Pressure Transmitter –	Emerson	Model:-	1
	density measurement		3051L3AGOMD21AADFK5D4T	
			1Q4M5	
1.3	Pressure Transmitter – fire	Honeywell	Model:-	1
	water hydrant line		STG170E1G0000HCSMZSA6L	
			PCCTGMBF1CA	
1.4	Flow Transmitter	Honeywell	Model:-	1
			STD720E1HS4AS1CAHC11CB	
			11AOF10000	
1.5	Level Gauge			1
1.6	Pressure Gauge	H.GURU	Model:- 6PSSSWS2	2
1.7	Temperature Gauge	H.GURU	Model:- 68QSWS3	1
2.0	Pressure Relief Valve			
2.1	Disc Spring			2
2.2	Bellows Gasket Set			2
3.0	Local Control Panels			
3.1	All items like push bottom,			1 lot(5 nos of
	hand switches, MCB,			each item)
	lamps, holder, selector			
	switch, Indicator etc.			
	mounted in the local panel			
4.0	PLC Based Systems			
4.1	Each type of module used			
	like I/O cards, all type of			
	processor card, all type of			
	power supply cards,			
	communication cards,			

	T	T		1
	interface cards, controller			
	cards, etc. as required for			
	the system.			
4.1a	Analog Input Card	Honeywell		1
4.1b	Digital output Cards	Honeywell		2
		, and the second		_
4.1c	Digital Input Cards	Honeywell		2
4.1d	Controller – safety PLC	Honeywell		1
4.1e	Power Supply Unit- Safety	Honeywell		1
	PLC			
4.1f	Bulk & Key switch module	Honeywell		1
1.11	(BKM)	lioney wen		1
4.1~	, ,	· (EALV)		
4.1g	Field Termination Assemblies		1	T a
	FTA (Field Termination	Honeywell		2
	Assembly) - DO			
	FTA (Field Termination	Honeywell		1
	Assembly) - DI			
	FTA (Field Termination	Honeywell		1
	Assembly) - AI	lioney wen		1
		T.T 11		1
	FTA (Field Termination	Honeywell		1
	Assembly) – Gas detector			
	input			
4.1i	IS Isolator Barriers			
	a) Analog Input (IS isolator	Pepperl + Fuchs	Model:- KFD2-STC4-EX1	1
	barriers)			
	b) Analog Output (IS		 	1
	isolator barriers)			1
	,	D 1 D 1	14 11 17772 272 774 777	
	c) Digital Input (IS isolator	Pepperl + Fuchs	Model:- KFD2-SR2-EX1.WLB	2
	barriers)			
	d) Thermocouple			
	e) Digital Output (IS	Pepperl + Fuchs	Model:- KFD2-SL2-EX1LK	2
	isolator barriers)			
4.2	Isolator/ Signal multipliers		 	1 lot
4.3	Lamps, Selector switches,			1 lot
4.5				1 101
	switches			
4.4	Annunciators, Lamps,			1 lot
	fuses			
5.0	Tank Farm Management Syst	tem(TFMS)		
5.1	Power Supply Module	Honeywell	1 no's of all types of radar	1 no's of each
5.2	Communication module	(Enraf)	,servo, TSI etc.to be kept as	type
5.3	Bearing	(211141)	spares	t) PC
	_		spares	
5.4	TSI			
5.5	Prefabricated Cable			
5.6	Fuses			
5.7	Electronic Cards for level			
	instruments			
5.8	Field interface unit (FIU)	1		
5.9	Antenna	Honeywell		1 _ from cross
0.9	AIICIIIa			1 - free space
<u> </u>		(Enraf		1- Still well
5.10	Multi element Temperature	Honeywell	UBAN768C11800970	1
	Sensor	(Enraf		
5.11	Power switch			1 lot
6.0	MCT Blocks			1 lot
7.0	Instrumentation			1 lot
1.0				1 101
	valves/fittings/tubes/cable			
	S			
7.1	Instrument globe valves	Champ		5nos
7.2	Instruments manifold	instruments		2nos
7.3	Tube fittings – Male	Champ		11nos
	connector	instruments		
7.4	Tube fittings – female			3nos
		i .		1 21108

	connector			
7.5	Tube fittings – union	1		3nos
7.6	Tube - cap	1		2nos
7.7	Tubes	1		11 metre(m)
8	Cables	1		
8a	3C X 2.5 Sq mm –Black	Thermocable		300m
8b	12C X 2.5 Sq mm – Black			290m
8c	24c X 1.5 Sq mm – Black			550m
8d	4C X 1.5 Sq mm – Orange			90m
8e	8C X 1.5 Sq mm – Black			450m
8f	12C X 1.5 Sq.mm – Black			70m
8g	1P X 1.5 Sq mm – Black	Thermocable		90m
8h	1P X 1.5 Sq mm - Blue			530m
8i	2P X 1.5 sq mm – Black			70m
8j	6P X 1.5 Sq mm - Black]		160m
8k	6P X 1.5 sq mm – Blue			62m
81	2C X 2.5 sq mm – Orange			210m
8m	24C X 1.5 sq mm – Orange]		390m
8n	1T X 2.5 Sq mm]		90m
80	8T X 2.5 sq mm]		90m
9	Junction Boxes	Flexpro	Minimum 1 Nos of each type	4
10	Cable glands		•	
10a	¾ " ET – Control room	Flexpro	Minimum 1 no of each type or	1
10b	1" ET]	higher	2
10c	1.1/4" ET			3
10d	1.1/2" ET			1
10e	½" NPT]		14
10f	³/4" NPT	1		4
10g	1" NPT	1		1
10h	1.1/4" NPT	1		2
10i	³¼"ET - Radar			8

3.1.10 Failure to maintain the Instrumentation System in smooth operational condition along with carrying out the scheduled maintenance and breakdown maintenance **penalty** will be imposed as per SL no. 5 of Penalty Clause no. 9.0.

3.2 INFORMATION TECHNOLOGY FOR CTF, DULIAJAN & MORAN TANK FARM

- 3.2.1 **CCTV system**: CCTV System, sub-systems including supply of spares, consumables CCTV package of CTF Duliajan and Moran Tank Farm consists of the following along with interconnecting cables and accessories
 - (i) High speed Explosion proof cameras (05 nos. for Duliajan & 3nos. for Moran)
 - (ii) Video Converter Transmitter & Receivers (One set for each camera)
 - (iii) One digital video recorder(DVR) One each for Duliajan and Moran
 - (iv) Joystick control One each for Duliajan and Moran
 - (v) One 55inch LED Monitor One each for Duliajan and Moran
 - (vi) Network Switch One each for Duliajan and Moran
 - (vii) Programming PC One each for Duliajan and Moran

In addition, the contractor shall also obtain a Comprehensive Annual Maintenance Contract with the OEMs or shall have tie up/arrangements with the OEMs for the CCTV systems Make Honeywell, for OEM services which shall be valid during the period of the contract and its extension if any so as to ensure trouble free maintenance as per terms of this contract.

In case the contractor's service Engineer fails to restore the systems/subsystems and OEM services are required the contractor must obtain services from OEM competent Engineers within 24 hours of reporting of such incident by operation Engineer of CTF Duliajan and Moran Tank Farm. In this regard, the contractor must make arrangements with OEMs for AMC/on-the-call-services as a part of this maintenance contract.

3.2.2 Information Technology Equipment/Field Instruments list of CCTV SYSTEMS:

	Description			Quant	ity
			Model	Duli	Mor
Sr. No		Make		ajan	an
	HD-DVR(High Definition Digital Video		HD-DVR 7016		
1	Recorder)	Honeywell	HD-DVK 7010	1	1
2	55" LED MONITOR	Samsung	DB55D	1	1
3	Joystick	Honeywell	HD-JC-010	1	1
4	Data Link Network Switch	D-Link	D-Link DES-105	1	1
5	CCTV Camera	Honeywell	NEXPTZ2364PA	5	3
6	CCTV Fibre optic Cable - 6 core (As per EIA/TIA 492) IEC 60793,IEC 60794, ITU-T, G.652. (Single mode multi fibre carrier armoured)as required			1ot	1ot

3.2.3 Mandatory Spare list:

The contractor must maintain mandatory spares as per the following list for each Tank Farm (CTF Duliajan & Moran Tank Farm). However the contractor shall assess the requirement and add more spares to this list as required as per maintenance plan.

SL NO.	Field Instruments	Make	Description	Qty per Tank Farm
1.0	CCTV system			
1.1	Each type of module use in the control unit of the system	Honeywell	NEXPTZ364PA	1 no.
1.2	DVD tapes			5nos.

3.2.4 Failure to maintain the Information Technology System in smooth operational condition along with carrying out the scheduled maintenance and breakdown maintenance penalty will be imposed as per SL no. 8 of Penalty Clause no. 9.0.

3.3 ELECTRICAL SYSTEMS FOR CTF DULIAJAN & MORAN TANK FARM

3.3.1 **ELECTRICALS AND ILLUMINATION:**

Electrical power shall be made available by OIL. Electrical power to all electric drives & area illumination for the tanks and process areas will be provided from the same source of power.

All the electrical jobs shall be carried out under direct supervision of competent and experienced Electrical Engineer. The Electrical Engineers & technicians engaged in the jobs should possess valid requisite Electrical licenses/certificates and permits issued by State Govt. Electrical Licensing Board.

The Electrical scope of work shall be as follows:

- i) The operator's electrical works cover all that is required for maintenance of all electrical drives/items & illumination of the proposed project including area/street lighting.
- ii) All earthing on panels, HVLRM system, High Mast must be checked and recorded regularly.
- iii) Clamping/supports/fixing to rack or hanger/straps etc. for exposed cable laying must regularly be checked for looseness/excessive tightness damaging to insulations.
- iv) Earthing system needs to maintained and measured as per Central Electricity Authority Regulations, 2010 and National Electricity Codes 1985. The operator shall regularly measure the respective earth resistance value of all earth pits and indicate the same with date. The earth pit numbers shall be maintained in a prominent way.
- v) Inside illumination of all the sheds/buildings shall be maintained.
- vi) Road lighting & Periphery/boundary lighting shall be maintained.
- vii) High mast lighting for entire area of the plant shall be maintained.
- viii) OIL approved Maintenance Schedule for Electrical Equipments shall be provided to contractor.

Comprehensive Annual Maintenance Contract (CAMC) shall include Routine, breakdown & schedule maintenance and repairing, servicing of all electrical equipment of Central Tank Farm (CTF) Duliajan and Moran Tank Farm including spares and consumables, tools/tackles as required for regular maintenance as well as breakdown maintenance if any for the following systems during the entire period of the contract and its extension if any.

3.3.2 ELECTRICAL MAINTENANCE SCOPE OF WORK SHALL INCLUDE:

Carrying out preventive, predictive as well as breakdown maintenance of equipment such as Packaged AC systems, UPS system for power Backup, HVLRM remote and manual type with control panels, MOV, Fire Water Pumps, Jockey pumps, Electrical switch room with PMCC, ELDB, ACDB & MLDB panels, Transformers, Electrical earthing systems, High Mast lighting Systems, outdoor lighting, Street & peripheral lighting etc. as per indicative list of equipment enclosed, as well as per instruction of OIL,s engineers from time to time. All maintenance jobs are to be carried out under the supervision of an engineer employed by the contractor for the purpose of monitoring the Tank Farm facility's maintenance. The contractor should ensure that all the maintenance jobs are carried out as per Maintenance Schedule of OEM's recommendations.

3.3.2.1 **HIGH MAST LIGHTING**

Each mast is complete with suitable winch & steel rope, lantern carriage, aviation

obstruction lights, heavy duty lightening arrestor, earthing terminals, junction box(es), feeder pillar and Luminaries. Luminaries are fitted with suitable lamp housing and control gears for 2 X 400 W HPSV lamps in total 12 (twelve) nos. of fittings. Regular maintenance to be undertaken.

3.3.2.2 **HVLRM SYSTEM:** HVLRM system consists of motors for Left/Right movement; up/down movement; Jet/Spray.

Regular maintenance of HVLRM motors, control & power circuit cables. Maintenance of starter panels to be undertaken.

- 3.3.2.3 **UPS PANELS & BATTERY BANKS:** The system provides back-up power to control system: Regular maintenance of battery & panels to be undertaken.
- 3.3.2.4 **SWITCH ROOM PANELS**: Regular maintenance of switch room panels to be undertaken.
- 3.3.2.5 Failure to maintain the Electrical System in smooth operational condition along with carrying out the scheduled maintenance and breakdown maintenance penalty will be imposed as per SL no. 4 of Penalty Clause no. 9.0.
- 3.3.2.6 **MINIMUM ELECTRICAL SPARES:** (To be maintained at each Installation i.e CTF Duliajan & Moran Tank Farm)

A. **FOR PANEL EQUIPMENT:**

Loca	tion: Switch Ro	om				
List	of Electrical Cor	nponent Spares				
S1 No	Component	Model	Make	Rating	Specification	Quantity
1	Soft Starter	PSTX72-600- 70	ABB Ltd.	37KW	415V, Control Voltage 240V	1
2	Soft Starter	PSTX142-600- 70	ABB Ltd.	75KW	415V, Control Voltage 240V	1
3	Motor Protection Relay	REM 610	ABB Ltd.			2
4	Fedder Protection Relay	REF 615	ABB Ltd.			1
5	Air Circuit Breaker	3P E00, MS Type	ABB Ltd.	800 A	MS Type	1
		T4S 320 PR221D5-LS/1	ABB Ltd.	320A	415V	1
		T4S 250 PR221DS-LS/1	ABB Ltd.	250A	415V	2
6	MCCB with Rotary handle	T4S 250 PR221LS/1 R160A	ABB Ltd.	160A	415V	1
	add on	T2S160 PR221DS-1	ABB Ltd.	100A	415V	1
		T2S 160 PR221DS-1	ABB Ltd.	63A	415V	2
		T2S 160 PR221DS-1	ABB Ltd.	25A	415V	1

Potential Transformer(P Tran			T2S160FF 3P PR221- LS/1R10	ABB Ltd.	16A	415V	4
8 COUNTOIN Transformer Long Insulation (CLASS B, 2KVA) 1 8 Insulation (CLASS B, 2KVA) 1 1 1 Insulation (CLASS B, 2KVA) 1	7	Transformer(P					1
Part	8					INSULATION	1
Part						Cl 1.0	1
Part						Cl 1.0	1
Surrent Transformer						Cl 1.0, 5P10	1
15VA					15VA	Cl 1.0	1
Transformer					15VA	Cl 1.0	2
15VA	9				15VA	Cl 1.0, 5P10	1
15VA Cl 1.0 2					15VA	C1 1.0	2
15VA					15VA	Cl 5P10	1
15VA					15VA	C1 1.0	2
ABB Ltd. 2A TPN 2					15VA	C1 1.0	1
NCB						C1 1.0	1
ABB Ltd. 63A TP 1				ABB Ltd.	2A	TPN	2
ABB Ltd. 32A TP 1			S202M	ABB Ltd.	6A	DP	10
MCB				ABB Ltd.	63A	TP	3
ABB Ltd. 10A DP 4				ABB Ltd.	32A	TP	1
ABB Ltd. 32A DP 2 ABB Ltd. 16A DP 1 ABB Ltd. 125A DP 1 11 Fuse 25A 415Vac 2 12 Switch Disconnector OT400E03P ABB Ltd. 16A 415Vac, 3phase 1 13 ELR with CBCT Prok Device Pvt Ltd. 300mA 85-275Vac 5 Ammeter 0-300A 1 15 Voltmeter 0-500V 1 16 Selector Switch Switch 4S39AP KAYCEE 240V Ac 5 E16DU18.9 ABB Ltd. 415Vac 1 ABB Ltd. 415Vac 2 16 ABB Ltd. 16A 415Vac 1 16 ABB Ltd. 16A 415Vac 1 17 OLR E45DU45 ABB Ltd. 400A 415Vac 1	10	MCB		ABB Ltd.	63A	DP	2
ABB Ltd. 16A DP 1 ABB Ltd. 125A DP 1 11 Fuse 25A 415Vac 2 12 Switch Disconnector OT400E03P ABB Ltd. 16A 415Vac, 3phase 1 13 ELR with CBCT Prok Device Pvt Ltd. 300mA 85-275Vac 5 Ammeter 0-300A 1 15 Voltmeter 0-500V 1 16 Selector Switch Switch 4839AP KAYCEE 240V Ac 5 E16DU18.9 ABB Ltd. 415Vac 1 ABB Ltd. 415Vac 2 10 O-400A 1 11 OLR E16DU18.9 ABB Ltd. 415Vac 1 12 ABB Ltd. 125A DP 1 16 DP 1 16 DP 1 18 DP 1 19 ABB Ltd. 125A DP 1 10 ABB Ltd. 415Vac 2 2 O-400A 1 1 O-400A 1 1 O-500V 1 1 OLR E16DU18.9 ABB Ltd. 415Vac 1				ABB Ltd.	10A	DP	4
ABB Ltd. 125A DP 1				ABB Ltd.	32A	DP	2
11 Fuse 25A 415Vac 2 12 Switch Disconnector OT16F3 ABB Ltd. 16A 415Vac, 3phase 1 13 ELR with CBCT EL-02 Prok Device Pvt Ltd. 30-300mA 85-275Vac 5 14 Ammeter 0-250A 1 15 Voltmeter 0-400A 1 16 Selector Switch 4S39AP KAYCEE 240V Ac 5 17 OLR E45DU45 ABB Ltd. 415Vac 1				ABB Ltd.	16A	DP	1
Switch Disconnector OT16F3 ABB Ltd. 16A 415Vac, 3phase 1				ABB Ltd.	125A	DP	1
12 Disconnector OT400E03P ABB Ltd. 400A 415Vac, 3phase 1 13 ELR with CBCT EL-02 Prok Device Pvt Ltd. 30-300mA 85-275Vac 5 14 Ammeter 0-250A 1 15 Voltmeter 0-400A 1 16 Selector Switch 4839AP KAYCEE 240V Ac 5 17 OLR E16DU18.9 ABB Ltd. 415Vac 1 17 OLR E45DU45 ABB Ltd. 415Vac 1	11	Fuse			25A	415Vac	2
Disconnector OT400E03P ABB Ltd. 400A 415Vac, 3phase 1	12		OT16F3	ABB Ltd.	16A	415Vac, 3phase	1
CBCT	14		OT400E03P			415Vac, 3phase	1
14 Ammeter 0-300A 1 15 Voltmeter 0-400A 1 16 Selector Switch 4S39AP KAYCEE 240V Ac 5 17 OLR E16DU18.9 ABB Ltd. 415Vac 1 17 OLR E45DU45 ABB Ltd. 415Vac 1	13		EL-02		300mA	85-275Vac	
1							
15 Voltmeter 0-500V 1 16 Selector Switch 4S39AP KAYCEE 240V Ac 5 E16DU18.9 ABB Ltd. 415Vac 1 17 OLR E45DU45 ABB Ltd. 415Vac 1	14	Ammeter					
16 Selector Switch 4S39AP KAYCEE 240V Ac 5 17 OLR E16DU18.9 ABB Ltd. 415Vac 1 17 OLR E45DU45 ABB Ltd. 415Vac 1							
16 Switch 4839AP RAYCEE 240V Ac 5	15				0-500V		1
17 OLR E45DU45 ABB Ltd. 415Vac 1	16		4S39AP	KAYCEE	240V Ac		5
			E16DU18.9	ABB Ltd.		415Vac	1
E80DU80 ABB Ltd. 415Vac 1	17	OLR	E45DU45	ABB Ltd.		415Vac	1
			E80DU80	ABB Ltd.		415Vac	1
18 TP Contactor ABB Ltd. 50A 220-240V COIL 3	18	TP Contactor		ABB Ltd.	50A	220-240V COIL	3

					VOLTAGE 3P	
			ABB Ltd.	16A	220-240V COIL VOLTAGE 3P	10
			ABB Ltd.	75A	220-240V COIL VOLTAGE 3P	1
			ABB Ltd.	145A	220-240V COIL VOLTAGE 3P	1
			ABB Ltd.	95A	220-240V COIL VOLTAGE 3P	2
			ABB Ltd.	185A	220-240V COIL VOLTAGE 3P	2
			ABB Ltd.	260A	220-240V COIL VOLTAGE 3P	1
19	Multi Function Meter	Rish EM 3490 SS	Rishabh Instruments			1
20	LED indicator Lamp	SPLBRL	TEKNIC	240V Ac		10 each of Red, Yellow, Green
21	Push Button Switch			415V ac		10

B. HVLRM SYSTEM SPARES:

Motor Spares

S1 No	Description	Make	Ratings	Specification	Required Qty
1	Jet/Spray movement Motor	Laxmi Hydraulic Ltd	0.18 KW, 415V±6%, 50Hz	3 Ph FLP Induction Motor, Ex-d IIA, IIB, T6, IP-65, S3 duty	3
2	Right Left Movement Motor	Laxmi Hydraulic Ltd	0.37KW, 415V±6%, 50Hz	cycle, rpm: 1350, Frame: 71, Insulation Class F	3
3	Up/Down movement Motor	Laxmi Hydraulic Ltd	0.37KW, 415V±6%, 50Hz	Class I	3
4	MOV Motor	Laxmi Hydraulic Ltd	0.75KW, 415V, 50Hz	3 Ph induction motor, 415V, Duty:S2,IP: 67, Insulation class: F	3

Spa	res for HVLRM panel				
S1 No	Component	Model	Make	Rating	Quantity
1	MCB	S202M C2	ABB	2A	5
2	OLR	SIRIUS	SIEMENS	240V, 50/60HZ	5
3	SMPS		Trio Power	240Vac/24VDdc	3
4	Switch Amplifier	KFD2 SR2- Ex.2w	Pepperl+Fuchs	24Vdc	3
5	Selector Switch	N2U3920	KAYCEE	16A/440Vac, 50Hz	5
6	Push Button	ZB2-BE102			5

	LED indicator lamp,			
	Red, Yellow, Blue,			
7	geen		110Vdc	Ę

C. **LIGHTING EQUIPMENTS:**

Sl. No.	Item	Description	QtyReqd per Year
1	HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12
2	HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8
3	Metal Halide	Type: BS/MH-400, Make: Bajaj	10
4	Choke	220V, Tube light chock, 36/40W, Make : Bajaj, Copper	20
4	Starter	220V, Tube light starter, Make: Phillips	30
5	Capacitor	20 MFD	10
6	Capacitor	33 MFD + - 5%, 250V	20

D. UPS Spares

List of Spares for the UPS

S1 No.	Item Description	Make	Rating	Quantity
1	Sysytem Manager Card	HITACHI HiREL		1
2	System Control Card	HITACHI HiREL		1
3	Rectifier Control Card	HITACHI HiREL		1
4	SMPS	HITACHI HiREL		1
5	IGBT gate drive card	HITACHI HiREL		4
6	Heat Sink Cooling Fan	REXNORD/NAD/NIS IKI		1
7	Inverter IGBT	SEMIKRON/EUPEC	400A/1200V	4
8	Thyristor Module	SEMIKRON/EUPEC		3
			200A	5
9	Fuse	BUSSMANN	250A	3
			160A	3
10	DC Filter Capacitor	EPCOS/ELECTROCI ON		4
11	AC Filter Capacitor	EPCOS/ALCON/BHC -RIPA		4
12	Metal Oxide Varistor			3

E. Lighting Spares

loor Flood Light				REMARKS
Control Room / FWPH / Switch Room	FD1 (1 X250 w) HPMV	3	Philips SNF-14/250 Bajaj BJEF - 14CAT Crompton FAD-1314	Complete fitting with controlgear box and lamp- 3 nos. Additionally lamp-6 Nos; Ballast-4 Nos.
Street lighting	ST- 10 with 1 X 125w HPMV	6		HPMV Lamp-6 Nos.
or Lighting				
	IND1 (1X40W)	4	Philips- TMC501/136 Crompton -IGP13-24HSB Bajaj - BJIR-136,140	Fluorescent tube
	IND2 (2X40W)	3	Philips- TMC501/236 Crompton -IGP13-24HSB Baja-BJIR-236	Fluorescent tube
	RSD6 (2X40W)	15	Philips-HDK-225HPL250 Darklite. Crompton- CRFD24HSB Bajaj BJDL 236	Fluorescent tube
Control Room / FWPH / Switch Room	CFL3 (2X11W)	2	Crompton TLE211 Philips FCS-518/211 Bajaj BJMS 211	CFL
	CFL4 (2X11W)	4	Crompton TLD211 Philips FBS-518/211 Bajaj BJMR 212	CFL
	HB1 (1X250W)	4	Philips HDK-225HPL250 Crompton IMB1325IH Bajaj BJHBI-250	HPMV
	LB2 (1X125W)	3		HPMV
	IND4 (2X40W)	3	Philips- TKC 203/236 Crompton - IGE1324/RSE24 Baja-BJIV-236	Fluorescent tube
	BK1 (1X100W)	1		GLS LAMP
Mast				
High Mast Light	RPV302 2 X SON- T 400W	4		Complete fitting with controlgear box and lamp- 4 nos. Additionally lamp- 10Nos; Ballast-4 Nos., Ignitor- 10 nos.
	Street lighting or Lighting Control Room / FWPH / Switch Room Mast High Mast Light	Switch Room	Switch Room	Switch Room Switch Room ST- 10 with 1 X 125 w HPMV FAD-1314

		5A,240V, RECEPTACLE	12		
5	Control Room/FWP/Swi	5A,240V, PIANO TYPE	20		
	tch Room	5A/15A, 240V, RECEPTACLE WITH SWITCH	12		
мсв					
	Control	40A MCB TP	5	Legrand DX3	
	Room/FWP/Swi	10A MCB DP	10	Legrand DX4	
6	tch Room	20A MCB DP	10	Legrand DX5	

F. SPARES FOR HIGH MAST PANEL.

Sl. No.	Item	Make	Model No.	Ratings	Quantity
1.	TP Contactor	L&T	MNX45	85A	2
		Havels		63A	2
2	DP Contactor	L&T	MNXA2	4A	4
3.	Fuse	Bussmann	FA	32A, 3W	14
			HF 14X	16A, 3pole	6
4.	Timer	GIC			2
5.	3P MCB			6A,	4
6.	Selector Switch	Recom		10A/16A	2

3.3.2.7 Day to Day Electrical Maintenance Spares:

Sl. No.	Item	Description	Estimated quantity required per Year per Installation
1	HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12
2	HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8
3	Metal Halide	Type: BS/MH-400, Make: Bajaj	10
4	Choke	215V, Tube light chock, 36/40W, Make : Bajaj, Copper	20
4	Starter	215V, Tube light starter, Make : Phillips	30
5	Capacitor	20 MFD	10
6	Capacitor	33 MFD + - 5%, 250V	20
	LED Lights	LED T/L Fittings	15
		Driver for the LED T/L	20
6	Fuse	HRC, SS type – 4A, 6A, 10A	12
		HRC, E.I.T. Type - 32	10
		HBC Fuse link-125A, Type : TSDS, Make : GE	8
		HBC, 200A, Type: TSF 200, GE	4
7	Bulb	400W, HPSV, Bajaj(HM), Type : BJR	12
		400W, HPSV, Bajaj (Threaded)	8
		400W, HPSV, 220V Bajaj (Threaded), SON-T	8
		20W Fluorescent Lamp, Phillips	20
		400W HPMV Lamp	6
		40W Fluorescent Lamp, Phillips	12

Part-III (SCC)

8	Panel Indicator Lamp	Red, Yellow, Blue: LED Type	12
9	MCB	DP-6A, 10A,16A, 25A& 32A, Make : Havells	6
		SP- 32A, Make : Havells	6
10	Cleaning agents	CRC 2-26/ Equivalent	4

3.3.3 TENTATIVE ROUTINE MAINTENANCE SCHEDULE OF ELECTRICAL EQUIPMENT (EQUIPMENT WISE)

F	TYPE OF	NATURE OF MAINTENANCE/			P.	PERIOD			RECORD /	
IAIN	MAINTENANCE	INSPECTION	EVERY	DAILY	F'NIGHTLY	FNIGHTLY MONTHLY	YEARLY	OTHERS	DOCUMENT IN	REMARKS
Ē	LIGHTING TRANSFORMERS	ORMERS			8 10	8 38		6 33		8 59
		Check for load	7						Shift log book	
æ	Routine	Check for overall cleanliness		7		10 03	6 5		Daily work progress register	10 03
		Check for overheating		*		7			Daily work progress register	
		Cleaning thoroughly				7		S	Equipment maintenance register	(d) (d)
Pre	Preventive	Checking IR Value including cables					>		Equipment maintenance register	
		Tightening of connections					7		Equipment maintenance register	

A. C. MOTORS:								
	Check for overheating	~	÷.	ę.		Shift	Shift log book	6
	Check for abnormal noise and vibration	7	S		54 US	Shift	Shift log book	F0 0
	Check for overall cleanliness	7				Shift	Shift log book	
Routine	Cleaning			7		Equ	Equipment maintenance register	3
	Greasing			G. 0	۸ ۸	Equ	Equipment maintenance register	As required
	Connections (tightening)				7	Fqu maintena	Equipment maintenance register	As required
	IR Value		G 33		C 0)	Comm	Commissioning report	a a
	Operation of HVLRM motors (UP/DOWN, LEFT/RIGHT)		7		3:	Equ	Equipment maintenance register	
Preventive	Checking of flange gap and shaft gap of FLP motors				7	Equ	Equipment maintenance register	

7	TVPF OF	NATURE OF MAINTENANCE/	5	7	PE	PERIOD		9	RECORD /	STATE STATE OF THE
NO.	MAINTENANCE	36	EVERY	DAILY	F'NIGHTLY	F'NIGHTLY MONTHLY	YEARLY	OTHERS	DOCUMENT IN	REMARKS
m	LT AC PANEL PMC	LT AC PANEL PMCC/MLDB/EPDB/High mast panel								35
		Operation of emergency lights	7							Siz.
		Overheating of Panels (From outside)	7						Shift log book	
		Cleaning of panels (Outside, including floor mats)		7						
	Routine	Check for external damages				7	7		65.	
		Check for effectiveness of ventilation system				~	~		Equipment Maintenance register	
		Check for corrosion effect (external and internal)				>	7	3		
		Testing of RCDs				~			RCD test record register	
		Cleaning panels (interior)				~	~	~		
		Checking of panels				~	~	- Si - Zi	_	Subject to availability of
		Tightening of all connections including TBs				×	×	٨		shutdown
	Preventive	Check cable TBs				~	~		Equipment	
		Check for overall cleanliness				~	7	7	maintenance register	2.
		Check breaker handle ok or not				×				
		Check for accessibility of maintenance/operation				×	×			
		Major overhauling						As required		

S	TYPE OF	NATURE OF MAINTENANCE/			8	PERIOD			RECORD /	REMARKS
NO.	MAINTENANCE	INSPECTION	EVERY	DAILY	F'NIGHTLY	MONTHLY	YEARLY	OTHERS	DOCUMENT IN	d
4	AIR CONDITIONERS:	ï								
	Routine	Checking for proper operation	7						Shift log book	
2	EARTHING:									
		Checking of connections			7	7		7	Equipment maintenance register	• or as required
	Koutine	Measurement of earth resistance			4		7		Commissioning Report	
9	CABLES: CABLES/CA	CABLES: CABLES/CABLE DUCT/TRENCH/SUPPORT			5.4	6				ę.
		Check for cleanliness					7	Six monthly*	Equipment maintenance register	• or as required
	Routine	Check for sealing cable trenches/ducts (prevention of foreign materials, vermin, water, chemicals, dirt, reptiles, into trenches/ducts)					7	Six monthly•	Equipment maintenance register	• or as required
		Checking of IR Value						As required	Equipment maintenance register	
		Checking of overheating					γ	N	Equipment maintenance register	
		Check for damages to cables, conduits, wires, clamps, cable supports; Check for corrosive effects on conduits & junction box			<u> </u>		7	N	Equipment maintenance register	
7	LIGHT FITTINGS (In	LIGHT FITTINGS (Including high mast systems)	ē		8					ē
	Routine	Checking and cleaning		>		γ	7	Six monthly*	Daily work progress register	* operation of lantern carriage of high mast
		Replacement of bulb, ignitor, ballast etc.						As reqd.	Shift log book	
	UPS AND BATTERY									
	Routine	Cleaning of cabinet				7	7		Equipment maintenance register	
	Preventive	Checking of Battery bank voltage			٨	٨		k	Equipment maintenance register	Į.

3.4 MECHANICAL SYSTEMS FOR CTF DULIAJAN & MORAN TANK FARM:

- 3.4.1 Comprehensive Annual Maintenance Contract (CAMC) shall include Routine, preventive/schedule/breakdown maintenance and repairing, servicing of all mechanical equipment of Central Tank Farm (CTF) Duliajan and Moran Tank Farm including spares and consumables, tools/tackles as required for regular maintenance as well as breakdown maintenance if any for the following systems during the entire period of the contract and its extension if any.
- 3.4.2 Mechanical Maintenance scope of work shall include:

Carrying out preventive, predictive as well as breakdown maintenance of equipment such as Diesel Engines, Centrifugal Fire water/Jokey pumps, rotary gear type foam pumps, Submersible water pumps, Air Compressor units, Air drier units, HOT cranes, Static vessels, all Valves in the network etc as per indicative list of equipment enclosed, as well as per instruction of OIL,s engineers from time to time. All maintenance jobs are to be carried out under the supervision of an engineer employed by the contractor for the purpose of monitoring the Tank Farm facility's maintenance. The contractor should ensure that all the maintenance jobs are carried out as per Maintenance Schedule of OEM's recommendations.

3.4.3 Indicative list of Major Mechanical Equipment for maintenance:

a. CTF-Duliajan:

Equipment	Qty (no's)	Make, Model & Type	Ratings & Capacity		
FW Diesel Engines	6	Greaves Cotton Ltd, TBD3V8 II	295 KW, 1500 RPM		
Foam Diesel Engine	1	Kirlosker, HA 494	1500 RPM		
FW Pumps	6	Mather & Platt Pumps Ltd. (Wilo), 8/10DME, Centrifugal	616m³/hr, 1500 RPM		
FW Jockey Pumps	2	Mather & Platt Pumps Ltd. (Wilo), Centrifugal,	130m³/hr, 2955 RPM		
Foam Pumps	2	MX System, RDZx1-300-L, Rotary Gear Pump	27m³/hr, 1500 RPM		
Make up water pump	2		50 m³/hr, 1500 RPM		
Air Compressors	2	Kirloskar Pneumatic Pvt. Ltd., KES 37-10C, Screw Type Compressor	5.86 m³/min, 10 bar.		
Air Dryer	2	Summit Hygronics, SA020DMN,	265 nm ³ /hr, 8.5 kg/cm ²		
Plant Air receiver	1	Fabtech Projects & Engineers Ltd.	5.5 to 7 kg/cm ²		
Instrument Air receiver	1	Fabtech Projects & Engineers Ltd.	5.5 to 7 kg/cm ²		
HOT crane	1	Brady & Morris Engg.Co.Ltd	4 tonnes		

b. Moran Tank Farm:

SL. NO.	SYSTEM	EQUIPM ENT	Qty	MAKE	CAPACITY
1	FIRE	Jockey Pumps	2 nos	Mather & Platt Pumps Ltd. (Wilo), Centrifugal	120 M3/HR (each)
2	WATER SYSTEM	Fire Water pump	6 nos	Mather & Platt Pumps Ltd. (Wilo), 8/10DME, Centrifugal	616 M3/Hr(each)

		Make- up Water pump	2 nos		50 M3/Hr(each)
3		FW Diesel Engines	6 nos	Greaves Cotton Ltd, Model: TBD3V8 II	295 KW, 1500 RPM
4		Foam Diesel Engine	1 no	Kirlosker Oil Engines Ltd, Model: HA 494	1500 RPM
5		Fire water tank	2 nos	Fabtech	4050 M3(each)
6		Fuel tank	6 nos	Fabtech	990 ltr.(each)
7		Foam Pump (Motor driven)	1 nos	Del Pd Pumps & Gears Pvt Ltd	Pressure 12kg/cm2, Rated capacity 18m3/hr
8	FOAM SYSTEM	Foam Pump Diesel Engine driven)	1 no	Del Pd Pumps & Gears Pvt Ltd	Pressure 12kg/cm2, Rated capacity 18m3/hr
9		Foam tank	1 nos		17700 ltr
10	HOT crane	Overhea d crane	1 no.	Brady & Morris Engg.Co.Ltd	5 tonnes
11		Screw Type Air Compre ssor	2 nos	Kirloskar Pneumatic Pvt. Ltd. Model: KES 18-10 C	Discharge =3.06 m³/min Max. working pressure= 10 bar
12	AIR COMPRE SSOR	Air dryer	1 no	Summit Hygronics	140nm3/hrW. Pressure 8.5Kgf/cm2
13	SYSTEM	Plant Air receiver	1 no	Fabtech Projects & Engineers Ltd.	5.5 to 7 kg/cm ²
14		Instrum ent Air receiver	1 no	Fabtech Projects & Engineers Ltd.	5.5 to 7 kg/cm ²

3.4.4 GENERAL CHECK LIST FOR MECHANICAL MAINTENANCE PERSONNEL:

EQUIPMENT: Diesel Engine (Fire water & Foam) FREQUENCY: As per OEM recommendations and

Daily:

ACTIVITY:

- 1.0 Check the operator's daily reports
- 2.0 Investigate and correct reported cases of
 - Low engine oil pressure
 - Low power
 - Abnormal water or oil temperature
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- Excessive smoke
- Misfiring
- Unusual engine noise/vibration
- Excessive consumption of engine oil
- Contamination of engine oil
- Leakage of coolant, fuel, water, engine oil or air
- Coupling wear/damage
- Loose foundation bolting
- Dirty/clogged air cleaner element
- Adjust Clutch
- Any other reportable condition

Every 500 hours

- 1. Repeat daily checks
- 2. Check and adjust belt tension replace belts if necessary
- 3. Check engine coolant and corrosion resistor/de-scaling additives, replace if necessary.
- 4. Clean air filter elements and filter housing with compressed air
- 5. Check all wires for frayed/damaged insulation replace if necessary
- 6. Check all connections to ensure that they are proper
- 7. Check all gauges for proper operation- replace defective gauges
- 8. Check throttles linkages for looseness of lock nuts/bolts.
- 9. Lubricate actuator control linkage rod and bearings
- 10. Clean crankcase breather
- 11. Check clutch & adjust if required
- 12. Externally clean engine and surroundings with water & detergent

Every1000 hours

- 1. Repeat daily and 500 hr checks
- 2. Drain engine oil, clean crankcase and refill fresh engine oil
- 3. Replace hydraulic governor oil
- 4. Replace oil filter elements after cleaning the filter housing
- 5. Replace belts if necessary
- 6. Clean/replace air filter elements
- 7. Check and adjust valve tappet clearances
- 8. Grease bearings
- 9. Check/adjust ignition timing
- 10. Service air starter
- 11. Replace spark plugs
- 12. Check ignition transformers replace if necessary
- 13. Check functioning of safety system & safety devices
- 14. Check and tighten all foundation bolting
- 15. Check clutch & adjust if required

EQUIPMENT: Fire Water, Jockey & Foam Pumps FREQUENCY: As per OEM recommendations

EQUIPMENT: Air Compressor

FREQUENCY: As per OEM recommendations and

Daily

ACTIVITY:

- Check the operator's daily records
- Investigate and correct reported cases of
- Abnormal noise or vibration of compressor
- Abnormal noise or vibration of the prime mover (motor / engine)
- Low discharge air pressure
- Leakage of air in air lines, valves and intercooler
- Malfunction of un-loader assembly
- Reports related to the engine's starting system, fuel system etc.
- Any other occurrence needing attention of maintenance personnel.

250 hours or 6 months (whichever is earlier)

- Repeat daily checks
- Replace air cleaner element
- Check un-loader for proper functioning
- Check proper tightness of all bolting
- Check tension/wear of v-belts replace if necessary
- Carry out preventive maintenance (Periodic Inspection) of prime mover

EQUIPMENT: HOT Crane

FREQUENCY: As per OEM recommendations and statutory safety guidelines for load testing, calibration & certification from the appropriate/authorized certification agency.

- 3.4.5 Supply, provisioning of spares, consumables and execution of all types of maintenance jobs shall be entirely under the scope of the contractor.
- 3.4.6 Contractor shall be provided with schedules of all scheduled maintenances of units/facilities/equipment stated above. The Contractor can put forward additional/modified list of maintenance schedules of the above based on OEM recommendations or other technical justifications etc. Such additional/modified list of maintenance schedules shall be reviewed by OIL and incorporated if found justified.
- 3.4.7 Contractor cannot and shall not claim the maintenance-schedules given by OIL to be improper at a later time. Likewise the Contractor cannot attribute any fault (malfunction/breakdown/under- performance etc.) of any unit that may take place at a later time on the ground of OIL's improper maintenance-schedules.
- 3.4.8 Contractor shall be responsible for supplying, provisioning and inventorying of all replacements and/or capital nature units/parts/components etc. Replacements of these categories of items shall come under major repair and do not come under regular day-to-day routine maintenances (as per attached check lists/log sheets/maintenance schedule etc).

- 3.4.9 The Contractor shall have to take certification from OIL on the quality of items purchased by them prior to use/inventorisation as and when advised by OIL for the same.
- 3.4.10The spares, consumables & replacements which are required for regular day to day processes, for safe, trouble-free & uninterrupted plant operations, regular &/or day-to-day routine maintenance-jobs (as per attached check lists/log sheets/maintenance schedule etc.) and running repair-jobs are completely under the scope of the contractor.

The shortage or lack of the above items may lead to malfunction, underperformance & breakdown of any unit/facility/equipment of the plant which in turn may affect/hamper the safe, trouble-free & uninterrupted operation of the plant. (eg. bearing, seals, gland packing and various regular spares of Jockey pumps, firefighting water & foam pumps, engines, Air compressors, submersible water pumps etc.)

To eliminate any likelihood of such a situation, the following points are necessary:

- a. The contractor shall make themselves ready with a comprehensive list of spares & consumables falling under the scope of contractor. Contractor shall compile the initial list from description of equipment/facilities in this document and from routine maintenance check lists/log sheets etc. Contractor can also visit Tank Farms for having better insight before taking over of Maintenance services of CTF, Duliajan & Moran Tank Farm.
- b. A Indicative list of **some such items is given below** for facilitating the contractor in creating an initial inventory,
- c. Looking at the usage of spares, OIL and/or the contractor after consultation & consent from OIL may include any additional spares, consumables & replacement-items under the scope the contractor at any point in time during the currency of the contract.
- d. The inventory of such items shall be with contractor & IM of the installations. OIL will check the items to be replaced prior to its replacement on normal working hours &/or take-over the replaced item at an earliest working time after the replacement. The contractor shall keep daily record of consumption & stock position and report the same to OIL on a daily basis &/or as & when sought by OIL. OIL may however keep some of the critical spares &/or replacement-items under the custody of OIL.
- e. The operator must maintain enough stock of each item in the inventory at all time in their base office at Duliajan. Projection of replenishment-requirement of these spares & consumables and initiation of procurement process shall be the responsibility of the contractor.
 - Shortage/lack of any such item(s) shall be on contractor's account; penalty on contractor shall be imposed as per **Penalty Clause 9.0 against SL No. 9.**
- 3.4.11On some special circumstances/emergency situations for the purpose of trouble free, uninterrupted, safe and sound-industry-standard of plant operation, OIL may advice the contractor to procure any of the items which are not included in the indicative list of items provided.

- 3.4.12 On some occasions, OIL may ask the contractor for providing quotations from OEMs/their franchisees/concerned vendors or any new vendors for items coming under their scope of supply. Contractor shall provide such quotation(s) or respond otherwise in writing within 07 days from OIL's written request for the same.
- 3.4.13The contractor cannot and shall not decline to carry out the procurement process on behalf and on advice of OIL. Should the contractor fail to carry out the jobs under this clause and/or should there be any shortage/lack of spares, consumables and replacements etc. falling under the scope of the contractor to do the purchasing process and should there be any consequences thereof like shutdown/malfunctioning/underperforming of CTF Duliajan & Moran Tank Farm, **Penalty as per Sl No. 3 of Penalty Clause no. 9.0** shall be imposed on contractor.
- 3.4.14 Apart from the above, the spares required for all mechanical items which are not covered in the indicative list of equipment and spares like piping repair, valves, flanges, bolts, nuts, washers and other pipe fittings, gaskets for smooth operation of the installation are also under the scope of the contractor.
- 3.4.15 OIL shall supply the POL items viz engine oil, gear oil, coolants and HSD for normal day to day routine maintenance jobs. Contractor shall have to provide all the other consumables for routine/scheduled maintenance jobs carried out at Daily/Weekly/monthly/as per OEM recommendation intervals. Also consumables for battery maintenances like distilled water, petroleum jelly, sand papers etc. shall have to be provided by the contractor.
- HSD is primarily required for running Fire Fighting engines during mock drills/exercises/testing etc. and the same is not in the scope of the contractor.
- 3.4.16The contractor shall bear the cost on consumables required while carrying out day-to-day Maintenance jobs which includes but not limited to materials like nuts & bolts of different sizes/gasket/asbestos ropes/jute/grease/bearing-lubricants/fasteners etc.

Shortage/lack of any item(s) as stated above shall be on contractor's account; penalty on operator shall be imposed as per **Penalty Clause 9.0 against SL No. 9.**

3.4.17 MINIMUM INDICATIVE LIST OF SPARES TO BE MAINTAINED BY THE CONTRACTOR AT EACH TANK FARM:

(a) Centrifugal FW Pumps:

PUMP	MODEL: 8/10 DME					
SERIA	L NO 81240173/550/1-6, 81240173/5	90/1-5, 812	40173/630/	1-6		
			Qty			
S1 No	Description	M.O.C	Duliajan	Moran	UOM	Remarks
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	
4	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	
5	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	

6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS
8	IMPELLER, P.N. 1500	CFB	1	1	NOS
9	NECK RING, P.N. 1181	CFBM	2	2	NOS
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS
11	GLAND, P.N. 2310	CI	2	2	NOS
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET
14	LOCK NUT, P.N. 3010	STEEL	1	1	NO
15	LOCK WASHER, P.N. 3020	STEEL	1	1	NO
16	THRUST COLLAR, P.N. 2884	EN8	1	1	NO

PUMP	MODEL: 8 / 8 DME - TA					
SERIA	L NO 81240173 / 700 / 1-4					
			Qty			
S1 No	Description	M.O.C	Duliajan	Moran	UOM	Remarks
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	
4	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	
5	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	
6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS	
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS	
8	IMPELLER, P.N. 1500	CFB	1	1	NOS	
9	NECK RING, P.N. 1181	CFBM	2	2	NOS	
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS	
11	GLAND, P.N. 2310	CI	2	2	NOS	
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS	
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET	
14	LOCK NUT, P.N. 3010	STEEL	1	1	NO	
15	LOCK WASHER, P.N. 3020	STEEL	1	1	NO	
16	THRUST COLLAR, P.N. 2884	EN8	1	1	NO	

PUMP	MODEL : ET - ISO 17H					
SERIA	L NO 81240173/950/1-2, 812401	73/1000/1-2	, 81240173/	1050/1-2		
			Qty			
S1 No	Description	M.O.C	Duliajan	Moran	UOM	Remarks
1	O RING FOR CASING, P.N. 775 – 1	NITRILE RUBBER	1	1	NOS	
2	O RING FOR SLEEVE, P.N. 775	NITRILE RUBBER	1	1	NOS	
3	WATER DEFLECTOR, P.N. 729	EN8	2	2	NOS	
4	LIP SEAL, P.N. 584	RUBBER	2	2	NOS	
5	GLAND, P.N. 026	C.I.	1	1	NOS	
6	LOGGING RING, P.N. 044	GFN	1	1	NOS	
7	GLAND PACKING, P.N. 057	G.R. COTTON	1	1	SET	
8	BEARING(IMP END), P.N. 464 – 1	SKF/FAG	1	1	NOS	
9	BEARING(IMP END), P.N. 464	SKF/FAG	1	1	NOS	
10	EXTERNAL CIRCLIP[, P.N. 454	STEEL	1	1	NOS	

11	IMPELLER NUT, P.N. 442	CF8	1	1	NOS
12	SPACER SLEEVE, P.N. 287	SS 316	1	1	NOS
13	SHAFT SLEEVE, P.N. 286	SS 410	1	1	NOS
14	KEY IMPELLER, P.N. 084	SS 410	1	1	NOS
15	KEY COUPLING, P.N. 054	SS 410	1	1	NOS
16	SHAFT, P.N. 049	SS 410	1	1	NOS
17	NECK RING, P.N. 032	CF8M	1	1	NOS
18	IMPELLER, P.N. 031	CF8	1	1	NOS

(b) Fire Water Engine Spares:

S1 No	PART NO	DESCRIPTION	QTY		UOM	Remarks
			Duliajan	Moran		
1	605411880009	Lub oil filter v6/v8	4	4	NOS	
2	1200240911/12	Filter element (micro + prime)	2	2	SET	
3	106900000014/1	Air filter (inner + outer)	1	1	SET	
	5					
4	123200198518	Coolant additive 5 ltr pack	1	1	NO	
5		Injector	10	10	NO	
6		Gasket set kit	2	2	SET	
7		Washer set kit	2	2	SET	
8		"V" Belts set kit	2	2	SET	
9		Adaptors with 'O' ring & gaskets	2	2	SET	
10		Exhaust flexible spool	2	2	NO	
11		Pressure Gauge	2	2	NO	

(c) Foam Engine Spares:

S1 No	PART NO	DESCRIPTION	QTY		UOM	Remarks
			Duliajan	Moran		
1		Lube Oil Filter	2	2	NO	
2		Fuel Filter	2	2	NO	
3		Injector	10	10	NO	
4		Injector line, excess line, support clamp, gasket etc.	6	6	SET	
5		Pressure gauge line(lube oil)	2	2	NO	
6		Pressure gauge benzo bolts & washers	4	4	SET	
7		Blower fan	2	2		
8		Air filter/cleaner assembly	2	2	SET	
9		Exhaust flexible spool	2	2	NO	
10		Exhaust gasket & 'O' rings	2	2	SET	
11		Tappet cover gasket	2	2	SET	
12		Gasket kit	2	2	SET	
13		'V' Belts	4	4	SET	

(d) Air Compressor:

S1 No	PART NO	DESCRIPTION	QTY		UOM	Remarks
			Duliajan	Moran		
1	271.01.432.50	Oil Filter Element	2	2	NO	
2	273.03.772.50	Air Filter Element	2	2	NO	
3	273.01.868.50	Air-Oil separator element with gaskets	1	1	NO	
4	273.01.044.50	Gasket for Air intake valve	1	1	NO	
5	273.50.109.50	Gasket for Air end delivery1	1	1	NO	
6	273.01.491.50	'O' ring ID 56 x 3.55 DIA	3	3	NO	
7	271.00.532.50	'O' ring 1/4"	1	1	NO	
8	271.00.534.50	'O' ring 3/8"	7	7	NO	

9	271.00.536.50	'O' ring 1/2"	3	3	NO
10	271.00.538.50	'O' ring 3/4"	3	3	NO
11	271.00.540.50	'O' ring 1"	4	4	NO
12	271.00.544.50	'O' ring 1-1/2"	2	2	NO
13	273.01.904.50	Service Kit for MPVL-40	1	1	NO
14	271.00.283.50	Service Kit for BDV 3/8" BSP	1	1	NO
15	273.01.453.50	Service Kit for intake valve – 4"	1	1	NO

(e) Air Dryer:

S1 No	PART NO	DESCRIPTION	QTY		UOM	Remarks
			Duliajan	Moran		
1		Main Valve Spare Kit	2	2	NO	
2		Exhaust Valve Kit	1	1	NO	
3		Solenoid Valve	3	3	NO	
4		Pre-Filter Element	1	1	NO	
5		After- Filter Element	1	1	NO	
6		Activated Alumina	1	1	Pack	

(f) Rotary gear type Foam Pumps:

S1 No	PART NO	DESCRIPTION	QTY		UOM	Remarks
			Duliajan	Moran		
1		DE and NDE bearing	2	2	NO	
2		Set of wear plates	2	2	SET	
3		V seal	2	2	NO	
4		Oil seal/Z pack	2	2	NO	
5		Paper packing	2	2	NO	
6		R.V.Spring	2	2	NO	
7		Coupling Spider	1	1	NO	
8		Rotor Stator Assembly	1	1	NO	
9		Relief Valve piston	1	1	NO	

3.4.18 Execution of Day-to-day Routine/Preventive/Break-down and Schedule maintenance and Corresponding penalties against non-execution of the maintenance jobs

The Contractor shall do all types of maintenance jobs on any type of equipment/instrument/machine/unit/facility of the plant irrespective of scope of provisioning of the spares, consumables and other materials required thereon.

i) After initial communication and subsequent acknowledgement of the contractor in regards to maintenance, in case of malfunctioning or under-performing or breakdown of any units of the plant that takes place at any time during the currency of this maintenance contract, the contractor needs to immediately report to OIL.

In case the contractor's claims any fault as above to happen at a time just prior to OIL's inspection of the plant on that day, OIL shall investigate the performance history of the unit and all related reports/records/documents as already furnished till that day by the contractor. No new reports etc. shall be acceptable to OIL on that day. Contractor's claim as above shall be judged as per findings based on already submitted reports etc. by contractor. Penalty shall be imposed on operator if fault is found to start earlier as per **penalty clause no. 9.0.**

- ii) All day-to-day routine maintenance/servicing jobs and schedule/preventive maintenance jobs shall be carried out regularly by the contractor at their cost. The contractor shall carry out all routine maintenance/servicing jobs and schedule/preventive maintenance jobs of the plant in the most regular, meticulous and diligent ways.
- iii) The contractor must be able to identify any problems, wear & tear in parts/components etc. of units/equipment etc. which if not replaced immediately is likely to cause trouble in the functioning. The contractor shall have to promptly replace such items and follow the clause in regards to items used/replaced. The contractor must eventually be able to avoid breakdown or malfunctioning of any equipment, facilities, and units of plant.
- iv) OIL may decide to go for additional maintenance jobs on any of the units/equipment/facility of the Tank Farms over & above the scheduled ones. The contractor shall have to carry out the same and necessary spare for which shall be supplied by OIL from its inventory.

 For all routing maintenances (servicing jobs, schedule (preventive maintenance)
 - For all routine maintenances/servicing jobs, schedule/preventive maintenance jobs and also for breakdown maintenances/major repairs etc. the contractor shall have to carry out all required workshop jobs like but not limited to jobs of various machining operations, milling, drilling, boring, reaming, grinding, lapping, press-fitting, shrink-fit assembly, expanded fit assembly, dismantling, assembling-disassembling etc. Further the operator shall have to be equipped with all required tools & tackles and other equipment. These include but not limited to items like wrenches, tongs, hammers, chisel, dies, all tools (non-sparking) necessary for attending routine and breakdown maintenance of electrics, instrumentation and control system; temperature guns for machine-temperatures; hydraulic pullers of sufficient ratings, tripods & chain pulleys of required ratings, maintenance tool boxes, tool kit-sets, tube expander etc for all maintenance jobs.
- v) All routine maintenance/servicing jobs and schedule/preventive maintenance jobs shall have to be properly documented/recorded and reported to OIL on real time basis. Absence of records &reporting to OIL, contractor's claim on doing the jobs will not hold good. Reports submitted at a later date shall not be accepted.
- vi) The maintenance history of equipments/units shall have to be maintained for each of the equipment/unit by the contractor and such maintenance history/records should be signed by the contractor and submitted to the IM of Tank Farms for future reference.
- vii) Should the contractor fail to start any jobs as above in professional manner and with full man-power strength due to any reasons including but not limited to the reason of shortage/lack of spares, consumables and replacements falling under the scope of the contractor to do the purchasing process, the contractor shall be fully responsible and accountable. Penalty will be imposed on the operator as per **Penalty Clause numbers-9.0** as the case may be.
- viii) Any one or more of these **penalties listed in clause no. 09** shall be applicable which may lead to malfunctioning, underperforming or shutdown/breakdown of any unit, equipment, facility of each Tank Farm.

- ix) The contractor's performance or the lack of it in doing routine & schedule maintenance jobs shall be determined from reports/records/documents etc. regarding all servicing & maintenance jobs and regarding all used spare parts & consumables used on a particular unit or equipment.
- x) In case of breakdown or malfunctioning or under-performing of any equipment, the contractor needs to immediately report the same to OIL.
- xi) Simultaneously, the contractor must immediately start break-down maintenance jobs for restoring the unit at their cost and/or must replace any such break-down unit(s) within the shortest time avoiding interruption or under-performance of the plant.
- xii) Breakdown maintenance job as above shall be done with professional workmanship and continuously in all the shifts in all days without gap with skilled and adequate man-power strength. For that, the contractor shall arrange its maintenance gang. Presence of Key personnel during the maintenance job will be required.

Man power of operator should be competent & sufficient for carrying out such jobs as **per clause no. 6.0.**

xiii) Requirement of OEM or their authorized dealers for Annual Maintenance Contracts (AMCs)/Warranties of their respective equipment shall be an issue of the contractor of their own. In case, the contractor decides for bringing OEM or their authorized dealers for any job at Tank Farms the same needs to be endorsed by OIL on immediate basis. The responsibility for the maintenance service shall entirely rest with the contractor in case of any failure to do so. Failure of the same shall not be acceptable. OIL's endorsement will only be for allowing the contractor to employ the OEMs/authorized dealer on their behalf.

Contrarily, if the contractor decides to send any equipment/unit etc. to OEM's workshop for maintenance, same needs to be endorsed by OIL. In such cases standby arrangement shall have to be provided by the contractor without extra charge.

Contractors failure to return the unit/equipment to OIL after such repair/rectification within 20 days shall attract **Penalty as per clause no. 9.0**. Such rectified unit/equipment shall have to be presented by the contractor to OIL for inspection before placement of the same.

xiv) If OIL finds the contractor's delay in starting required maintenance job detrimental to the plant or its operation, OIL shall carry out the job on its own but the financial implications in regards to cost of OIL's repair-activities will be recovered from monthly bills/Performance Bank Guarantee. This is deemed as **per Penalty Clause number-9.0.** OIL shall intimate the contractor prior to start of the jobs.

3.4.19 **Services of OEM:**

The contractor is under the binding to inspect all the equipment/units by the representative of OEM not less than Service Manager or authorized Engineer twice in a year under normal circumstances. Certificates of Inspection shall have to be deposited to OIL after completion of each inspection immediately.

In case of any major breakdown where the contractor's crew are unable to rectify the defects within 48 hours of occurrence of such breakdown, the contractor is liable to provide the services of OEM to repair/rectify such defects.

Should the contractor feels the requirement of OEM's services it may do so at any point of time during the tenure of the contract. No additional charges for availing the above services/certification etc. shall be paid by the OIL to the contractor/OEM/authorized dealer.

Any issues related to OEM/authorized dealer with the contractor shall not be the responsibility of OIL.

Failure to comply the above requirements as stated shall attract **Penalty as** per clause no. 9.0

3.5 FIRE & SAFETY SYSTEMS

FOR CTF DULIAJAN & MORAN TANK FARM:

3.5.1 HVLRM (High Volume Long Range Monitor)

OIL has introduced Manual as well as Remote Controlled High Volume Long Range Monitor (RCHVLRM) in crude oil Tank Farms for compliance of MB Lal Committee's recommendations as well as revised OISD-117-2012. The following two types of Portable /fixed type High Volume Long Range Monitors are used in Oil India Ltd.

Manual Operated HVLRM

The monitors are equipped with non-aspirating type nozzles designed to throw high volume of water or foam as per the requirement. These monitors are erected on a structural platform at a desired height at strategic places where there is a potential hazard of fire.

The Manual High Volume Long Range Monitors are available in capacities of 1000 US GPM (3800 LPM). The monitors have excellent horizontal and vertical throw making them effective against fires of any kind. HVLRM are ideally suited for fighting fires of storage tanks, columns, process towers, well fire etc. effectively & safely. The monitor can be rotated 340° horizontally and 120° vertically. The monitor produces various discharge patterns from jet, spray to semi-fog and fog. The conversion from a jet pattern to fog pattern takes place in less than 30 seconds and the fog curtain is as wide as 160°.

Remote Operated HVLRM

These Remote Controlled High Volume Long Range Monitors operate electrically & can be controlled from a safe distance by using a simple operating console. A Fire Fighter can be stationed in a control cabin that can be located away from the monitor. An Installation

Personnel life is risk free, even while fighting a very large magnitude of fire. The monitors are equipped with non-aspirating type nozzles designed to throw water or foam as per the requirement from a safe distance of 200–300 meters.

The Remote Controlled Monitors (RCM) are installed in capacities ranging of 1000 US GPM (3800 LPM). The monitors have excellent horizontal and vertical throw making them effective against fires of any kind. HVLRM are ideally suited for fighting fires of storage tanks, process area, well fire etc. effectively & safely. The monitor can be rotated 340° horizontally and +90° & -15° vertically. The monitor produces various discharge patterns from jet, spray to semi-fog and fog. The conversion from a jet pattern to fog pattern takes place in less than 30 seconds and the fog curtain is as wide as 140°.

The foam is inducted to through the balanced foam proportioners the central foam system at the installation.

The Manual & Remote Controlled Monitors have integrated safety through self-arresting gearing units that lock the monitor in all rotational movements thus preventing any chance of uncontrolled movements. Also to meet the safety standards the monitors have a provision to be manually operated in case of an electric failure.

MEFG (Medium Expansion Foam Generator)

Medium Expansion Foam Generator having minimum foam expansion ratio of 1:40 is fitted with 75 mm dia. inlet flange (ANSI B 150 lbs rating). The flow rate MEFG is 600 LPM capacity .Glycerine filled S.S. Pressure Gauge (1-10kg/cm2) is fitted near the inlet flange. Foam Generator is able to produce foam at minimum 3.5 Kg/Cm² to 5Kg/Cm² pressure. Complete foam generator with inlet flange is made of stainless steel (SS-316). The barrel of MEFG is suitably designed to handle 5 Kg/cm² pressure. The barrel is Shield Metal Arc Welded SS-316 compatible electrodes. Minimum Stream Range of foam generator is 3 meters .All stainless steel metal parts of the foam generator are painted with two coats of polyurethane paints in yellow color.

3.5.2 Fire Fighting Equipment in Tank Farms

Tank	Rim	HVLM	MEFG	Emergency	Fire	Fire Water Header	Foam
Farm	Seal			Escape Set	Proximity	Size	Header Size
					Suit		
Duliajan	5	Remot e – 10 Manu al – 6	16	2	1	16 inch	4 inch
Moran	4	Manu al – 10	10	2	1	16 inch	4 inch

Tank	Rim	Fire	Water	Jockey Pump	Foam Pump	Fire Water Tank	Foam (ltrs)
Farm	Seal	Pumps					
Duliajan	5	616 m3	/hr	130 m3/hr	25 m3/hr	7200 m3	29260
		(6 nos)		(2 nos)		+	
						1930 m3	
						(2 nos)	
Moran	4	616 m3	/hr	120 m3/hr	18 m3/hr	4050 m3	19470
		(6 nos)		(2 nos)		(2 nos)	

3.4.3 **Spare Parts:**

(a) Spare Part list for HVLRM

Sl.	Spare Part	Vendor	MOC	Quantity	Quantity
No.				Duliajan	Moran
1.	Nozzle	M/s NK Fire Safety	SS-316	2	2
2.	Swivel Joints	M/s NK Fire Safety	SS-316	2	2
3.	Worm	M/s NK Fire Safety	SS-316	2	2
4.	Gear	M/s NK Fire Safety	SS-316	2	2
5.	Spindle for worm	M/s NK Fire Safety	SS-316	2	2
6.	Hand-wheels for Nozzle,	M/s NK Fire Safety	SS-316	10	10
	horizontal/vertical				
	movement				
7.	Drain connection	M/s NK Fire Safety	SS-316	4	4
8.	Drain valve	M/s NK Fire Safety	SS-316	4	4
9.	Nuts/bolts at Monitor	M/s NK Fire Safety	SS-316	20	20
10.	Mounting Brackets for	M/s NK Fire Safety	SS-316	4	4
	Motors/Limit switches				
11.	Deflector Set	M/s NK Fire Safety		4	4
12.	Pressure gauge	M/s NK Fire Safety	SS-316	4	4
13.	Push Button	M/s NK Fire Safety		6	0
14.	Limit Switch	M/s NK Fire Safety		6	0
15.	Proxy Sensor	M/s NK Fire Safety		6	0

(b) Spare Part list for MEFG

S1.	Spare Part	Vendor	MOC	Quantity	Quantity
No.				Duliajan	Moran
1.	Glycerine filled S.S.	M/s NK Fire Safety		2	2
	Pressure Gauge(1-				
	10kg/cm2)				
2.	Flexible tube connected	M/s NK Fire Safety		10	10
	to inline inductor				

(c) Spare Part list of Hydrant

S1.	Spare Part	Vendor	MOC	Quantity	Quantity
No.				Duliajan	Moran
1.	Lugs	M/s NK Fire Safety		20	20
2.	Blank Cap with chain	M/s NK Fire Safety		10	10
3.	Washer	M/s NK Fire Safety		30	30
4.	Hydrant Wheel	M/s NK Fire Safety	SS-316	10	10

(d) Spare Part list of Inline Balanced Foam Proportioner

S1.	Spare Part	Vendor	MOC	Quantity	Quantity
No.				Duliajan	Moran
1.	Foam Proportioner	M/s FIRE	TECH SS-304	2	2
		Equipment & Se	rvices		
		Pvt. Ltd.			
2.	Pressure balancing Valve	M/s FIRE	ΓECH SS-304	4	4
		Equipment & Se	rvices		
		Pvt. Ltd.			
3.	Pressure Gauge-Water	M/s FIRE	TECH SS-316	4	4
		Equipment & Se	rvices		

		Pvt. Ltd.			
4.	Pressure Gauge-Foam	M/s FIRETECH Equipment & Services Pvt. Ltd.	SS-316	4	4
5.	Gasket	M/s FIRETECH Equipment & Services Pvt. Ltd.	Nitrile	10	10
6.	Nut, Bolt	M/s FIRETECH Equipment & Services Pvt. Ltd.	SS-304	20	20
7.	Ferrule Fitting	M/s FIRETECH Equipment & Services Pvt. Ltd.	SS-304	6	6
8.	Drain Valve	M/s FIRETECH Equipment & Services Pvt. Ltd.	SS-304	6	6
9.	Flexible Tube	M/s FIRETECH Equipment & Services Pvt. Ltd.		10	10

3.5.4 Maintenance & Testing Schedule

Sl. No.	Equipment/ System	Periodiccity
1	Hydraulic Testing of Fire Extinguishers*	Once in Three Years
2	Foam Pouring System Testing	Six Monthly
3	HVLRMs, Hydrants	Quarterly
4	MEFG	Quarterly
5	Rim Seal Fire Protection System	Six Monthly
6	Balanced foam proportioner	Quarterly
	(for HVLRMs & MEFGs)	
7	Water Spray System	Quarterly

*List of Fire Extinguishers:

Quantity at CTF Duliajan:

a. DCP type 9 Kg capacity: 24 Nos.

b. DCP type 25 Kg capacity: 20 Nos.

c. CO₂ type 4.5 Kg capacity: 4 Nos.

d. CO₂ type 9 Kg capacity: 4 Nos.

Quantity at Moran Tank Farm:

a. DCP type 6 Kg capacity: 1 No.

b. DCP type 9 Kg capacity: 21 Nos.

c. DCP type 25 Kg capacity: 12 Nos.

d. CO₂ type 4.5 Kg capacity: 4 Nos.

e. CO2 type 9 Kg capacity: 4 Nos.

3.5.5 FIRE ALARM SYSTEMS:

Fire Alarm and Detection system of CTF Duliajan & Moran comprises the followings:

a) **COMBINATION DETECTOR:** Auto-adjusting levels: 1 to 2%/ ft. and 2 to 4%/ft. Operating temperature- 0°c to 38°c (32°F to 100°F). Voltage range- 15-32 volts peak. Standby current(max avg.-300μA, LED Current-6.5mA @24VDC("ON")

Model: Notifier-FAPT-851(A), Acclimate® Plus TM Multi-sensor low profile intelligent Detector

Size: 2" (5.3cm) high; base determines diameter. Shipping weight-5.2oz.(147g)

Make: Honeywell; Quantity: 105 (Duliajan) & 100(Moran)

b) **MCP (SAFE AREA):** Dual-action (Two motions to activate the station), Operating voltage 24VDC, IP 24, Operating temp. 0-49 C.

Size:89(w)x93(h)x60(d),weight-130g

Model: NOTIFIER F/MCP/GLASS, Make: Honeywell

Quantity: 8(Duliajan) & 9(Moran)

c) MCP (HAZARDOUS AREA): Break glass, Cast aluminium alloy LM6,RAL 3000 RED,Zone-1&2,IIA & IIB,T6,IP 65,Earthing- 1 no inside & 2 nos outside brass/SS(M4/M6) screws with 2 nos. plain washers. Upto 3 nos 2.5/4 sq.mm clip on type terminals or open strip type 15ampsx 4 ways.1 No.10A, 415V,1 NO/NC contact element.

Model: SAI/PBS/1050, Make: SAI Industries

Quantity: 14(Duliajan) & 12(Moran)

d) **HOOTER:** Outdoor wall and ceiling products. Nominal Voltage-Regulated 12VDC/FWR or regulated 24VDC/FWR. Operating voltage range-8 V to 17.5V (12V nominal) or 16V to 33V (24V nominal).x

Model: NOTIFIER HRA, Make: Honeywell Quantity: 03 (Duliajan) & 06 (Moran)

e) **HOOTER ACKNOWLEDGE BOX:** Wall mounting, Operating Voltage-230V/AC, Output freq-200Hz, Acknowledgement switch is provided to acknowledge the alarm.

Model: AL-140A-R; Make: POLMON Quantity: 01 (Duliajan) & 01 (Moran)

f) **EXIT SIGN BOARD:** The equipment shall operate with universal 2-wire AC input voltage of 120 to 347 VAC at less than 2.5Watts and universal 2-wire DC input voltage from 6 to 24VDC at less than 1.5Watts for single and double face signs. Power consumption less than 2.5W in AC or DC remote mode.CSA 22.2 No.141-10 standard for pictogram exit signs. Suitable for wall, end or ceiling mount comes standard with the canopy for quick and easy installation.

Quantity: 07 (Duliajan) & 06 (Moran)

g) **FIRE ALARM JB:** IP 55 to EN 60 529/1091 complies with NEMA 12.Enclosure-Sheet steel 1.25mm, Cover-Sheet steel-1.25mm, width-300mm, height-120mm, weight-2.7kg, Gland Plate (Top Bottom)-

Model: KL 1530.510; Make: RITTAL Quantity: 02 (Duliajan) & 02 (Moran)

h) **SIREN:** Electrically operated, audible range-5KM, Mounting-Vertical single mounting three phase, Power supply-400/440v,2800 rpm,50Hz,AC. Model: VST-500; Make: KHERAJ

Quantity: 01 (Duliajan) & 01 (Moran)

i) **ADDRESSABLE MONITOR MODULE FOR FLP MCP:** Powered directly by two-wire SLC Loop. No additional power required. Operating Voltage-15 to 32 VDC.Max. Current draw-5.0 mA. Operating temperature- 0°c to 49°c (32°F to 120°F).

Model: NOTIFIER NMM-100(A); Make: HONEYWELL

Quantity: 14 (Duliajan) & 12 (Moran)

j) **ADDRESSABLE CONTROL MODULE FOR HOOTER & SIREN:** Internal circuitry and relay power directly by two-wire SLC loop. Normal operating Voltage 15 to 32VDC.External supply voltage regulated 24VDC supply; 2.2mA maximum using 80 VRMS supply. Temperature range- 0°c to 49°c (32°F to 120°F)

Model: NOTIFIER FCM-1(A); Make: HONEYWELL

Quantity: 04 (Duliajan) & 07 (Moran)

k) **CONTROL FIRE ALARM PANEL (6 LOOPS):** 6 Loops, Input power-AMPS-24E:240VAC, 50/60 Hz, 2.25A maximum, Output power 24V Power, Main 24VDC: Up to 5A, Aux 24 VDC: Up to 5A.Battery charger Range 7AH-200AH batteries. Intelligent Addressable Fire Alarm System/Fire Alarm Control Panel (FACP) Model: NOTIFIER NFS2-3030; Make: HONEYWELL

Quantity: 01 (Duliajan) & 01 (Moran)

l) **FAULT ISOLATOR MODULE:** Powered directly by two-wire SLC Loop.No additional power required. High noise (EMF/RFI) immunity. Operating Voltage-15 to 32 VDC (Peak).Current range-5.0 mA. Operating temperature- 0°c to 49°c (32°F to 120°F); 150g (5 oz)

Model: NOTIFIER ISO-X; Make: HONEYWELL

Quantity: 5 (Duliajan) & 5(Moran)

3.5.6 Failure to maintain the systems mentioned in clause no. 3.5.1, 3.5.2, 3.5.3, 3.5.4 & 3.55 in smooth running condition along with carrying out the scheduled maintenance, routine maintenance, preventive maintenance and breakdown maintenance of CTF Duliajan & Moran Tank Farm penalty will be imposed as per SL no. 2 of Penalty Clause no. 9.0.

3.6 **CLEAN AGENT SYSTEM**

FOR DULIAJAN & MORAN TANK FARM:

- (a) The clean agent system consists of following components:-
 - 1. Control panel: 1 no.
 - 2. Horn: 4 nos.
 - 3. Strobes: 3 nos.
 - 4. Co2 Cylinder: 6 nos.
 - 5. Pilot Nitrogen Cylinder: 2 nos.
 - 6. Main Nitrogen Cylinder: 38
 - 7. Pressure relief Damper: 3 nos.
 - 8. Miniature Contact module: 3 nos.
 - 9. Smoke Detector: 92 nos.

The integlex multi crest S508 is an intelligent addressable fire alarm system, with a simple and compact design concept. The S508 supports up to 508 addressable devices in

styles 4, 6 and 7 of the signal line circuit, making it suitable for a range of small to medium sized applications.

The system features intelligent anti tamper protection. The panel front operation is protected against tampering by intelligent methods such as software passwords and a hardware key switch.

The S508 panel is equipped with address setting functionally, which allows users to set the address numbers of addressable devices connected to the panel, thus eliminating the need for a dedicated address setting device.

The S508 panel also has the ability to control fire suppression system. This functionality consists of auto and manual mode .Under the auto mode either multiple fire detector signals or a manual release signal activates the devices in the suppression zone via user configuration .The manual mode accepts only the manual release signals to activates the devices in the suppression zone.

(b) Miniature Contact Modules (MCM)

The miniature contact module is used to monitor the contact status of an initiating device that contains a normally open contact. The MCM can be programmed in the panel to supervise either a normally open or close contact on the FACP panel.

Specification of MCM

No.	Item	Specification		
1	Rated voltage range of SLC input power(S+,S-)	22.0 to 24.0 V		
2.	Maximum SLC 24 VDC stand by current (S+, S-).	250μΑ		
3.	Maximum SLC 24 VDC alarm current (S+, S-).	250μΑ		
4.	IDC input circuit wiring style	Class B (Style B)		
5.	End - of- line resistor for IDC	5.1kΩ,1.2W		
6.	Maximum wiring resistance of IDC	100Ω		
7.	Maximum wiring capacitance of IDC	1μF		
8.	Operating temperature range	0°C to 49°C (32°F to 120°F)		
9.	Operating humidity range	0 to 93% (non condensing)		

(d) Single Contact Module (scm):

The single contact module is used to monitor the contact status of a device that contains normally open contact. It can be programmed in the panel to supervise either a normally open or normally closed contact on the fire alarm control panel.

Specification of SCM:-

No.	Item	Specification
1	Rated voltage range of SLC input power(S+,S-)	22.0 to 24.0 V
2.	Maximum SLC 24 VDC stand by current (S+, S-).	250μΑ
3.	Maximum SLC 24 VDC alarm current (S+, S-).	1mA
4.	IDC input circuit wiring style	Class B (Style B)
5.	End - of- line resistor for IDC	$5.1k\Omega,1/2W$
6.	Maximum wiring resistance of IDC	100Ω

7.	Maximum wiring capacitance of IDC	1μF
8.	Operating temperature range	0°C to 49°C (32°F to 120°F)
9.	Operating humidity range	0 to 93% (non condensing)

(d) **Dual Contact Module (dcm):**

It is used to supervise multiple contact points with unique form a single device. It may be configured to monitor a normally open or normally closed contact.

Specification of DCM:

No.	Item	Specification
1	Rated voltage range of SLC input power(S+,S-)	22.0 to 24.0 V
2.	Maximum SLC 24 VDC stand by current (S+, S-).	250μΑ
3.	Maximum SLC 24 VDC alarm current (S+, S-).	1mA
4.	IDC input circuit wiring style	NFPA class A (Style D)
5.	IDC input circuit wiring style	NFPA class B (Style B)
6.	End - of- line resistor for IDC	$5.1k\Omega,1/2W$
7.	Maximum wiring resistance of IDC	100Ω
8.	Maximum wiring capacitance of IDC	1μF
9.	Operating temperature range	0°C to 49°C (32°F to 120°F)
10.	Operating humidity range	0 to 93% (non condensing)
		, , , , , , , , , , , , , , , , , , , ,

(e) MCP Indoor call point Range MCP₃ NO/NC Contact Model (Red Versions)

Product Benefits:

- Unique 'Plug & Play' installation concept.
- Total 'Flex ability' in the choice of operation element.
- Anti-Tamper facility.
- Enhanced aesthetics.
- Fully approved to the latest standards.
- Backward compatibility.
- CPD Approved.

Installation efficiency, flexibility and full compliance with the latest standards are at the heart of the new MCP indoor call point range. These products utilize a special terminal block where all initial installation cabling is terminated. This terminal block is then simply connected to the back of MCP.

The MCP3A product version is supplied with one normally open and one normally closed contact. Selecting either the 'Normally Open' or 'Normally Closed' contact easily achieved by simply connecting the terminal block to the required connection in the back of the MCP3 Product. Single pole changeover switching can be achieved with the use of two terminal blocks.

Ordering information:

Model	Electrical	Mounting	Operating	Markings
	Configuration			
MCP3A-R000SF-	N/O & N/C contacts	Surface	Flexi	EN54-11
K013-01	30VDC			

MCP Indoor call point Range MCP₃ NO/NC Contact Model (Yellow Versions)

Model	Electri	cal		Colour	Mounting	Operating	Marking
	Config	uratio	on		Element		
MCP3A-R000SF-	N/O	&	N/C	Yellow	Surface	Flexi	Plain
K013-01	contac	ts 30	VDC				

(f) System Sensor: Indoor selectable – Output Horns, Strobes and Horn Strobes for wall application.

The Spectra Alert Advance series offers the most versatile and easy to use line of horns, strobes, and horn strobes in the industry. With white and red plastic housings.

Physical/Electrical Specifications

Standard Operating	32° to 120°F (0°C to 49°C)		
Temperature			
Humidity Range	10 to 93% non-condensing		
Strobe flash rate	1 flash per second		
Nominal Voltage	Regulated 12DC/FWR or regulated 24 DC/FWR		
Operating Voltage Range	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)		
Input Terminal Wire Gauge	12 to 18 AWG		
Wall-Mount Dimension.	5.6" L x 4.7" W x 2.5" D		
Horn Dimension	5.6" L x 4.7" W x 1.3" D		
Wall-Mount Back Box Skirt	5.9" L x 5.0" W x 2.2" D		
Dimensions (BBS-2,BBSW-2)			
Wall-Mount Trim Ring	5.7" L x 4.8" W x 0.35" D		
Dimension (Sold as a 5 pack)			
(TR-HS,TRW-HS)			

(g) The spares for Clean Agent system for each Tank Farm:

S1 No	Item details	Part no.	Model	Specification	Qty
1	N2 storage cylinder (Capacity-20.3 cum)	U4011	NN83CU-E	50 Mpa (HYDROSTATIC)	40 nos
2	Cylinder valve (For N2 storage cylinder)	U2101	PC30BU	27.9 Mpa (operating)	40 nos
3	N2 pilot cylinder (Capacity -8.2 cum)	U4002	NN82.5CU	24.5 Mpa (HYDROSTATIC)	2 nos
4	Cylinder valve(For N2 pilot cylinder)	U2201	PH10NU	10 Mpa (opearting)	2 nos

ı	ı	1	1		1
5	Pressure Gauge 0-400 bar(For N2 storage cylinder)		PGS21		38 nos
6	Pressure Gauge 0-250 bar (For pilot cylinder)		PGS21		2 nos
7	Connecting Device (For PH10NU)				2 nos
8	Releaser(For cylinder valve Model PH10NU)	U2501	PH10-N3	10 Mpa (operating)	2 nos
9	LOOP PIPE (Pipe Dia-18.4Xt 2.2 mm . Nut- G 3/4)	U2901	14QSU		38 nos
10	NON RETURN VALVE	U3101	14SU	10 Mpa (operating)	38 nos
11	CO2 actuating cylinder	U0210	AC2.1U	24.5 Mpa (HYDROSTATIC)	6 nos
12	Cylinder Valve(For CO2 actuating cylinders)	U0015	PH5CU	5.6 Mpa (Operating)	6 nos
13	Cylinder Valve Solenoid(For cylinder valve Model PH5CU)	U0060	R85M14		6 nos
14	Non RETURN VALVE	U0095	4S-B		6 nos
15	Non RETURN VALVE	U3001	LCV4A	10 Mpa (Oprating)	3 nos
16	Relief Valve (Small leakage valve)	U0090	4BLA	0.098 Mpa (Max relief Pr.)	6 nos
17	Safety Vent	U3201	SAV94U	11.9 to 16.2 Mpa (Opearting)	1 nos
18	Selector Valve	U0073	PD 50KU	10.0 Mpa (Operating)	3 nos
19	Pressure Switch		PR79-1MT		3 nos
20	Discharge Nozzle	U3621 U3341	20ZMTU,25ZM Tu	3/4" (20A) 12 nos 1"(25A)9 nos	21 Nos
21	Resetting Tool		TCR65B		1 SET
22	Spanner(For PH type cylinder valve releaser)		PH14D		1 SET
23	Fire alarm control panel (which is an intelligent addressable fire alarm system)		S508	S508 fire alarm control panel.	1 no
24	Miniature contact module		FRRU004- MCM		3 nos
	1			•	

25	Single contact Module	FRRU004- SCM4		3 nos
26	Dual Contact Module	FRRU004- DCM4		3 nos
27	Monitored Output Module	FRRU004- MOM4		3 nos
28	MCP Indoor call point range MCP3 NO/NC Contact Model (Red Version)	MCP3A- R00SF-K013- 01		3 nos
29	MCP Indoor call point range MCP3 NO/NC Contact Model (Yellow)	MCP3A- Y000SF-K013- 11		3 nos
30	System Sensor (SPECTR Alart)		2-Wire Horn Strove,standardcd,red	1 no
31	Pressure relief Damper (500x415 mm)	UL. KUL		3 nos

(h) Failure to maintain the Clean Agent in smooth running condition along with carrying out the scheduled maintenance and breakdown maintenance **penalty** will be imposed as per SL no. 6 of Penalty Clause no. 9.0.

3.7 AIR CONDITIONER SYSTEM

FOR CTF DULIAJAN & MORAN TANK FARM

<u>Make</u> : Bluestar

<u>Model No</u>. : DPAP1983R1 – I

Capacity: 16.56TR (3 compressor of 5.5TR capacity) Air Cooled

Total No. of units : 12 nos. (6 No. at Duliajan and 6 No. at Moran)

3.7.1 Scope of Work:

The comprehensive Annual Maintenance Contract of the Air Conditioners shall interalias include:

- a. Monthly checking and servicing the air conditioning plant/unit. The Service Report Card has to be handed over to the Installation Manager of the respective Tank Farm.
- b. Attending to the plant for repair/maintenance as and when called for.
- c. Cleaning the evaporator and condenser.
- d. Repair/overhaul of components of equipment at site/in our service installation, including replacement of worn out parts when found necessary.
- e. Replenishing of refrigerant required as a result of a leak in the system arising out of wear and tear.

- f. Lubricating the bearings of motor and fans, when found necessary.
- g. Inspection of belts, adjusting of tension and replacement of worn out belts as and when required.
- h. Repair of microprocessor controls and motors and starters.
- i. Checking motors and starters, checking the operation of controls.
- j. Painting of equipment and platform of the outdoor AC units during the contract period.
- 3.7.2 Failure to maintain the air-conditioner system in smooth operational condition along with carrying out the scheduled maintenance and breakdown maintenance penalty will be imposed as per SL no. 7 of Penalty Clause no. 9.0.

3.7.3 **Spares:**

Indicative list of spares and quantity to be maintained by the contractor for two years AMC given below:

Sl. No.	Component	Model	Make	Rating	Quantity
1.	Compressor Specifications: 5.25KW, 2900rpm motor, Hermitically sealed	DPAN (BLUESTAR)	Emersen	5.5TR	3 nos
2	Blower Motor Specification: 415V, 3 phase IM, Duty S1, Encl TE, rpm 1430, Frame:100L		Hindustan Electric Motor	3KW	1no
3	Air Filter: 1255X688mm2	Blue Star	Blue Star		18 nos
4 (a)	V Belt (Wet Grinder Belt)	A28	Ecodrive		10 nos
4 (b)		A199L LP/A77	Flexer		10 nos
5	Refrigerant Filter Drier		Danfoss		4 nos
6	MCCB	DL100	L&T	63A	4 nos
7	MCB		L&T	6A	6 nos
8	CT - 60/1A 5VA, Class -1		Kappa Electrical	60/1 A	4 nos
9	Controlling PCB				2 nos
10	Running capacitor				6 nos
11	HPLP switch (8nos HP + 8nos LP switch)				16 nos
12	Expansion valve				2 nos
13	Outdoor fan blade				4 set
14	Condenser fan motor				6 nos

15	R22 refrigerant,		1 cylinder
	61 kg (per cylinder)		
16	Leak Test (detector) N2 cylinder		4 nos.
17	Contactor 3phase		10 nos.

3.8 STORAGE GODOWN

(TWO EACH FOR DULIAJAN & MORAN TANK FARM)

3.8.1 **PRINCIPAL DIMENSIONS:**

Overall length : 9000 mm

Overall length including skid : 9600 mm

Overall width : 2700 mm

Overall height with skid and lifting lug : 2800mm

3.8.2 GENERAL DESIGN AND CONSTRUCTION:

3.8.2.1 **SHELL:**

The shell structure shall comprise of sidewalls, end walls and self-draining roof. SKID:

The Bunk House shall be mounted on a skid arrangement made of two build-up I sections (200x100x8 mm thick) having 3 Nos. cross members of formed C section (150x75x8mm thick). At the end of skid, suitable formed section made of steel conforming to IS: 2062 shall be connected.

Materials of structural steel members shall conform to IS: 2062 Grade A

3.8.2.2 BASE FRAME/FLOOR SYSTEM:

The main structural elements of the under frame shall be 125x50 formed C section from minimum 3.15 mm thick sheets conforming to IS: 1079 Grade O/ IS: 2062Grade A. This under frame shall support the floorboard of min. 35 mm thick MDF board (weather & borer proof) duly fixed by self-tapping screws to 16 G thick steel sheets welded to the base and steel runners. PVC Sheet tiles of 2 mm thickness of size 300x300 mm of reputed make shall be laid over the MDF board and Bitumen preservative paint is to be applied on the lower side of the board.

3.8.2.3 **SIDE & END WALLS:**

The sidewalls shall be made of wall posts, corrugated panels and top cant rails. The cladding panels shall be made of min. 1.6 mm thick steel sheet conforming to IS: 1079 Gr. O and be vertically corrugated by means of press forming, continuously welded to top side and base structure. The wall post shall be cold formed Z-section made out of min. 3.15 mm thick mild steel sheets conforming to IS: 1079 Grade O. The top cant rails shall be made of formed (C) section of size of 200x50x3.15(min.) mm thick, materials conforming to IS: 1079 Grade O/ IS: 2062 Grade A.

3.8.2.4 **ROOF:**

Self-draining roof shall be made of 1.6 mm thick steel sheets conforming to IS: 1079 Grade O, adequately stiffened by roof bows of pressed channel sections of thickness 2.5/3.15 mm with same material specification. The roof shall be having a positive camber allowing water to drain away under static conditions.

3.8.2.5 SURFACE TREATMENT AND PAINTING:

The surface preparation of all fabricated steel components shall be done by manual grit blasting to achieve SA-2 quality finish, followed by one coat of zinc based primer and two coats of epoxy paint by air spray method. The under frame and skid shall be painted with bituminous/red lead paint of reputed make. Necessary marking/logos shall be provided as per the instruction of OIL

3.8.2.6 **INSULATION:**

Average 75 mm thick thermal insulation with resin bonded fiber glass wool having density of 16 kg/m3 and conforming to IS: 8183 shall be provided on the side walls, end walls and roof, with proper fixing arrangement.

3.8.2.7 INNER PANELLING:

The panelling of side walls and end walls shall be of min. 1 mm thick resin bonded plastic decorative laminate sheets fixed on min. 8 mm thick commercial quality plywood. The roof panels shall be min. 4 mm thick commercial quality plywood of same specification covered with min. 1 mm thick resin bonded plastic decorative laminate of same quality and design as in the case of inner panels. All wall and roof panels shall be supported by suitable M.S. Frame work.

3.8.2.8 **DOORS:**

One steel door at the main entry of the bunk house shall be provided in the desired location. The overall dimension of the main entry door shall be $1981 \times 800 \text{ mm}$ (H x W). The steel doors shall comprise of a framework of min. 3.15 mm thickness(material conforming to IS: 1079 Grade O/IS: 2062 Grade A), on which outside cladding of 2mm thick steel sheets (conforming to IS 1079 Grade O)with two vertical corrugations are fixed. The door shall have 40 mm thick resin bonded fiber glass wool insulation.

The peripheral edges of the door shall be provided with rubber seal to prevent ingress of water and dust. The door panel shall be outward opening type with single leaf closing panel. The door shall be provided with manually operating type locking arrangements from both internal and external side. The door shall be provided with steel rain-shed made from 2 mm thick sheet (IS:1079 Gr. O) from outside.

3.8.2.9 **WINDOWS:**

The windows shall be provided in the desired location. The windows shall be horizontal sliding type having overall dimensions 585x800 mm (H x W). The windows shall be decorated by anodized aluminium extruded section fitted with sliding shutter-proof safety glass sheets of clear vision and min. 4 mm thickness. Iron grills made of 20 mm

M.S. flats shall also be provided in the windows for safety purpose. Stainless Steel fly-proof mesh in suitable framework shall also be provided in the windows. The windows shall be provided with steel rain-shed made from min. 2 mm thick sheet (IS:1079 Gr.O) from outside.

3.8.2.10 **STEPS/STAIRS:**

Fabricated steel steps of detachable type having three treads shall be provided in each bunk house for getting inside at main entry door. These shall be made of checkered plates and formed channel sections.

3.8.2.11 **ELECTRICALS:**

PVC insulated copper wire of ISI mark shall be used for the wiring. This wiring shall be done in PVC conduits. As a measure of safety, continuous copper earth wire shall be provided as necessary. For lighting circuits, 3/1.09 cable and for heavy-duty circuits, such as air conditioners, heating circuits, 7/1.22 cable shall be used. DOL switches of capacity 250V/15 Amps shall be provided for air conditioners. For connecting power supply to bunk houses, 3 pin input industrial socket of 32 Amps capacity shall be provided.

Concealed type (2x36) roof hanging florescent light shall be provided as per the layout arrangements. In addition, four nos. each of 15 Amps and 5 Amps 3 pin sockets shall be provided at suitable locations inside the bunk house.

All the lamps, fans, exhaust fans; plug points etc. shall have independent slash/piano type switches of required rating inside the bunkhouse. Ceiling fans shall be of Crompton, or equivalent of reputed make. All electrical points & switches shall be of Anchor or equivalent make. Necessary circuit breakers i.e. MCB & ELCB shall be provided. Supply to refrigerator and heating unit shall be through metal clad MCB of adequate rating. Junction Box shall be provided outside on the bunk house for telephone connections with suitable connecting points inside the bunk house.

3.8.2.12 HANDLING AND TRANSPORTATION:

Necessary arrangement shall be provided at top four corners for safe and easy lifting and transportation of the bunkhouse.

3.8.2.13 **TARFELTING:**

The roof surface is to be painted with one coat of "Bitumen Primer" before laying Hessian based finished tar felt as per IS:1322, Type-3, Gr.-1 in two layers as basic waterproofing material. Blown Grade Bitumen 85/25 as per IS: 702 in three layers 1.5 Kg/M2 are to be used as the bonding materials. Fine sand is to be finally sprinkled over the last layer of bitumen.

Other Specifications as per standard with sufficient racks fabricated for stacking all the spares as listed.

4.0 PLANT AND PLANT BATTERY LIMITS:

- 4.1 "PLANT" shall mean the entire area as mention in the CLAUSE No. 2.0Broad scope of work falling within the existing boundary walls of each Tank Farm on its four sides. PLANT encompasses all facilities, equipment, machinery, civil structures, sheds & buildings within the boundary walls as mentioned in clause no. 3.0 and its sub-clauses 3.1 to 3.7
- 4.2 Power and duties of Contractor: The Contractor shall take all appropriate steps to maintain in force & execute the Contract in accordance with the terms of the Contract. All maintenance jobs will be carried out by the Contractor in accordance with policies, work program within the plant in accordance of the provisions of contract and the directions of the Mines Manager, Installation Manager or his authorized representative and in accordance with standard and safe industry practice within the purview of all statutory norms applicable in upstream oil industry.

5.0 HSE (HEALTH, SAFETY AND ENVIRONMENT):

i) Contractor shall maintain the plant in a diligent, safe and efficient manner strictly in accordance with provisions stipulated obligations imposed upon by applicable laws of India, Indian Mines Act, Oil Mines Regulations, Indian Explosives Act and Indian Electricity Rules, Petroleum Rules etc. in force and OISD norms in vogue.

Contractor shall also comply with guidelines of the Statutory bodies like DGMS, OISD, IBR, State and Central Pollution Control Board(s), PESO, Legal Metrology Department, OIL's HSE policy and other relevant statutory body in existence or likely to come into existence. The contract should submit DGMS returns Quarterly before 10th of April, July, October & January as it is a mandatory DGMS guidelines.

For any HSE matters not specified or without any stipulated provision in the contract document, the Contractor will abide the relevant and prevailing acts/rules/regulations & sound industry practices pertaining to Health, Safety and Environment.

ii) It will be solely the Contractor's responsibility to fulfil all legal formalities with respect to the Health, Safety and Environmental aspects of entire "MAINTENACE" job under the contract (namely formalities related to the person & the equipment employed by the Contractor and the environment etc.) under the jurisdiction of Dibrugarh district, Assam.

Further, during carrying out all the "MAINTENANCE" jobs at CTF-Duliajan & Moran Tank Farm, it will be entirely the responsibility of the Contractor to ensure strict adherence to all HSE measures, statutory rules and to ensure safety of all workers of the Contractor.

iii) The Contractor has to update and timely submit all HSE related paper-works including but not limited to reporting, record keeping etc. to external agencies and/or to OIL. The report-formats will be as per prevalent ones in OIL and/or as suggested by statutory bodies and as per prevailing laws. Some of such formats include Form-A (MVT), Form-B (employee register), Form-E (daily attendance) and Form - J, K (accident-report), Form-O (IME/PME), Training Matrix etc. as per Mines Rules 1955.

In case of employee's daily attendance in Form-E, the Contractor shall regularly take and maintain attendance of all its employees coming to work at CTF-Duliajan. As stated in

man power clause, the Contractor shall promptly report to Installation Manager if deviation in attendance from already submitted man power roster happens on a day.

Contractor shall have to report all incidents including near miss to Installation Manager/departmental representative of the concerned department of OIL. The Contractor has to arrange daily tool box meeting and regular site safety meetings and maintain records.

- iv) The Contractor within 30 days from LOA of the contract shall prepare written Site Specific Maintenance Plan (SMP) along with Safe operating Procedures (SOP) for the work to be carried out, including an assessment of risk, wherever possible and safe methods to deal with them. The SMP/SOP should clearly state all the risks that may arise to men, machineries & material during execution of any maintenance jobs to be done by the Contractor and how it is to be managed. In case the Contractor is found non-compliant of HSE laws as required, OIL will have the right for directing the Contractor to take prompt action to comply with the requirements or to cease work until the noncompliance is corrected.
- v) In case of accident causing injury, loss of life or property inside the Plant, the Contractor shall:
 - a) Immediately report the same to OIL.
 - b) Provide necessary first aid/medical assistance without any delay.
 - c) Report the same in the prescribed format as per statutory norms.
 - d) Investigate the matter & submit investigation report within 3 days.
 - e) Providing reliever crew in place of any injured person immediately.

Contractor shall be responsible for any pollution, accident (causing injury to man, damage to machinery) and clean-up operation due to pollution caused by the Contractor as a fall out of non-compliance of HSE rules & regulations. OIL's technical team shall investigate cause(s) of pollutions, accidents and/or any other non-compliance of HSE rules & regulations by the Contractor and the findings thereof shall be final. In this context, plant battery limit will not be applicable if the pollution caused by the Contractor inside the plant spills out of the plant boundary.

- vi) The Contractor shall be responsible for any unplanned circumstances/events in the plant within the Battery Limit that may take place due to material failure resulting from Contractor maintenance jobs. The Contractor shall also be responsible for failure of any equipment or any abnormality leading to subsequent unplanned circumstances/events due to lack of pro-active maintenance. The cause(s) of such circumstances/events shall be investigated by OIL's technical team and finding thereof shall be final.
- vii) Mines Manager, Production (Oil) Mines may appoint one or more of the Contractor's personnel as competent person(s) for carrying out specific job(s) coming under the contract within a certain domain of authority. Contractor shall have to abide by the same. The authority of such competent persons shall, under no circumstances,

supersede that of the Installation Manager of Duliajan & Moran Tank Farms. Appointment of the competent persons is not a pay-roll appointment.

viii) All persons deployed at CTF-Duliajan & Moran Tank Farm by the Contractor must undergo Mines Vocational Training, Initial Medical Examination, Periodic Medical Examination and other requisite statutory trainings like but not limited to firefighting training as per OMR & OISD-116/117, First Aid Training, Gas Testing Training etc.

The health check-up of Contractor's personnel is to be done by the Contractor in authorized Health Centres as per OIL's requirement and proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations is every three years for all employees of the Contractor.

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 Vocational Training (VT) Certificate, how many work persons undergone IME and type of medical coverage given to the work persons. The return shall be submitted quarterly (by 10th of April, July, October & January).

Contractor may take note of the fact that OIL provides some of the statutory training like MVT/First Aid/Fire Fighting etc. to Contractor's employees engaged by OIL near its Field Headquarter, Duliajan.

If OIL arranges any safety classes/training etc. for the working personnel at site the Contractor must arrange to release its personnel for any such training without hampering normal Operation jobs.

ix) Every person deployed at both the Tank Farms by the Contractor must wear all required safety gadgets/PPE items which are to be provided by the Contractor. No person will be allowed to work at Tank Farms without PPE.

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 OIL's PPE schedule. Safety appliances like Safety Boots, Safety Helmet and Full Body harness have to be DGMS approved. Necessary supportive documents / approvals 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 all 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.

x) The Contractor shall maintain First Aid Box with all the required and fresh batches of medicines and other items for use of his personnel in CTF Duliajan and Moran Tank Farm. The contractor shall also possess other safety items like safety torches/lamp etc. as required for attending any maintenance jobs during night.

- xi) Contractor personnel shall also attend Fire Mock drills at both the Tank Farms as and when conducted by the operation team.
- xii) Contractor will provide all necessary support & co-operation if OIL decides to obtain HSE related certifications including but not limited to ISRS, ISO, and OHSAS at CTF-Duliajan/Moran.

All Contractor's employees must, while at work, cooperate with OIL so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of employee's health, safety and welfare.

Any of the employees of the Contractor shall not refuse to follow any instruction given by OIL's Installation Manager or any competent person engaged by him for ensuring best maintenance practise.

- xiii) The Contractor must carry out all maintenance activities of any new equipment/facilities/instruments installed for compliance of any recommendation(s) of any statutory bodies or audits etc. during the currency of the contract. However any spares/consumable if required due to statutory addition shall be paid to the contractor at actuals.
- xvi) Contractor must carry out all maintenance activities in clean, safe and environmentally friendly ways; must avoid all sorts of pollution & contamination of the surrounding areas & environment.
- xiv) Contractor shall make available PPE for all of their employees to be deployed for maintenance jobs at Tank Farms. The list of PPE shall include following minimum types of items: a) SAFETY SHOE h) EYE GOGGLE b) SAFETY HELMET i) MASK c) DANGRI (OVERALL) j) BREATHER d) GUM BOOT k) RAIN COAT e) EAR PLUG l) APRON f) HAND GLOVES (Normal) m) JACKET g) HAND GLOVES (High Temperatures & chemical usage)

OIL will check the brands/qualities of the PPE items at site prior to issue of the PPE items to the Contractor's employees. The quality of the PPE shall have to be as per DGMS guidelines.

In case OIL finds any PPE items to be of inferior quality, torn &/or tattered the same shall not be allowed to be used by the Contractor at the Production Oil Mine of Tank Farms. The persons without PPE shall not be allowed to work at Tank Farms on any time of a day and corresponding penalty against the SL no. 1 of Penalty Clause No. 9.0 will be applicable against the inadequacy of contractor maintenance personnel shall be imposed on the Contractor.

OIL will ensure PPE-wearing only at worksites inside Tank Farms. PPE-wearing by Contractor's employees is not required during entering (and so exiting) the gate of Tank Farms.

xv) Statutory aspects in regards to procurement of items & services: All spares, consumables and materials procured by the Contractor as per scope of this maintenance contract for CTF Duliajan and Moran Tank Farm shall have necessary certification of Govt. approved agencies and approval of such statutory bodies as stipulated vide

provisions of Oil Mines Regulations, Indian Explosives Act, Indian Electricity Rules, Petroleum Rules etc. in force or byelaws/directives promulgated by Govt. circulars from time to time.

6.0 CONTRACTOR PERSONNEL:

- i) All personnel to be deployed by the Contractor in different streams of work must have sound health, requisite qualifications, adequate experience in their respective fields as well as requisite competency as stipulated vide Indian Mines Act, Oil Mines Regulations & other byelaws, regulations & norms in force. The Contractor must warrant that all their employees shall perform the work correctly and efficiently and must ensure that such personnel observe all applicable statutory norms and safety requirement of OIL.
- ii) Contractor shall submit all documents, Bio-data/Qualification/Experience-details/Credential/Competence Level/Eligibility Certificates/Police Verifications/IME reports etc. and other relevant data of any prospective deployment at both the Tank Farms. Such personnel must not have any pending case against them in court of law/any pending police case or FIR against them. Any of the employees officers or work staff can work at respective Tank Farms only after approval of OIL for such employees. If not approved by OIL, Contractor cannot employ any of its employees at Tank Farms. In regards to selection process of the Contractor for their potential employees to be deployed at both the Tank Farms, OIL shall not have any role or say.

The cost - if any - on providing all the above initial documents/reports etc. (including but not limited to Initial Medical Examinations, IME) to OIL at the beginning of deployment of each prospective employee shall be responsibility of the Contractor.

The initial documents to be provided to OIL shall be applicable for any new/fresh employee to be deployed at CTF-Duliajan and Moran Tank Farm at any time during the currency of the contract.

Further, the Contractor shall be responsible for (carrying out Periodic Medical Examination (PME) and) providing OIL with PME reports of the employees on or before completion of 03 (Three) years of working continuously at CTF-Duliajan & Moran Tank Farm.

- iii) Even after initial deployment if at a later stage OIL finds any personnel of the Contractor to be unsuitable/undesirable to OIL and communicates to the Contractor in writing, the Contractor shall remove such personnel immediately from working at any of the Tank Farms as mentioned. In this case, the Contractor entirely on their expense shall promptly replace such personnel with alternative personnel acceptable to OIL.
- iv) If Contractor wants to change any of their personnel deployed at any of the Tank Farm at any time, replacement for such employee(s) will be required in advance. New recruitment shall take over the responsibility after adequate training and familiarization prior to release of concerned persons. For new recruits, clauses 6.0 (i), (ii) & (iii) will be applicable.
- v) Contractor shall be solely responsible throughout the period of the Contract for ensuring that all the Contractor's employees have requisite statutory trainings like but

not limited to Fire Fighting Training as per OMR /OISD-116, MVT, First Aid, Gas Testing etc.

The Contractor must maintain its training-matrix records of its all employees and keep it updated at all times.

Absence of any requisite statutory trainings including but not limited to the above for any employee shall render that employee un-employable at CTF-Duliajan or Moran Tank Farm and clause no 6.0 (iii) above will be applicable.

OIL will provide the above mentioned trainings to all employees of the Contractor free of cost. But such training can be imparted to Contractor's personnel at OIL only during periods when OIL conducts these trainings and subject to availability of seats.

6.1 JOB REQUIREMENT AND QUALIFICATION OF KEY PERSONNEL

Contractor shall have a Maintenance Team comprising the following personnel for each of CTF Duliajan and Moran Tank Farm:

A. OVERAL INCHARGE - 2 Nos.

Field Maintenance Managers (One each in Duliajan & Moran Tank Farm) - Graduate in Mechanical/Instrumentation/Electrical/Chemical Engineering having five years' experience in process industry including oil field experience

B. **INSTRUMENTATION**

- (a) Instrumentation Engineers: 2 nos. (One each in Duliajan & Moran Tank Farm) -Graduate in Instrumentation /Electronics /Electronics & Telecom with 3 years' experience in instrumentation systems including PLC/DCS/SCADA etc. of any process industry or Diploma in Instrumentation/Electronics/Electronics & Telecom with 5 years' experience in instrumentation systems including PLC/DCS/SCADA etc. of any process industry.
- (b) Instrumentation Technicians: 4 nos. (Two each in Duliajan & Moran Tank Farm) Diploma with 3 years' experience or ITI with 5 years' experience in process instrumentation.

C. **ELECTRICAL**

Electrical Engineers: 2 nos. (One each in Duliajan & Moran Tank Farm)-(a) Electrical Engineer must have minimum Degree in Electrical Engineering with minimum 3 years' experience in petroleum/chemical/process plants. OR Diploma Electrical Engineering with minimum 06 years' experience petroleum/chemical/process plants. The incumbent should be dynamic and have managerial skill to plan ahead and lead a team of experienced persons for carrying out day to day maintenance jobs. The person shall have overall responsibilities for safe & environment friendly operation & maintenance of all electrical equipment/items of the plant. He should be confident in independently carrying rectification analysis, of operation routine/planned/breakdown maintenance of all the electrical equipment/items of the plant including the air conditioners. He must possess valid Electrical Supervisor's Certificate of Competency [minimum parts I, II, III, IV and preferably Part VIII-Mining Installations] issued by State Licensing Board, Assam or equivalent authority. The Electrical Manager should be conversant with all statutory rules and regulations such as Indian Oil Mines Regulations (1984), Central Electricity Authority Regulations (2010), Mines Act, Mines Rules, Indian Electricity Act and various directives, rules and regulations of Statutory bodies like DGMS (India), OISD etc.

The Electrical Engineer shall be responsible for overall plant electrics including record keeping. He shall, with the help of his team, shall keep and maintain all statutory electrical records of the plant.

Apart from the electrics of the plant, the person shall be conversant with all the operation and maintenance activities of CTF related to hazardous oil and gas processing, SCADA operation etc. The person shall be in constant touch with Company electrical engineer/representative. The Electrical Engineer shall normally attend general shift duty but shall be available for 24 hours.

Additionally, he must assist the Field Maintenance Manager in every possible way to run the plant smoothly, including the administrative activities of the plants and establishment.

(b) Electricians/Technicians: 4 nos. (Two each in Duliajan & Moran Tank Farm)

Electricians/technicians shall be deployed to maintain the electrics of the plant as per the direction of Electrical Engineer. The electricians/technician shall be minimum an ITI certificate holder in electrical discipline having minimum 3 yrs. experience in the operation and maintenance of electrical equipment preferably in similar process industry. The electricians/technician must possess valid Electrical Workman's Permit [minimum parts: 1 (Wiring), 2 (Motor-Generator)] issued by State Licensing Board or equivalent authority.

The electricians/technician shall have good hands-on skill and experience with all kinds of electrical equipment/items and if required, shall be able to attend and rectify electrical reports/problems independently. They shall be at available round the clock for attending any breakdown job apart from the regular maintenance of the installation.

D. **MECHANICAL**

- (a) Mechanical Engineers: 2 nos. (One each in Duliajan & Moran Tank Farm) Graduate in Mechanical Engineering with 3 years' experience OR Diploma in Mechanical Engineering with 6 years experience in any process industry handling similar nature of job as mentioned in the clause no. 3.3 of TOR.
- (b) **Mechanical Fitters: 4 nos (Two each in Duliajan & Moran Tank Farm)** Diploma with 3 years' experience or ITI with 5 years' experience in maintenance of pumps/pipe/Valve fitting jobs in process industry/Oil fields

(c) **Mechanical Technician: 4 nos (Two each in Duliajan & Moran Tank Farm)**Diploma with 3 years' experience or ITI with 5 years' experience in maintenance of
Diesel Engines/pumps/pipe/Valve fitting jobs in process industry/Oil fields

E. SAFETY OFFICER: 2 nos. (One each in Duliajan & Moran Tank Farm)

Safety officer should be qualified Engineer with 03 yrs experience in petroleum industry (handling similar nature of job as mentioned above) as a Safety Officer, with Graduate in Mechanical Engg/Electrical/Instrumentation along /Electrical/Chemical/Eletronics Engg/Fire& Safety Engg/Fire Tech. /Graduate in Science + 1yr. Diploma in Industrial Safety Engg./Fire & Safety Engg from an Institude recognized by State/Central Govt. The person shall by oneself or with the league of field maintenance manager/other ENGINEERS must carry out all S&E related jobs on priority basis so that the operator's all personnel are sensitized/aligned to carry out the jobs as primary "MAINTENANCE" jobs. This officer shall ensure that all routine S&E related jobs coming at definite frequencies must be known to all in the morning rake-up/tool-box meeting. The person must be able to develop good file management/record keeping system.

F. HELPERS/CLEANERS: 12 nos. (Six each in Dulaiajn & Moran Tank Farm)

Equipment/Machine cleaner – Matriculate and able to read and write English and communicate in local language.

Notes:

- 1) As per OMR Clause 16, Contractor shall appoint a number of competent persons including officials and technicians during each of the working shift. Such appointed persons shall be competent to perform the duties assigned to them. The person deployed shall be accorded prior approval from OIL.
- 2) In the absence of candidates with requisite quantum of experience, OIL reserves the right to approve substitute candidates temporarily up to maximum period of three months.

Note to Clause No. 6.1: The contractor must assess the jobs requirement as per scope of this maintenance contract and depute his maintenance team comprising adequate no of personnel accordingly without affecting planned/ unplanned jobs as per terms of this contract. Contractor failure to provide maintenance services because of inadequacy of manpower shall attract **penalty at the rate described under SL no. 14 of clause No. 9.0**

6.2 **MISCELENOUS**

- (i) Contractor shall plan for all preventive maintenance jobs as per OIL General Shift from 7:00 am to 3:30 pm. But Contractor maintenance personnel shall be available for attending any breakdown maintenance round the clock 365 days in a year.
- (ii) If OIL decides to take up any maintenance jobs beyond the scheduled maintenance jobs then requisite Contractor personnel shall attend those jobs.

Here decision of the necessity of the person's presence is solely OIL's and Contractor has to abide by that decision.

- (iii) The Contractor will submit a list of engaged personnel and their deployment pattern including any change in the deployment pattern during the tenure of contract period. Contractor shall provide the Installation Manager, OIL with roster/deployment pattern/attendance of all its employees on a monthly basis in the first three days of the month Failure to deploy the minimum Contractor personnel for maintenance jobs will attract **penalty at the rate described under SL no. 14 of clause No. 9.0**
- iv) The Contractor, before starting the work shall obtain a license from concerned authorities under the Contract Labour (Abolition and Regulation) Act 1970, and furnish a copy of the same to the Company. Contractor shall also be responsible for its validity and renewal and for complying with provisions of all applicable Act, Rules and Regulation in force at the locations of the site.
- v) The Contractor shall be solely responsible throughout the period of the Contract for providing all requirements of their personnel, including but not limited to their insurance, housing, medical services, messing, transportation (both air and land transportation), vacation, salaries and all amenities, termination payment and taxes, if any, payable at no charge to the Company. The Contractor's crew personnel's shall arrange for their meal from their own, OIL shall not be responsible for providing any optional canteen facility.
- vi) The Contractor shall be responsible for maintaining the minimum maintenance team personnel as mentioned under clause no. 6.1 irrespective of their leave, sick, absence, retrenchment etc. The Contractor shall maintain his back up personnel with requisite qualification and experience as per this contract terms ready for replenishment the maintenance team for any of the above or any other unforeseen circumstances.

7.0 SPARE MANAGEMENT

FOR CTF DULIAJAN & MORAN TANK FARM:

- (i) All constituent serviceable parts and components of the equipment/facilities of CTF Duliajan and Moran Tank Farm describes above under various above clauses are the spares required for their maintenances (day-to-day routine, scheduled/preventive and break-down maintenances) as well as for keeping them functional so as to continue their safe, trouble free and uninterrupted operations.
- (ii) Any equipment/part/component without which and/or without the replacement of which for any fault, a larger equipment/facility may become inoperative are also termed spares for this contract.
- (iii) All the components of PLC/TFMS/CCTV systems and their associated subsystems including field instruments are considered as spares under this contract.
- (iv) The total cost of spares for CTF Duliajan and Moran Tank Farm as quoted by the bidder/contractor shall be incorporated in the price Schedule of Quantities (SOQ)-

Part-II of this contract. It is presumed that the contractor's quoted price against cost of spares is all inclusive and this quoted price will be valid for the total duration of the contract.

- (v) Payment to the contractor against cost of spares shall be made on **COMPLETE MOBILIZATION OF SPARES**. If OIL decides to buy additional spares from the listed spares in the SOQ then the said spares to be provided at the quoted price of the particular along with the bid within 15 days from the date of issuance of Letter for Purchase as a part of this comprehensive maintenance contract. No extra cost will be paid to the Contractor/OEM/Authorized Dealer by OIL.
- (vi) The mandatory spares list mentioned elsewhere in this contract is a minimum as per OIL's assessment and is for contractor's reference only. The contractor must assess and add to his inventory of mandatory spares any other extra spares as required for the entire duration of this contract and can quote additionally along with the bid, which will be not the part of bid evaluation. Additional spares quoted by the Contractor will be purchased by OIL if OIL feels its requirement for a particular maintenance job.
- (vii) The contractor must handover the replaced items (Items/spares replaced by new ones as part of maintenance) to the respective Installation Manager.
- (viii) Procurement of spares and payment: The contractor shall procure spares preferably from OEM (Original Equipment Manufacturer).
- (ix) In case additional spare not listed in the above mandatory spares list (refer clause no. 3.1 to 3.7) for preventative/breakdown maintenance beyond the contract value of cost of spares, the contractor shall procure at its own cost as a part of comprehensive maintenance contract from OEM/authorized dealer as desired by OIL based on the maintenance requirement. The contractor shall obtain minimum three quotations from three different vendors as per OIL's prevailing procurement process and purchase from the vendor quoting the lowest price. The contractor shall be paid the invoiced amount including base price of the item, taxes & duties as applicable, transportation charges on FOR Duliajan/Moran basis. Additionally the contractor shall be paid 5% on the base price of the invoiced items as handling & administrative charges.
- (x) Contractor shall obtain approval/permission/certificate from OIL indicating quantities make/brand/manufacturer's name etc. against each item before procurement of additional spares.
- (xi) OIL shall have the right to inspect contractor's inventory of mandatory spares from time to time.
- (xii) For procurement of items coming under petty expenses/local purchases/multibrand etc., OIL's prevailing procurement process may not be required to be followed and operator can do off-the-shop purchases. But even in these cases also, approval/permission/certification as stated above and specific permission for such type of off-the-shop procurement must be taken from OIL.
- (xiii) Contractor shall maintain an inventory of all mandatory spares at OIL's premises and stack the same in the Storage Godown as specified in Clause no. 3.7 with

proper housekeeping on daily basis. The Contractor shall keep daily record of consumption & stock position and report the same to OIL on monthly basis &/or as & when asked by OIL. Projection of replenishment-requirement of these spares for initiation of procurement process shall be the responsibility of the contractor.

- (xiv) Contractor shall make available additional spares at CTF Duliajan and Moran Tank Farm within maximum 48 hours of reporting of such requirement by OIL failing which penalty shall be imposed as per SL No. 9 of Clause No.9.0.
- (xv) The contractor must handover unused spares if any to the respective Installation Managers of CTF Duliajan and Moran Tank Farm before closure/expiry of this contract.
- **8.0 Consumables:** Necessary consumables required for maintenance of Instrumentation, Mechanical, Electrical, Information Technology, Clean Agent & Air Conditioner Equipments/Systems except HSD, Lubricants, Gear oil & Coolants shall be under contractor's scope, **failing which penalty shall be imposed as per SL No. 9 of Clause No.9.0.**

9.0 IMPOSITION OF PENALTY

Penalty shall be imposed on the operator for failure of the operator to do any job as per detail scope of work stated on different sub-clauses within clause no 2.4 to 2.10 and Clause no 5.1. Penalties are enlisted at serial number column.

Sl No.	Clause no	Reason of Penalty	Basis of penalty amount	Amount
1.	Safety Gadgets	Non availability of all required safety gadgets, tools & equipment.	Penalty equal to "One day Maintenance Charge/Week will be deducted until its compliance from the invoice of the particular month	Maintenance Charge/wee
2.	Fire Fighting maintenance	Contractor's Failure to carry out all types of Fire Fighting Eqpts. Maintenance as per Check list/ logsheet/ maintenance schedules attached in the tender documents &/or to be provided by OIL.	i) Penalty equal to a day's salary of person concerned.	Rs 10,000/ day part thereof
3.	Mechanical maintenance	Contractor's Failure to carry out all types of Mechanical maintenance as per Check list/log-sheet/maintenance schedules attached in the tender documents &/or to be provided by OIL.	ii) Penalty equal to a day's salary of person concerned.	Rs 10,000/ day part thereof
4.	Electrical Maintenance	Contractor's Failure to carry out all types of Electrical maintenance as per Check list/log-sheet/maintenance schedules attached in the tender documents &/or to be provided by OIL.	i) Penalty equal to a day's salary of person concerned.	Rs 10,000/ day part thereof

Check lists/log-sheets/maintenance shedules attached in ender documents &/or to be provided by Oil.		Instrumentati	Contractor's Failure to carry out a types of Inst maintenance as pe			Rs 10,000/
Clean Agent by Check isits/log-sheets/ iii) Penalty equal to a day's salary of person concerned. Contractor's Failure to carry out all types of Air Conditioner maintenance as per Check lists/log-sheets/ maintenance schedules attached in ender documents &/or to be provided by Oll. Clause no. 3.0 to 8.0 Shortage of sparc parts consumable Clause no. 3.0 to 8.0	5.		Check lists/log-sheets/maintenance schedules attached in ended documents &/or to be provided by	e i) r		day part
7. System as per Check lists/log-sheets/ maintenance schedules attached in ender documents &/or to be provided by OIL. Information Charlestor's Failure to carry out all types of Information Technology System attreance attached in ender documents &/or to be provided by OIL. Clause no. 3.0 to 8.0 spare parts consumable under operator's scope of O&M Clause no. 3.0 to 8.0	6.		types of Clean Agent maintenance at per Check lists/log-sheets maintenance schedules attached it ender documents &/or to be provided	s / ii) n		day part
Recinology System		Conditioning System	types of Air Conditioner maintenance as per Check lists/log-sheets maintenance schedules attached in ender documents &/or to be provided	e / iii) n		day part
Clause no. 3.0 to 8.0 Shortage of spare parts consumable Clause no. 3.0 to 8.0 Improper b/down maintenance of base to 8.0 It. Clause no. 3.0 to 8.0 Improper b/down maintenance of base to 8.0 It. Clause no. 3.0 to 8.0 It. It. Contractor's failure to do Maintenance on minor additional new equipment / unit etc requiring no extra man power burden. 13. New item maintenance item no extra man power burden. 14. Shortage of man-power item no extra man power burden. 15. Contract		Technology System	types of Information Technolog maintenance as per Check lists/log sheets/maintenance schedule attached in ender documents &/or t	y iv)		J 1
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		each Tank Farm.		
15	Failure of OEM's/Autho rized Dealer's Service	equipments as listed in Clause no. 3.1 to 3.7 along with availing	Penalty lumsum of Rs.20, 000/- each day will be	/// // // // // // // // // // // // //

PART-II

1.00 DEFINITIONS AND INTERPRETATION

- 1.01 "THE COMPANY/OWNER/OIL" means Oil India Limited, a Government of India Undertaking having its registered office at Duliajan, Assam. "THE CONTRACTOR/CONTRACTOR" means the successful bidder of this contract. "Act" means the all applicable laws;
- 1.02 "OMR" means Oil Mines Regulation 1984; and its subsequent ammendment
- 1.03 "Schedule" means a schedule appended to these regulations;
- 1.04 "Regional Inspector" means the inspector of mines in charge of the region or local area or areas in which the mine is situated or the group or class or mines to which the mine belongs, over which he exercises his power under the Act;
- 1.05 "Petroleum" means naturally occurring hydrocarbons in a free state whether in the form of natural gas or in a liquid, viscous or solid form but does not include helium occurring in association with petroleum;
- 1.06 "Gas" means the vapour state of the hydrocarbons occurring in, or derived from petroleum.
- A. "Gas free" means an environment in which the percentage of flammable gas does not exceed 20 percent of lower explosive limit of such gas.
- B. "Machinery means I. any stationary or portable engine, pump, air or gas compressor, boiler or steam apparatus, or II. any such apparatus, vessels, appliance or combination of appliances intended for developing, processing, storing, transmitting, converting or utilizing energy, or III. any such apparatus, appliances or combination of appliances if any power developed, stored, transmitted, converted or utilized thereby is, under or intended for use in connection with mining operations.
- 1.07 "Toxic dust/gas" means any dust or gas which can cause a reversible or irreversible disturbance of the normal physiological processes of one or more bodily systems;
- 1.08 "Hazardous atmosphere" means an atmosphere containing any flammable gas in a concentration capable of ignition.

- 1.09 "Hazardous area" means an area where hazardous atmosphere exists or is likely to occur.
- 1.10 "Zone one" hazardous area" means an area in which a hazardous atmosphere is likely to occur under normal operating conditions;
- 1.11 "Zone two" hazardous area" means an area in which hazardous atmosphere is likely to occur only under abnormal conditions;
- 1.12 "Installation" means any fixed installation or part of a fixed installation which is maintained within the mine or is to be established there in connection with exploitation of petroleum or with a view to such exploitation.
- 1.13 The "Mines Manager" means the person appointed in writing by the owner or agent of the mine to be in charge of and responsible for all operations and activities of or in connection to the Mine.
- 1.14 "Installation Manager" means the person appointed in writing by the owner or agent of the mine to be in charge of and responsible for all operations and activities of or in connection to the installation.
- 1.15 "Competent person" means a person who is capable of identifying existing and predictable hazards in the surroundings of working conditions which are unsanitary or dangerous to work-persons and who has authorization to take prompt corrective measures to eliminate them.
- 1.16 "Official" means a person appointed in writing by the owner, agent or manager to perform duties of supervision in a mine or part thereof and includes installation manager, mines safety officer, fire officer, engineer (installation) and surveyor.
- 1.17 The "WORK" means and include all items to be supplied, things to be done and services to be provided and activities to be performed by the CONTRACTOR, pursuant to and in accordance with the CONTRACT, or part thereof, as the case may be, and shall include all extra, additional, altered or substituted items/things/activities/services as required for purpose of the Operation of the plant at DESIRED PERFORMANCE LEVEL with due authorization from the Mines Manager or Installation Manager.
- 1.18 "CONTRACT" means the contract agreement signed for "Operation of the new facilities Post implementation MB LAI Committee Recommendations in the Central Tank Farm, Duliajan & Central Tank Farm, Moran".
- "CENTRAL TANK FARM DULIAJAN & MORAN TANK FARM" means Central Tank Farm (CTF) Duliajan & Moran tank Farm.
- 1.19 "DAY" means a day of 24 hours starting from morning 6 AM of the particular day to next morning 6 AM, irrespective of the number of hours worked in that day.
- 1.20 "WORKING DAY" means any DAY, which is not declared to be holiday or rest day by the OWNER.
- 1.21 "WEEK" means a period of any consecutive seven days.

- 1.22 "Quarter" means a period of three months ending on the 31st March, 30th June, 30th September or 31st December.
- 1.23 "DESIRED MAINTENANCE PERFORMANCE LEVEL" of the PLANT means trouble-free operation of the PLANT with stipulations explained under article PENALTY.
- 1.24 "Major Accident" means an occurrence including but not limited to, a major emission of fire or explosion from uncontrolled developments in the course of drilling and for production, storage, handling or transportation, processing of petroleum or machinery or owing to natural events leading to serious effects (both immediate and delayed as well as inside or outside the installation) causing or likely to cause substantial loss of life and property.
- 1.25 "District Magistrate" in relation to any mine means the District Magistrate or the Deputy Commissioner as the case may be, who is vested with the executive powers of maintaining law and order in the revenue district in which the mine is situated. In the case of a mine which is situated partly in one district and partly in another, the District Magistrate for the purposes of these regulations shall be the District Magistrate authorized in this behalf by the Central Government.
- 1.26 EMERGENCY means any happening which have immediate harmful affect involving threat to the installation, its surroundings and other installations and Govt/public properties and/or its people resulting in disaster caused by major accident and/or uncontrolled release of hydrocarbon from underground reservoir, natural calamities like flood, storm, earthquake etc.
- 1.27 Normal duty hours means from 7:00 AM to 3:00 PM on all working days.
- 1.28 "Standard and Sound Industry Practice" means Clean and safe environment in the entire plant some parameters of which but not limited to are Plant's drains, OWS pits, office-buildings, sheds, facilities, engines, machines, equipment, water reservoirs etc, each devoid of Oil spillage, dirt, filth, sludge, rubble, garbage, residue, high growth grass etc.
- 1.29 Effective date and Duration: This Agreement shall be effective from the Effective Date (being the date on which this Agreement is signed) and unless terminated earlier pursuant to the provisions of this Agreement or the contract, shall continue in effect for the term of contract.

2.0 MOBILIZATION

2.1 **Personnel's & Consumables:** Mobilization shall be deemed to be completed when the Contractor mobilizes along with its personnel and consumables to each Tank Farm along with the manpower ready in all respects to commence the work. The Contractor shall intimate the Company in writing of their readiness to commence work.

Company shall inspect the Contractor's manpower within 5 (five) days' of receipt of the Contractor's Notice of Readiness for Inspection

The mobilization is to be carried out within **30 days** from the receipt of Letter of Award (LOA). After inspecting the pre-requisites, Workorder will be issued to the contractor

prior to start of job in each Tank Farm. The date of issue of workorder will be the date of commencement of contract.

If the Company fails to inspect the Contractor's Personnel's within 05 (five) days from the receipt of Notice of Readiness for Inspection, it shall be deemed to be mobilized.

2.2 **Mandatory Spares:** Mobilization of the mandatory spares along with storage godown should completed within **60 days** from the date of issue of LOA.

Once the Contractor's spares along with storage godown have reached the Contractor's base camp at Duliajan & Moran and are ready to commence services, Contractor shall issue a Notice of Readiness for Inspection to the Company.

Company shall inspect the Contractor's spares a within 7 (seven) days' of receipt of the Contractor's Notice of Readiness for Inspection. After final inspection as per specification, the contract shall arrange for mobilization of the spares and godown to each Tank Farm.

The location for placement of storage godown in each tank farm will be provided by the Installation Manager of each installation. The mandatory spares shall have to be stored & stacked in the said godown properly along with the consumables used for their service.

If the Company fails to inspect the Contractor's Equipment within 5 (five) days from the receipt of Notice of Readiness for Inspection, the Contractor's Equipments shall be deemed to be mobilized.

3.0 CONTRACTOR'S PERSONNEL

- 3.1 Except as otherwise hereinafter provided the selection, replacement, and engagement; Contractor shall determine remuneration of Contractor's personnel. Such employees shall be solely of Contractor's employees. Contractor shall ensure that its personnel will be competent and efficient. However, the Contractor shall provide details of experience, qualification and other relevant data of the personnel to be deployed for scrutiny and clearance by the company before the actual deployment. The Contractor shall not deploy its personnel unless cleared by the company.
- 3.2 Contractor shall provide all manpower for necessary supervision and execution of all work under this contract to company's satisfaction except where otherwise stated. The minimum number of key personnel to be deployed is mentioned in this document.
- 3.3 Replacement of Contractor's Personnel: Contractor will immediately remove and replace any Contractor's personnel, who in the opinion of company, is incompetent, or negligent or of unacceptable behaviour or whose employment is otherwise considered by company to be undesirable.
- 3.4 Contractor shall deploy on regular basis, all category of their employee required for economic and efficient work servicing operations.

4.0 FOOD, ACCOMMODATION, TRANSPORTATION AND MEDICAL FACILITY AT FIELD INSTALLATIONS:

- 4.1 Contractor shall provide food and accommodation services for its Own/OEM's/Authorized Dealer's personnel.
- 4.2 Transportation of Contractor's/OEM's/Authorized Dealer's personnel from base camp to work place and back will be arranged by Contractor at his cost.
- 4.3 Medical Facilities: The Contractor shall arrange for medical facilities for their/OEM's/Authorized Dealer's personnel. However, OIL may provide services of OIL Hospital as far as possible in emergency on payment basis which shall be recovered from the quarterly bill(s) of the contractor.

5.0 CONTRACTOR'S ITEMS

- 5.1 Contractor shall provide equipment and personnel to perform the services under the contract as specified in this document.
- 5.2 Contractor will provide all consumables as specified in this document at Contractor's own cost.

6.0 CONDUCTING FIELD & OFFICE WORKS

- 6.1 The Contractor should have their base camp both at Duliajan & Moran within 8 km radius of each tank farm.
- 6.2 The Contractor shall carry out all maintenance jobs mentioned hereunder with due diligence in a safe and workmanlike manner and in accordance with accepted International oilfield practices.
- 6.3 All the equipment and materials required for execution of the works under this contract shall be in good working condition. The company reserves the right to check the relevant certificates of the equipments, certifying the conditions of the equipment.
- 6.4 Contractor shall be solely responsible for the maintenance of the equipments as mentioned.
- 6.5 **HEALTH, SAFETY & ENVIRONMENT (HS&E) MANAGEMENT:** The objective of safety management is to evaluate, monitor and communicate about the health, environment and safety of the Contractor workforce for an incident free work environment during operation of the contract. Oil India Limited has already devised a standard Performa (Part-V SM/Safety Measures of the tender document), which Contractor has to undertake regarding compliance of all safety measures while carrying out contractual job. Bidder/Contractor's HSE Policy shall cover all the points listed in Part-V SM/Safety Measures of the tender document and shall have to give undertaking to comply the same. A) OIL has also an HSE policy in place covering different applicable industry standards and regulations. Moreover the policy is guided by the statutory and Government directives.
- i) **HSE Drills, meeting etc:** The Party shall observe such HSE regulations in accordance with acceptable oilfield practice and applicable Indian Laws. The Party shall take all measures reasonably necessary to provide safe & pollution free working conditions and shall exercise due care and caution in preventing fire, explosion or

pollution. Party shall conduct such safety drills, Tool box meetings, etc. as may be required by company at prescribed intervals.

- ii) Record Keeping, Documentation in connection with HSE: Documentation, record keeping of all safety practices should be conducted as per international/Indian applicable laws, act, regulations etc, as per standard Oilfield practice and these records should be made available for inspection at any point of time. The H.S.E policy as well as emergency procedure manual/contingency plans for pollution control should be kept at site. Compliance of these shall be the sole responsibility of the Party.
- iii) **First Aid Kit:** An adequate and approved first aid kit shall be provided at work site with all medicines as per Rule 44(1) of Mines Rules 1955.
- iv) **CAMP AND OTHER ESTABLISHMENT**: Suitable camp facilities for Party's personnel including catering services shall be Party's responsibility.
- v) **STAND BY VEHICLE:** A standby vehicle with spark arrestor at the engine exhaust should be made available by the contractor at work site for emergency mobilization of personnel to hospital in case of injury/accident/medical emergency for their personnel's.

Note: The bidder shall submit an undertaking as per Part-V SM/Safety Measures of the tender document.

- 6.6 **Adverse Weather:** Contractor, in consultation with company, shall decide when, in the face of impending adverse weather conditions, to institute precautionary measures in order to safeguard the equipment and personnel to the fullest possible extent.
- 6.6 <u>Execution of Day-to-day Routine/Preventive/Break-down and Schedule maintenance and Corresponding penalties against non-execution of the maintenance jobs</u>

The Contractor shall do all types of maintenance jobs on any type of equipment/instrument/machine/unit/facility of the plant irrespective of scope of provisioning of the spares, consumables and other materials required thereon as described in clause no. 3.0 to 8.0 in SCC (Part-I)

i) After initial communication and subsequent acknowledgement of the contractor in regards to maintenance, in case of malfunctioning or under-performing or breakdown of any units of the plant that takes place at any time during the currency of this maintenance contract, the contractor needs to immediately report to OIL.

In case the contractor's claims any fault as above to happen at a time just prior to OIL's inspection of the plant on that day, OIL shall investigate the performance history of the unit and all related reports/records/documents as already furnished till that day by the contractor. No new reports etc shall be acceptable to OIL on that day. Contractor's claim as above shall be judged as per findings based on already submitted reports etc by contractor. Penalty shall be imposed on operator if fault is found to start earlier as per **penalty clause no. 9.0.**

- ii) All day-to-day routine maintenance/servicing jobs and schedule/preventive maintenance jobs shall be carried out regularly by the contractor at their cost. The contractor shall carry out all routine maintenance/servicing jobs and schedule/preventive maintenance jobs of the plant in the most regular, meticulous and diligent ways.
- iii) The contractor must be able to identify any problems, wear & tear in parts/components etc. of units/equipment etc. which if not replaced immediately is likely to cause trouble in the functioning. The contractor shall have to promptly replace such items and follow the clause in regards to items used/replaced. The contractor must eventually be able to avoid breakdown or malfunctioning of any equipment, facilities, and units of plant.
- iv) OIL may decide to go for additional maintenance jobs on any of the units/ equipment/facility of the Tank Farms over & above the scheduled ones. The contractor shall have to carry out the same and necessary spare for which shall be supplied by OIL from its inventory.
 - For all routine maintenances/servicing jobs, schedule/preventive maintenance jobs and also for breakdown maintenances/major repairs etc. the contractor shall have to carry out all required workshop jobs like but not limited to jobs of various machining operations, milling, drilling, boring, reaming, grinding, lapping, press-fitting, shrink-fit assembly, expanded fit assembly, dismantling, assembling-disassembling etc. Further the operator shall have to be equipped with all required tools & tackles and other equipment. These include but not limited to items like wrenches, tongs, hammers, chisel, dies, all tools (non sparking) necessary for attending routine and breakdown maintenance of electrics, instrumentation and control system; temperature guns for machine-temperatures; hydraulic pullers of sufficient ratings, tripods & chain pulleys of required ratings, maintenance tool boxes, tool kit-sets, tube expander etc for all maintenance jobs.
- v) All routine maintenance/servicing jobs and schedule/preventive maintenance jobs shall have to be properly documented/recorded and reported to OIL on real time basis. Absence of records &reporting to OIL, contractor's claim on doing the jobs will not hold good. Reports submitted at a later date shall not be accepted.
- vi) The maintenance history of equipments/units shall have to be maintained for each of the equipment/unit by the contractor and such maintenance history/records should be signed by the contractor and submitted to the IM of Tank Farms for future reference.
- vii) Should the contractor fail to start any jobs as above in professional manner and with full man-power strength due to any reasons including but not limited to the reason of shortage/lack of spares, consumables and replacements falling under the scope of the contractor to do the purchasing process, the contractor shall be fully responsible and accountable. Penalty will be imposed on the operator as per **Penalty Clause numbers-9.0** as the case may be.
- viii) Any one or more of these **penalties listed in clause no. 09** shall be applicable which may lead to malfunctioning, underperforming or shutdown/breakdown of any unit, equipment, facility of each Tank Farm.

- ix) The contractor's performance or the lack of it in doing routine & schedule maintenance jobs shall be determined from reports/records/documents etc. regarding all servicing & maintenance jobs and regarding all used spare parts & consumables used on a particular unit or equipment.
- x) In case of breakdown or malfunctioning or under-performing of any equipment, the contractor needs to immediately report the same to OIL.
- xi) Simultaneously, the contractor must immediately start break-down maintenance jobs for restoring the unit at their cost and/or must replace any such break-down unit(s) within the shortest time avoiding interruption or under-performance of the plant.
- xii) Breakdown maintenance job as above shall be done with professional workmanship and continuously in all the shifts in all days without gap with skilled and adequate man-power strength. For that, the contractor shall arrange its maintenance gang. Presence of Key personnel during the maintenance job will be required.

Man power of operator should be competent & sufficient for carrying out such jobs as **per clause no. 6.0.**

xiii) Requirement of OEM or their authorized dealers for Annual Maintenance Contracts (AMCs)/Warranties of their respective equipment shall be an issue of the contractor of their own. In case, the contractor decides for bringing OEM or their authorized dealers for any job at Tank Farms the same needs to be endorsed by OIL on immediate basis. The responsibility for the maintenance service shall entirely rest with the contractor in case of any failure to do so. Failure of the same shall not be acceptable. OIL's endorsement will only be for allowing the contractor to employ the OEMs /authorized dealer on their behalf.

Contrarily, if the contractor decides to send any equipment / unit etc to OEM's workshop for maintenance, same needs to be endorsed by OIL. In such cases standby arrangement shall have to be provided by the contractor without extra charge.

Contractors failure to return the unit/equipment to OIL after such repair/rectification within 20 days shall attract **Penalty as per clause no. 9.0**. Such rectified unit/equipment shall have to be presented by the contractor to OIL for inspection before placement of the same.

- xiv) If OIL finds the contractor's delay in starting required maintenance job detrimental to the plant or its operation, OIL shall carry out the job on its own but the financial implications in regards to cost of OIL's repair-activities will be recovered from monthly bills/Performance Bank Guarantee. This is deemed as **per Penalty Clause number-9.0.** OIL shall intimate the contractor prior to start of the jobs.
- xv) In case of any maintenance jobs that requires civil/mechanical/ electrical/instrumentation assistance, the same will be under the contractor's scope.

xvi) In case of breakdown of any major equipment and requirement of transferring it to the IC workshop or any workshop for repairing all necessary arrangement viz. Lifting, transportation, packing etc. should be provided by the contractor.

6.7 Services of OEM (For Clause no. 3.0 to 8.0 in SCC (Part-I)):

The contractor is under the binding to inspect all the equipment/units by the representative of OEM not less than Service Manager or authorized Engineer twice in a year under normal circumstances. Certificates of Inspection shall have to be deposited to OIL after completion of each inspection immediately.

In case of any major breakdown where the contractor's crew are unable to rectify the defects within 48 hours of occurrence of such breakdown, the contractor is liable to provide the services of OEM to repair/rectify such defects.

Should the contractor feels the requirement of OEM's services it may do so at any point of time during the tenure of the contract. No additional charges for availing the above services/certification etc. shall be paid by the OIL to the contractor/OEM/authorized dealer.

Any issues related to OEM/authorized dealer with the contractor shall not be the responsibility of OIL.

Failure to comply the above requirements as stated shall attract **Penalty as per clause no. 9.0**

7.0 CONTRACTOR'S SPECIAL OBLIGATIONS

- 7.1 It is expressly understood that Contractor is an independent party/Contractor and that neither it nor its employees are employees or agents of company provided, however, company is authorized to designate its representative, who shall at all times have access to the equipment and materials and all records, for the purposes of observing, inspecting and designating the work to be performed hereunder by Contractor. The Contractor may treat company's representative as being in charge of company's designated personnel. The company's representative may, amongst other duties, observe, test, check and control implementation of equipment and inspect works performed by Contractor or examine records kept by Contractor.
- 7.2 Compliance with Company's Instructions: Contractor shall comply with all instructions of Company consistent with the provision of this Contract, but not limited to work programme, safety instructions, confidential nature of information, etc. Such instructions shall, if Contractor request, be confirmed in writing by company's representative.
- 7.3 Confidentiality of Information: All information obtained by Contractor in the conduct of operations hereunder shall be considered confidential and shall not be divulged by Contractor or its employees to anyone other than company's representative. This obligation of Contractor shall be in force even after the termination of the Contract.
- 7.4 Contractor shall arrange for inland transportation of all equipment, etc. from the port to the place of work and back at the end of the work at their own expense.

Arrangement of Road Permits and payment of Assam Entry Tax for bringing equipment/material to Work place shall be Contractor's responsibility.

- 7.5 Contractor must observe all safety and statutory norms applicable to the Company to prevent surface pollution and injury to Contractor's personnel working in the area and provide medical facilities to Contractor's injured persons if any due to accident/take corrective measures in case of pollution as per the company's instructions.
- **8.0** Loss or Damage of Contractor's equipment Except as otherwise specifically provided in the contract, any damage to or loss, of tools/equipment regardless of the cause or reason for said loss, shall be the loss of the Contractor, its underwriters or insurers. Contractor indemnifies OIL, its Co-licensees and its and their affiliates Companies, Agents, employees, invitees, servants, their underwriters or insurers (other than Contractor's) and their employees, agent any claim whatsoever or responsibility for any damage to or loss the equipment or property of Contractor furnished or intended for use in the operations herein undertaken.
- **9.0** Loss or Damage of OIL'S EQUIPMENT/PROPERTY: Contractor shall assume the risk of and shall be solely responsible for, damage to and loss or destruction of materials and equipment or supplies furnished by OIL. In case there is a loss or damage to OIL's equipment/property for causes attributable to Contractor, the Contractor shall compensate OIL adequately.
- **10.0** Pollution and contamination: Notwithstanding anything to the contrary contained herein, it is agreed that the responsibility and liability for pollution or contamination shall be as follows:

Contractor shall assume all responsibility and liability for cleaning up and removal of pollution or contamination which originates above the surface.

11.0 LIQUIDATED DAMAGES & PENALTY

- 11.1 Mobilization shall be completed within 30 (Thirty) days from the Date of issue of LOA (Letter of Award) of the Contract.
- 11.2 For default in timely mobilization, the Contractor shall pay to the Company liquidated damages at the rate of ½% of the Annualized Contract value per week or part thereof of delay subject to maximum of 7.5% of the Contract value. Liquidated Damages will be reckoned from the date after expiry of the scheduled mobilization period as per LOA till the date of actual completion of the mobilization as defined in 2.0 above under Section-II.
- 11.3 If the Contractor fails to mobilize their personnel's within 30 days and mandatory spares along with storage godown within 60 days from the issue of LOA, the Company reserves the right to cancel the Contract without any compensation whatsoever.
- 11.4 In case of inordinate delays attributable to the Contractor at any stage of contract period the Company also reserves the right to discontinue the contract in which case no charge shall be payable to Contractor. Company's decision in such matters shall be final and binding on the Contractor.

12.0 DISCIPLINE: The Contractor shall maintain strict discipline and good order among their employees and shall abide by and conform to all rules and regulations promulgated by the Company. Should the Company feel with just cause that the conduct of any of the Contractor's personnel is detrimental to Company's interests; the Company shall notify Contractor in writing the reasons for requesting removal of such personnel. The Contractor shall remove and replace such employees at their expense within 7 days from the time of such instruction given by the Company.

13.0 Powers and Duties of OIL In no other circumstances, OIL's obligations cover any other matter(s) not stated below:

- i) OIL shall appoint, as per provisions of the Oil Mines Regulations 1984 (OMR) and its subsequent amendment if any, a Mines Manager, an Installation Manager or his representative, Competent Person(s) for safe operation of the plant as per sound industry practice.
- ii) The Installation Manager, Mines Manager or his representative will be solely responsible for all decisions regarding safe operation and up to date maintenance of the installation. Installation Manger, Mines Manager or his representative will also be responsible for maintenance of water disposal wells connected to the installation.
- iii) Subject to the provisions of the contract, OIL promptly pay and discharge the costs arising out of maintenance of the plant/facilities, reimbursement of other jobs as per provisions of the payment terms of the contract.
- iv) OIL shall deduct penalty amount from quarterly "MAINTENANCE" bills of the Contractor in case the Contractor fails to carry out any job as mentioned in the Contract document.
- v) The Contractor will be following all the instructions as decided by the Installation Manager, Mines Manger or his representative for safe operation of the plant/facilities, as per the scope of work covered under clause no 3.1 to 3.0 to 8.0 of Section-I under Part-I (SCC). For any decision regarding safe operation of the plant, the decision of Installation Manger, Mines Manager or his representative will be final & binding which must be strictly complied with by the Contractor unless such decisions are contrary to the provisions of the contract.
- vi) OIL will have to finally give consent to appointment of any work personnel in the capacity of officers or work-staff for working at Tank Farms under the contract. Contractor must hand over all documents about their potential employees to be deployed at Tank Farms regarding personal details, educational background, other credentials etc. before actual appointment. OIL does not have any part or say on the selection procedures of employees of the Contractor. However, on receipt of all documents as above OIL has the right to reject/disallow any such employees to work at Tank Farms. This clause is applicable in conjunction with Man power clause no 6.0 of Section-I under Part-I (SCC).
- vii) The Installation Manger, Mines Manager or his representative shall have the authority to promptly take action regarding removal of any person working inside the plant from his workplace for negligence of duty, violation of safety norms as per Mines Act or OMR, HSE policy of OIL and wilful insubordination of any legitimate order of the

Installation Manger, Mines Manager or his representative regarding operation of the plant. Such decisions will be in consultation with representative(s) of the Contractor and are applicable in conjunction with Man power clause no 6.0 of Section-I under Part-I (SCC).

- viii) The Installation Manager, as per provisions of the OMR, will visit the installation once in every working day and the authorised representative of the Contractor will be physically present during the regular visit of the Installation Manager to the Installation. In case of any operational emergency when the authorised representative of the Contractor leaves the installation during the visit of the Installation Manager, the prior intimation for the same should be made in advance to the Installation Manager and the name of the authorised in-charge representative(s) shall be made known to the Installation Manager in writing.
- ix) OIL shall make available Electricity free of cost for "MAINTENANCE" jobs of the plant/facilities from OIL's captive power plant at a New Switch Room inside the plant boundary.
- **14.0** Contractor should ensure that there is no pollution either of water, air or sound during the operation of the new facilities under the MB Lal project. Contractor should be more careful and checked for any leakage and immediate corrective action to be taken for such leakages to avoid any pollution problems. Contractor should inform such leakages immediately to the Company's Representative.
- **15.0** The Contractor shall not make Company liable to reimburse the Contractor to the statutory increase in the wage rates of the contract labour appointed by the Contractor. Such statutory or any other increase in the wage rates of the contract labour shall be borne by the Contractor.
- **16.0 LABOUR LICENSE:** The Contractor, before starting the work shall obtain a license from concerned authorities under the Contract Labour (Abolition and Regulation) Act 1970, and furnish a copy of the same to the Company. Contractor shall also be responsible for its validity and for complying with provisions of all applicable Act, Rules and Regulation in force at the locations of the site.
- **17.0** The Contractor shall not engage labour below 18 (eighteen) years of age under any circumstances. Persons above 60 years age also shall not be deployed. Moreover, the Contractor should obtain and produce in advance before commencement of work, the following certificate/approvals:
- (i) Total manpower list
- (ii) All certificates as per applicable laws including Mines Acts.
- (iii) Regional Labour certificate, if required.
- **18.0 Additional expenses due to fault of the Contractor:** In case additional expenses are incurred due to failure of system/process/equipment/general infrastructure of the plant/facilities, pipeline network and disposal wells on account of wrong operation/wrong maintenance/wrong handling/poor workmanship/use of incompetent manpower /lack of supervision/lack of co-ordination/wilful insubordination of Operating

instruction by the person or group of persons engaged by the Contractor, the Contractor will bear all such expenses. The Contractor will commence necessary rectification/modification required to rectify such failures.

19.0 Additional expenses on OIL for design modification required at the plant:

For any modification in design or addition of new equipment or infrastructure which is required for some additional requirements felt by OIL during the currency of the "MAINATENANCE" contract, the cost will be borne by OIL, unless otherwise the modification/addition is required to rectify poor workmanship of the Contractor during operation.

20.0 The Bidder/Contractor understands that minimum wages may increase from time to time as notified by statutory authority and undertakes that Contractor shall not make Company liable to reimburse Contractor for such statutory increase in wage rates of the labours/workers appointed by the Contractor during the entire period of the contract, including extension if any. Currently, such increase in the wage rates is twice in a year. Bidder shall bid after considering this increase in wage rates for the entire period of Contract including extension provision. The Contractor further undertakes that he/she/they will pay his/her/their workers the increased wages as notified by Govt. of India under the Minimum Wages Act from time to time and such statutory or any other increase in the wages rates of contract labour deployed by the Contractor shall be borne solely by the Contractor during the entire period of the contract, including extension if any, without any cost implication whatsoever upon the Company.

21.0 CUSTOMS DUTY

21.1 In terms of Sl. No. 404 of the Customs Notification No.50/2017-Cus dated 30.06.2017, imports of the items specified in List 33(CONDITION NO. 48)of the Notification are subject to levy of concessional rate of customs duty @5% (BCD Nil & IGST@5%)subject to conditions specified therein (Condition No.48). However, this is subject to change as per Government guidelines and the provisions ruling at the time of tender closing will be applicable.

Similarly, the domestic supply of such goods would attract5% GST (i.e. IGST or CGST & SGST/UTSGT) on submission of EC in terms of GST Notification No.03/2017.

- 21.2 Contractor shall provide the list of items to be imported by them under the Contract in the format specified in Proforma-A along with their bid for issuance of Recommendatory Letter to DGH. Contractor shall made written request to Company immediately after shipment of the goods indicated by them in Proforma-A, along with the Invoices and all shipping documents (with clear 15 working days' notice) requesting Company for issuance of the Recommendatory Letter. OIL shall issue the Recommendatory provided all the documents submitted by the Contractor are found in order as per contract. It shall be however, Contractor's responsibility to obtain EC from DGH and clear the goods through customs. OIL shall not be liable in whatsoever manner for the rejection of their claims for zero customs duty by any of the authorities including DGH arising solely as a result of any default on the part of the Contractor.
- 21.3 All imports and import clearances under the contract shall be done by the contractor and OIL shall not provide any assistance in this regard.

- 21.4 However, in the event customs duty becomes leviable during the course of contract arising out of a change in the policy of the Government, Company shall be liable for payment of the customs duties leviable in India on Contractor's items as provided in Proforma-A or the actual whichever is less (for the first time import) and at actuals (for subsequent imports), provided Contractor furnishes all necessary documents indicating the estimated customs duty at least 10 days in advance. Such payment of Customs Duty shall be arranged by Company and made available to the representatives of Contractor at Kolkata within 3 working days after Contractor submits the undisputed and clear necessary documents/duty assessment papers at Company's office at Kolkata. Contractor would be responsible for passing such payment to customs authorities at the port of entry. Company's obligation for Customs Duty payment shall be limited/ restricted to the tariff rates as assessed by the Customs on the day of clearance, or as on the last day of the stipulated mobilization period. In case of clearance thereafter, on the CIF value of items in Proforma-A will be frozen and any increase in Customs Duty on account of increase in value on these will be to the Contractor's account. Furthermore, in case the above CIF value is not acceptable to assessing Customs Officer and as a result if any excess Customs Duty becomes payable, it shall be to Contractor's account. Before filing Bill of lading, Bill of entry, the Contractor must consult the Company to avoid payment of excess Customs Duty.
- 21.4.1Contractor shall, however, arrange clearance of such items from Customs and port authorities in India and shall pay all requisite demurrages, if any, clearance fees/charges, port fees, clearing and forwarding agent fees/ charges, inland transport charges etc. Company shall provide all assistance by issuance of necessary letter of authority or other relevant documents and necessary help.
- 21.4.2 Notwithstanding what is stated above, the bidders should also consider the position in regard to import of goods as specified in list No. 33 of above notification against concessional rate of 5% Customs Duty. OIL is not liable in whatsoever manner, for the rejection of their claims for concessional rate of 5% Customs Duty by any of the authorities including the DGH.
- 21.4.3 The bidder while quoting would need to consider the duty drawback as per notification No. 23/2008 dated 01.03.2008 available to them upon re-export of the equipment, if any. The bidder should also note that input tax credit would also be available to them on the IGST paid by them excluding duty drawback and this aspect should also be considered by them while quoting their rates.
- 21.4.4 Similarly, such specified goods required for petroleum operations if procured from domestic sources would attract5% concessional GST (IGST or CGST & SGST/UTGST) as per notification no. 3/2017 dtd. 28.06.2017 against issuance of EC by DGH for which OIL shall issue the recommendatory letter.

Note: The recommendatory letter will be given only for those items which are either consumed during the execution of work or for those equipment/tools which are undertaken to be re-exported by the bidder. The recommendatory letter will not be issued when the bidder imports the equipment/tools on acquisition basis and does not undertake to re-export the same after the completion of the contract.

21.5 Contractor must ensure that the spares and consumables imported by them for providing the services under Contract are properly used in executing their job under the

Contract in the PEL/ML areas of Company for which EC has been obtained. Contractor shall furnish to Company a certificate as and when the spares and consumables are used/consumed certifying that the spares and the consumables imported by them have been consumed in those ML and PEL areas under the contract for which ECs were obtained by them. In order to avoid any misuse of the spares and consumables imported by the Contractor for providing the services under the Contract, Contractor shall furnish an Undertaking similar to that being furnished by Company to Customs of suitable amount before issue of the Recommendatory Letter.

PROFORMA-A

LIST OF ITEMS (Equipment, Tools, Accessories, Spares & consumable) TO BE IMPORTED INCONNECTION WITH EXECUTION OF THE CONTRACT SHOWING CIF VALUE

Srl #	Item Description	Qty/ Unit	Rate	II'ATAI	Freight & Insurance	CIF Value	Port & other charge	Landed Cost	Is it re- exportable ? YES or NO	Year of Mfg.	HSN Code
A	В	С	D	E = C x D	F	G = F + E	н	I = G+H	J	K	L

- (1) The items which are not of consumable in nature and required to be re-exported outside India after completion of the Contract should be indicated as "YES" in column "J".
- (2) The items, which are of consumable in nature should be indicated as "NO" in column "J".
- (3) For estimation of applicable customs duty, the bidders are required to indicate customs tariff code (i.e. HSN Code) of each item in column "L".

Authori	Authorised Person's Signature:							
Name: _								
	Seal of the Bidder:							

To, CGM-CONTRACTS OIL INDIA LIMITED DULIAJAN-786602

SUB: SAFETY MEASURES

Description of service:

Hiring of Service for 'Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of 02 (Two) years extendable by 01 (One) year.

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:

1) _		 	_
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. We would ensure that all the provisions under the Oil Mines Regulations, 1984 and other safety rules related to execution of our work would be strictly followed by our personnel. 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) We confirm that all persons engaged by us would be provided with the necessary Safety Gears at our cost.
- f) 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.
 - g) We shall abide by the following HSE (Health, Safety & Environmental) POINTS:

GENERAL HEALTH, SAFETY & ENVIRONMENT (HSE) POINTS:

- 1. It will be solely the Contractor's responsibility to fulfill 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-sub contractors.
- 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 footwear, Safety Helmet and Full Body harness 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. 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, initial 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 VT 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 Centers 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. To arrange 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.

PART-V SAFETY MEASURES (SM)

- 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.

(Seal)	Yours Faithfully
Date	
M/s	
FOR & ON BEHALF OF CONTRACTOR	

PART-VI: INTEGRITY PACT

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 "Hiring of Service for 'Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of 02 (Two) years extendable by 01 (One) year." 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 Organization "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

- (1) 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.
- (2) 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 suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section: 2 - Commitments of the Bidder/Contractor

- (1) 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 cartelization 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.
- **(2)** The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

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.
- 5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9 Pact Duration whichever is later**. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings

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 Earnest Money Deposit/Bid Security.
- 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 Security Deposit/Performance Bank Guarantee.
- 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 Principal will enter into Pacts on identical terms with all bidders and contractors.

- 2. The Bidder/Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.
- 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

- 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. However, the Independent External Monitor shall give an opportunity to the bidder/contractor to present its case before making its recommendations to the Principal.
- 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

PART-VI: INTEGRITY PACT

'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. The Arbitration clause provided in the main tender document/contract shall not be applicable for any issue/dispute arising under Integrity Pact.
- 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 intensions.

For the Principal	For the Bidder/Contractor
	Witness 1:
	Witness 2:
Place.	
Date.	

BID FORM

To M/s Oil India Limited, P.O. Duliajan, Assam, India

Sub: IFB No. CDO7246P18

Gentlemen,

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 work/services in conformity
with the said conditions of Contract and Terms of Reference for the sum of
"NOT TO BE QUOTED HERE" (Total Bid Amount in words and
figures) or such other sums as may be ascertained in accordance with the
Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to commence the work as per the terms & conditions set out in the subject tender.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum not exceeding 10% of contract value for the due performance of the Contract.

We agree to abide by this Bid for a period of 120 days from the original date of Bid closing 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	2018.
Authorised Per	son's Signature:	
Name:		
Designation: _		
Seal of the Bid	der:	

STATEMENT OF NON-COMPLIANCE (IF ANY)

(Only exceptions/deviations to be rendered)

1.0 The Bidder shall furnish detailed statement of **exceptions/deviations**, if any, to the IFB 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

Signature of Bidder: _	
Name:	

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 Non-Compliance**" in the above Proforma is left blank (or not submitted along with the Bid), then it would be constructed that the bidder has not taken any exception/deviation to the IFB requirements.

PROFORMA LETTER OF AUTHORISATION FOR ATTENDING BID OPENING

TO CGM (CONTRACTS) OIL INDIA LIMITED P.O. DULIAJAN-786602 Assam, India

Sir,

SUB: OIL's IFB No. CDO7246P18

I/Weaddress) as authorised to represent against IFB No. <u>CDO7246P18</u> for H Maintenance Contract (CAMC) for Committee recommendations in Committee against IFB No. 2015	us during bid opening on or iring of Service for 'Composite the new facilities instantant Tank Farm, Duliaja	our behalf with you prehensive Annual lled post M B Lal n and Moran Tank
Farm for a period of 02 (Two) years	extendable by 01 (One) y	Yours Faithfully,
Aut	norised Person's Signatur	
Si	gnature of Bidder:	
	Name:	

PROFORMA LETTER OF AUTHORITY

TO
CGM-CONTRACTS
Contracts Department
P.O. DULIAJAN PIN-786602
Dist. Dibrugarh, Assam
India

Dear Sir,

SUB: OIL	's IFB	No. CD	0724	6P18
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We	of	
Confirm	that	Mr.
(Name and Address) is	authorised to represent us to Bid, nego	tiate and conclude
the agreement on our l	behalf with you against IFB No. CDO724 0	6P18 for Hiring of
-	ensive Annual Maintenance Contract (C	•
-	st M B Lal Committee recommendation	
	Moran Tank Farm for a period of	
extendable by 01 (One	e) year for any commercial/Legal purpose	etc.
We confirm the representative shall con	at we shall be bound by all and who	atsoever our said
Authorised Person's S	ignature:	
Name:		
		Yours faithfully,
		rouro raremany,
	Signature:	
	Name & Designation	n
	name & Designation	.1
	For $\&$ on behalf of $_$	

NOTE: This letter of authority shall be on printed letter head of the bidder, and shall be signed by a person competent and having the power of attorney (Power of attorney shall be annexed) to bind such Bidder.

To

FORM OF BID SECURITY (BANK GUARANTEE FORMAT)

M/s OIL INDIA LIMITED, CONTRACTS DEPARTMENT, DULIAJAN, ASSAM, INDIA, PIN-786602
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 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 said Bank this day of 20
 THE CONDITIONS of these obligations are: If the Bidder withdraws their Bid within its original/extended validity; or The Bidder modifies/revises their bid suomoto; or The Bidder does not accept the contract; or The Bidder does not furnish Performance Security Deposit within the stipulated time as per tender/contract; or If it is established that the Bidder has submitted fraudulent documents or has indulged into corrupt and fraudulent practice.
We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable), 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 any of the 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.
The details of the Issuing Bank and Controlling Bank are as under:
A. Issuing Bank: BANK FAX NO: BANK EMAIL ID: BANK TELEPHONE NO.: IFSC CODE OF THE BANK:
B. Controlling Office:
Address of the Controlling Office of the BG issuing Bank: Name of the Contact Person at the Controlling Office with Mobile No. and e-mail address:
SIGNATURE AND SEAL OF THE GUARANTORS
Name of Bank & Address
Contd P/2

Wi	tness
	dress
(Si	gnature, Name and Address)
Da	te:
Pla	ce:
	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/as specified in the Tender.
No	te:

Page No. 2

PROFORMA-V

The Bank Guarantee issuing bank branch shall ensure the following:

The Bank Guarantee issued by the bank shall be routed through SFMS platform as per the following details:

- i) "MT 760/MT 760 COV for issuance of bank guarantee.
- ii) "MT 760/MT 767 COV for amendment of bank guarantee.

The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code – UTIB0001129, Branch address – AXIS Bank Ltd., Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, District Dibrugarh, PIN – 786602.

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

Name:
ULL Address:
Phone Number: Mobile Number: C-mail address: Cax Number: Bank Account Number (in which the Bidder wants remittance against invoices): Bank Name: Branch: Eddress of the Bank: Bank Code: FSC/RTGS Code of the Bank: DEFT Code of the Bank: DAN Number: BAN Number: BAN Registration Number:
Signature of Bidder with Official Seal

To

FORM OF PERFORMANCE BANK GUARANTEE

AND WHEREAS it has been stipulated by you in the said Contract that the
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee as security for compliance with
Contractor's obligations in accordance with the Contract.
AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee NOW THEREFORE we hereby affirm that we are Guarantors on behalf of the Contractor, up to a total of (Amount of Guarantee in figures) (in words), such amount being payable in the types and proportions of currencies in which the Contract price is payable, and we undertake to pay you upon your first written demand and without cavil or argument, any sum or sums within the limits of guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the Contract or the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way see us from any liability under this guarantee, and we hereby waive notice of such
change, addition or modification.
This guarantee is valid until theday of
The details of the Issuing Bank and Controlling Bank are as under:
A. Issuing Bank:
BANK FAX NO:
BANK EMAIL ID:
BANK TELEPHONE NO:
IFSC CODE OF THE BANK:
B. Controlling Office:
Address of the Controlling Office of the BG issuing Bank: Name of the Contact Person at the Controlling Office with Mobile No. and e mail address:
SIGNATURE AND SEAL OF THE GUARANTORS
Designation

Note:

Name of Bank	
Address	
Witness	
Address	-
 Date:	-
Place:	

The Bank Guarantee issuing bank branch shall ensure the following:

The Bank Guarantee issued by the bank shall be routed through SFMS platform as per the following details:

- i) "MT 760/MT 760 COV for issuance of bank guarantee.
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The above message/intimation shall be sent through SFMS by the BG issuing bank branch to Axis Bank, Duliajan Branch, IFS Code – UTIB0001129, Branch address – AXIS Bank Ltd., Duliajan Branch, Daily Bazar, Jyotinagar, Duliajan, District Dibrugarh, PIN – 786602.

AGREEMENT FORM

This Agreement is made on day of between Oil India
Limited, a Government of India Enterprise, incorporated under the Companies Act
1956, having its registered office at Duliajan in the State of Assam, hereinafter
called the "Company" which expression unless repugnant to the context shall
include executors, administrators and assignees on the one part, and M/s.
(Name and address of Contractor) hereinafter called the "Contractor"
which expression unless repugnant to the context shall include executors,
administrators and assignees on the other part,
administrators and assignees on the other part,
WHEREAS the Company desires that Services (brief
description of services) should be provided by the Contractor as detailed hereinafter
or as Company may requires;
or as company may requires,
WHEREAS, Contractor engaged themselves in the business of offering such
services represents that they have adequate resources and equipment, material etc.
in good working order and fully trained personnel capable of efficiently undertaking
the operations and is ready, willing and able to carry out the said services for the
Company as per Section-II attached herewith for this purpose and
WHEREAS, Company had issued a firm Letter of Award No dated
based on Offer No dated submitted by the
Contractor against Company's IFB No All these aforesaid documents
shall be deemed to form and be read and construed as part of this
agreement/contract. However, should there be any dispute arising out of
interpretation of this contract in regard to the terms and conditions with those
mentioned in Company's tender document and subsequent letters including the
Letter of Intent and Contractor's offer and their subsequent letters, the terms and
conditions attached hereto shall prevail. Changes, additions or deletions to the
terms of the contract shall be authorized solely by an amendment to the contract
executed in the same manner as this contract.
executed in the same manner as this contract.
NOW WHEREAS, in consideration of the mutual covenants and agreements
hereinafter contained, it is hereby agreed as follows –
isolomator contamea, it is notosy agreed as lone we
1. In this Agreement words and expressions shall have the same meanings as are
respectively assigned to them in the Conditions of Contract referred to.
1
2. In addition to documents herein above, the following Sections and Annexures
attached herewith shall be deemed to form and be read and construed as part of

- (a) PART-I indicating the General Conditions of this Contract;
- (b) PART-II indicating the Schedule of work, unit, quantities & rates;
- (c) PART-III indicating the Special Conditions of Contract;
- (d) PART-V indicating the Safety Measures.

this agreement viz.:

E-TENDER NO. CDO7246P18

- 3. In consideration of the payments to be made by the Company to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Company to provide the Services and to remedy defects therein in conformity in all respect with the provisions of this Contract.
- 4. The Company hereby covenants to pay the Contractor in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS thereof, each party has executed this contract at Duliajan, Assam as of the date shown above.

Signed, Sealed and Delivered,

For and on behalf of Company (Oil India Limited)	for and on behalf of Contractor (M/s
Name:	Name:
Status:	Status:
In presence of	In presence of
1.	1.
2	2

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETTER HEAD									
TO WHOM IT MAY CONCERN									
This is to certify that the following financial positions extracted from the audited financial statements of M/s									
YEAR TURN OVER NET WORTH									
IEAR	In INR	In INR							
Place: Date:									
Seal:									
Membership Number:		Signature							
Registration No. :									

Enclosure-B

Proforma of Bank Guarantee towards Purchase Preference - Local Content

Ref. No.	Bank Guarantee No
	Dated
To, Oil India Limited	
 India	
Dear Sirs,	
which expression shall include all its successed into a CONTRACT No called 'the CONTRACT with M/s	hereinafter referred to as the 'CONTRACTOR') which its repugnant to the context or meaning thereof include all its ators, executors and assignees) and OIL having agreed that all furnish to OIL a Bank guarantee for India Rupees/US\$ withful fulfillment of conditions pertaining to Local Content in alue mentioned in the certificate of Local Content submitted claiming purchase preference under the Purchase Preference
of having hear referred to as "the Bacontext or meaning the and permitted assign immediately on first of Rs./US\$ (in figures) words) protest and/or without made by OIL on the binding, without any protest and any other authority are these presents being all these presents being all contents.	registered under the laws ad/registered office at

discharged by OIL in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operating against the bank.

- **3.** The Bank also agrees that OIL at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that OIL may have in relation to the CONTRACTOR's liabilities.
- 4. The Bank further agrees the OIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in OIL against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relived from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of OIL or any indulgence by OIL to the said CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
- **5.** The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of OIL under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till OIL discharges this guarantee in writing, whichever is earlier.
- **6.** This Guarantee shall not be discharged by any change in our constitution, in the constitution of OIL or that of the CONTRACTOR.
- **7.** The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.
- **8.** The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the purchase CONTRACT has been placed.

9.	Notwithstanding	g anything	contained	herein	above,	out	liability	under	this
Guar	antee is limited	to Indian	Rs./US\$(in	figures	s)		(Indian	Rupees	s/US
Dolla	rs (in words))	and our	guaran	itee s	shall rem	ain in i	force
until		(indic	ate the date	e of expi	ry of ba	nk gi	uarantee).	

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of OIL under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of OIL under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

E-TENDER NO. CDO7246P18

ANNEXURE-XI

In witness whereof, the Bank through its at stamp on this date of 20 a	
WITNESS NO.1	
(Signature) Full name and official address (in legible letters) Stamp	(Signature) Full name, designation and address (in legible letters) With Bank
WITNESS NO.2	Attorney as per power of Attorney No Dated
(Signature) Full name and official address (in legible letters) Stamp	

FORMAT FOR UNDERTAKING (IN TERMS OF BEC CLAUSE NOS. 1.2.2 OF TENDER NO. CDO7246P18)

(On Non-Judicial Stamp Paper of Rs. 100/-) TO BE NOTORISED

To CHIEF GENERAL MANAGER (CONTRACTS) OIL INDIA LIMITED DULIAJAN

Dear Sirs,
UNDERTAKING/DECLARATION BY THE BIDDER AND THE OEM(S)/AUTHORIZED DEALER(S) OF EQUIPMENT(S) SPECIFIED IN CLAUSE NO. 3.0 (PART-I OF SCC) IN RESPECT OF TENDER NO CDI9317P16
This is in connection with the Bid submitted byagainst Tender
No for COMPREHENSIVE ANNUAL MAINATENANCE CONTRACT
(CAMC) FOR CENTRAL TANK FARM (CTF), DULIAJAN AND MORAN TANK FARM
(MTF), OIL OINDIA LTD., DULIAJAN for a period of 2 (two) years or its extension if
any.
I/We, OEM against the subject tender, hereby declare that I/We
would facilitate the required services to the bidder on regular basis
with Maintenance Crew/technology/Spares/Product updates etc. And also extend
all necessary support during the maintenance period for our equipments details of
which is Specified in Clause no. 3.0 (Part-I of SCC).
I/We declare that the information given above is true and any misstatement,
misrepresentation, or suppression of facts in connection with the above
undertaking may entail rejection of the bid and cancellation of contract, if awarded.
Yours faithfully,
Authorized Signatory with Seal
(OEM/Authorized Dealer)
Place:- Date:-

OIL INDIA LIMITED

(A Government of India Enterprise)

Duliajan, Assam

DESCRIPTION OF WORK/SERVICE: Comprehensive Annual Maintenance Contract (CAMC) for the new facilities installed post M B Lal Committee recommendations in Central Tank Farm, Duliajan and Moran Tank Farm for a period of 02 (Two) years extendable by 01 (One) year.

	E-TENDER NO. CDO7246P18										
	NAME OF BIDDER										
	Bidder's GST No.										
	SAC/HSN Code										
<u>Se</u>	elect the benefit sought under the Policy (Use Drop Down List)										
Item No.	Description of Services (For detailed description of Services Refer SOQ)	UOM	Estimated Quantity	Unit Rate Excluding GST (Rs.)	Applicable GST Rate in %	Applicable GST (Select from Drop Down List)	Total (Rs.) Excluding GST	Total GST Amount	Total (Rs.) Including GST		
			A	В			$\mathbf{D} = \mathbf{A} * \mathbf{B}$	C	E = D + C		
10	Comprehensive Annual maintenance charge for 1st year	Quarter	8				0.00	0.00	0.00		
20	Comprehensive Annual maintenance charge for 2nd year	Quarter	8				0.00	0.00	0.00		
30	Cost of Mandatory Spares As per Annexure I	Lumpsum	1		GST Rate to mention in Annexure I		0.00		0.00		
40	Cost of Mandatory Spares As per Annexure II	Lumpsum	1		GST Rate to mention in Annexure II		0.00		0.00		
50	Cost of Mandatory Spares As per Annexure III	Lumpsum	1		GST Rate to mention in Annexure III		0.00		0.00		
60	Cost of Mandatory Spares As per Annexure IV	Lumpsum	1		GST Rate to mention in Annexure IV		0.00		0.00		
70	Cost of Mandatory Spares As per Annexure V	Lumpsum	1		GST Rate to mention in Annexure V		0.00		0.00		

			<u>5P18</u>						
80	Cost of Mandatory Spares As per Annexure VI	Lumpsum	1		GST Rate to mention in Annexure VI		0.00		0.00
90	Cost of Mandatory Spares As per Annexure VII	Lumpsum	1		GST Rate to mention in Annexure VII		0.00		0.00
100	Cost of Mandatory Spares As per Annexure VIII	Lumpsum	1		GST Rate to mention in Annexure VIII		0.00		0.00
Т	Total Cost including Spares, Manpower, Fooding, Accodomation, Transportation, Tools/Tackles and other logistic supports, all liabilities, excluding GST						1 (100	Grand Total Including GST	0.00

Bid shall be evaluated considering total of Spare Price and CAMC Price.

Also, it is mandatory to provide price of each spare as in Annexures without GST but including all liabilities which is to remain valid throughout the tenure of the contract.

All the spares to be supplied must match with the corresponding make/model/part nos. and/or the already installed items at the Central Tank Farm, Duliajan and Moran Tank Farm. In case a prospective bidder/s wants to visit installation to collect specifications, they may do so at their own cost within two days within the bidding period with due permission from OIL provided the bidder/s have purchased the bid document before approaching OIL for permission.

- 1. The price/rate(s) quoted by the Bidders will be inclusive of all taxes except GST (i.e. IGST or CGST and SGST/UTGST as applicable in case of interstate supply or intra state supply respectively and Cess on GST, if applicable) on the final services. However, GST rate (including cess) & Custom Duty to be provided in the respective places in the Price Bid.
- 2. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST (CGST & SGST/UTGST or IGST)
- 3 OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.
- 4. Price Bid uploaded without giving any of the details of the taxes (Including rates and amounts) will be considered as inclusive of all taxes including GST. When a bidder mentions taxes as extra without specifying the rates & amount, the offer will be loaded with maximum value towards taxes received against the tender for comparison purposes. If the bidder emerges as lowest bidder after such loading, in the event of order on that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts will be binding on the bidder.
- 5. Input Tax Credit on GST (Goods & Service Tax) for this service is NOT available to OIL & The bids will be evaluated based on total price including GST.

E-TENDER	NO.	CDO724	6P18
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- 6. Bidder may seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs Order 2012, Bidder hereby categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy.
- i. PP-LC

OR

- ii. MSE policy.
- 7. Purchase preference policy-linked with Local Content (PP LC) notified vide letter No. O-27011/44/2015-ONG/II/FP dated 25.04.2017 of MoPNG shall be applicable in this tender.

Bidders seeking benefits under Purchase Preference Policy (linked with Local Content) (PP - LC) shall have to comply with all the provisions specified in ITB and shall have to submit all undertakings/documents applicable for this policy.

- 8. Refer to GCC for detail of GST
- 9. Refer to SOQ & SCC for Item detail Description
- 10. Period of Contract: 04 (Four) years.
- **11. Mobilisation Period:** 1. The mobilization of the Personnels along with consumables is to be carried out within 30 days from the receipt of Letter of Award (LOA). This mobilized date will be considered as the start date of the Contract. 2. Mobilization of the mandatory spares along with storage godown should be completed within 60 days from the date of issue of LOA.
- 12. Bidder must submit cost break up against line item Nos. from 30 to 100 above, in Annexure I to VIII worksheet.

Annexure-I: Mandatory Spare list (Instrumentation Equipment/System as described in Part-I of SCC)

Bidder Name 0

SL No	Field Instruments	Make	Description	Qty each Tank Farm	Total Reqmt. Quantity	UOM	Unit Rate Excluding GST INR	Total Excluding GST INR	Applicable GST Rate	GST Amount INR
1	F	ield Instru	ments		A		В	C = A *B		
1.1	Gas Detectors	Crowcon	Model - Irmax	1	2	NOS		0.00		0.00
1.2	Pressure Transmitter - density measurement	Emerson	Model:- 3051L3AGO MD21AA DFK5D4T1Q4 M5	1	2	NOS		0.00		0.00
1.3	Pressure Transmitter - fire water hydrant line	Honeywell	Model:- STG170E1G0 000HC SMZSA6LPC CTGMBF 1CA	1	2	NOS		0.00		0.00
1.4	Flow Transmitter	Honeywell	Model:- STD720E1HS 4AS1C AHC11CB11 AOF100 00	1	2	NOS		0.00		0.00
1.5	Level Gauge			1	2	NOS		0.00		0.00
1.6	Pressure Gauge		Model:- 6PSSS		4	NOS		0.00		0.00
1.7	1 0		Model:- 68QSV	1	2	NOS		0.00		0.00
2		ssure Relie								0.00
	Disc Spring		Compatible	2	4	NOS		0.00		0.00
	Bellows Gasket Set		Compatible	2	4	NOS		0.00		0.00
3	Local Control Panels									0.00

	All items like push							
	bottom, hand		c 1					
2	switches, MCB,		5 nos. of each	1	2	MOG	0.00	0.00
3.	l lamps, holder,		item	1	2	NOS	0.00	0.00
	selector switch,		mentioned					
	Indicator etc. mounted							
	in the local panel							
4	Pl	LC Based S	ystems				0.00	0.00
4.1	Each type of modul processor card, al	l type of	power supp	oly cards,				
	communication card etc. as required for th		e cards, contro	ller cards,				
4.1 a	Analog Input Card	Honeywell	Compatible	1	2	NOS	0.00	0.00
4.1 b	Digital output Cards	Honeywell	Compatible	2	4	NOS	0.00	0.00
4.1 c	Digital Input Cards	Honeywell	Compatible	2	4	NOS	0.00	0.00
4.1 d	Controller - safety PLO	Honeywell	Compatible	1	2	NOS	0.00	0.00
4.1 e	Power Supply Unit- Safety PLC	Honeywell	Compatible	1	2	NOS	0.00	0.00
4.1 f	Bulk & Key switch module (BKM)	Honeywell	Compatible	1	2	NOS	0.00	0.00
4.1g	Field Terr	nination As	semblies(FTA)				0.00	0.00
	FTA (Field							
	Termination Assembly) - DO	Honeywell	Compatible	2	4	NOS	0.00	0.00
	FTA (Field Termination Assembly) - DI	Honeywell	Compatible	1	2	NOS	0.00	0.00
	FTA (Field Termination Assembly) - AI	Honeywell	Compatible	1	2	NOS	0.00	0.00
	FTA (Field Termination Assembly) - Gas detector input	Honeywell	Compatible	1	2	NOS	0.00	0.00
4.1 i	IS Isolator Barriers						0.00	

	a) Analog Input (IS isolator barriers)		Model:- KFD2- STC4-EX1	1	2	NOS	0.00	0.00
	b) Analog Output (IS isolator barriers)		Compatible	0	0	NOS	0.00	0.00
	c) Digital Input (IS iso	Pepperl +Fuchs	Model:- KFD2- SR2- EX1.WLB	2	4	NOS	0.00	0.00
	d) Thermocouple			0	0	NOS	0.00	0.00
	e) Digital Output (IS isolator barriers)	Pepperl + Fuchs	Model:- KFD2- SL2-EX1LK	2	4	NOS	0.00	0.00
4.2	Isolator/ Signal multipliers		Compatible	1 lot	2	LOT	0.00	0.00
4.3	Lamps, Selector switches, switches		Compatible	1 lot	2	LOT	0.00	0.00
4.4	Annunciators, Lamps, fuses		Compatible	1 lot	2	LOT	0.00	0.00
5	Tank Farm Manag	gement Sys	tem(TFMS)					0.00
5.1	Power Supply Module				2	NOS	0.00	0.00
5.2	Communication module				2	NOS	0.00	0.00
5.3	Bearing		1 no's of all		2	NOS	0.00	0.00
5.4	TSI		types of	1 mala of	2	NOS	0.00	0.00
5.5	Prefabricated Cable	Honeywel 1 (Enraf)	radar,servo,	1 no's of each type	2	NOS	0.00	0.00
5.6	Fuses	i (Eiliai)	TSI etc.to be	cach type	2	NOS	0.00	0.00
5.7	Electronic Cards for level instruments		kept as spares		2	NOS	0.00	0.00
5.8	Field interface unit (FIU)				2	NOS	0.00	0.00
5.9	Antenna	Honeywel l (Enraf	1 - free space 1- Still well	1	2 2	NOS NOS	0.00	0.00
5.1	Multi element Temperature Sensor	Honeywel l (Enraf	UBAN768C11		2	NOS	0.00	0.00
5.11	Power switch		Compatible	1 lot	2	LOT	0.00	0.00
6	MCT Blocks			1 lot	2	LOT	0.00	0.00

7	Instrumentation valve cables(to be procured drawings)	_		1 lot	2	LOT	0.00		0.00
7.1	Instrument globe valves(to be procured of size as per as-built drawings)		Compatible	5nos	10	NOS	0.00		0.00
7.2	Instruments manifold(to be procured of size as per as-built drawings)		Compatible	2nos	4	NOS	0.00		0.00
7.3	Tube fittings - Male connector(to be procured of size as per as-built drawings)		Compatible	11nos	22	NOS	0.00		0.00
	Tube fittings - female connector(to be procured of size as per as-built drawings)	Champ instrumen ts	Compatible	3nos	6	NOS	0.00		0.00
	Tube fittings - union(to be procured of size as per as-built drawings)		Compatible	3nos	6	NOS	0.00		0.00
	Tube - cap(to be procured of size as per as-built drawings)		Compatible	2nos	4	NOS	0.00		0.00
7.7	Tubes(to be procured of size as per as-built drawings)		Compatible	11 meters	22	Meters	0.00		0.00
8		Cables						-	

8a	3C X 2.5 Sq mm -		in meters	300	600	Meters	0.00	0.00
oa	Black		III IIICCIS	300	000	Wicters	0.00	0.00
8ь	12C X 2.5 Sq mm - Black		in meters	290	580	Meters	0.00	0.00
8c	24c X 1.5 Sq mm - Black		in meters	550	1,100	Meters	0.00	0.00
8d	4C X 1.5 Sq mm - Orange		in meters	90	180	Meters	0.00	0.00
8e	8C X 1.5 Sq mm - Black		in meters	450	900	Meters	0.00	0.00
8f	12C X 1.5 Sq.mm - Black		in meters	70	140	Meters	0.00	0.00
8g	1P X 1.5 Sq mm - Black	Thermoca ble	in meters	90	180	Meters	0.00	0.00
8h	1P X 1.5 Sq mm - Blue	oie	in meters	530	1,060	Meters	0.00	0.00
8i	2P X 1.5 sq mm - Black		in meters	70	140	Meters	0.00	0.00
8j	6P X 1.5 Sq mm - Black		in meters	160	320	Meters	0.00	0.00
8k	6P X 1.5 sq mm - Blue		in meters	62	124	Meters	0.00	0.00
8L	2C X 2.5 sq mm - Orange		in meters	210	420	Meters	0.00	0.00
8m	24C X 1.5 sq mm - Orange		in meters	390	780	Meters	0.00	0.00
8n	1T X 2.5 Sq mm		in meters	90	180	Meters	0.00	0.00
8o	8T X 2.5 sq mm		in meters	90	180	Meters	0.00	0.00
9	Junction Boxes	Flexpro	Minimum 1 Nos of each type	4	8	NOS	0.00	0.00
10		Cable gla						0.00
10a	3/4" ET - Control room			1	2	NOS	0.00	0.00
10 b	1" ET			2	4	NOS	0.00	0.00
10 c	1.1/4" ET			3	6	NOS	0.00	0.00
10 d	1.1/2" ET		Minimum 1 no		2	NOS	0.00	0.00
10 e	1/2" NPT	Flexpro	of each type or		28	NOS	0.00	0.00
10f	3/4" NPT		higher	4	8	NOS	0.00	0.00

	tal Spares Landed Pric	e at Duliaja	an and Moran a	all inclusive	e but Exclu			Total GST	
10i	3/4" ET - Radar			8	16	NOS	0.00		0.00
10 h	1.1/4" NPT			2	4	NOS	0.00		0.00
10 g	1" NPT			1	2	NOS	0.00		0.00

Annexure-II: Mandatory Spare list (Information Technology System as described in Part-I of SCC)

	Bid	der Name	0						
SL NO	Field Instruments	Make	Description	Qty per Tank Farm	Total Reqmt Quantity	UOM	Unit Rate Excluding GST (INR)	Total amount Excluding GST INR	Applicable GST Rate In %
1	CC	TV system			A		В	C= A * B	
1.1	Each type of module use in the control unit of the system	Honeywell	NEXPTZ364 PA	1 no.	2	NOS		0.00	
1.2	DVD tapes		Compatible	5 nos.	10	NOS		0.00	
		Total 1	Landed Price	at Duliaj	an and Mo	oran incl	luding all liabilities excluding GST	0.00	Total GST

Bidder to quote landed price at Duliajan, Moran considering all liabilities but excluding GST

Annexure-III: Mandatory Spare list (Mechanical Equipment/System as described in Part-I of SCC)

Bidder Name 0

(a) Centrifugal FW Pumps: PUMP MODEL: 8 / 10 DME SERIAL NO 81240173 / 550 / 1-6, 81240173 / 590 / 1-5, 81240173 / 630 / 1-6

Sl No	Description	м.о.с	Q	ty	UOM		Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	4		0.00		0.00
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	2		0.00		0.00
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	4		0.00		0.00
	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	4		0.00		0.00
_	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	4		0.00		0.00
6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS	4		0.00		0.00
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS	4		0.00		0.00
8	IMPELLER, P.N. 1500	CFB	1	1	NOS	2		0.00		0.00
9	NECK RING, P.N. 1181	CFBM	2	2	NOS	4		0.00		0.00
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS	4		0.00		0.00
11	GLAND, P.N. 2310	CI	2	2	NOS	4		0.00		0.00

			7				ajan and Moran s excluding GST	() ()()	Total GST	0.00
16	THRUST COLLAR, P.N. 2884	EN8	1	1	NOS	2		0.00		0.00
15	LOCK WASHER, P.N. 3020	STEEL	1	1	NOS	2		0.00		0.00
14	LOCK NUT, P.N. 3010	STEEL	1	1	NOS	2		0.00		0.00
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET	2		0.00		0.00
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS	4		0.00		0.00

PUMP MODEL: 8 / 8 DME - TA SERIAL NO 81240173 / 700 / 1-4

Sl No	Description	м.о.с	Q	ty	UOM	_	Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
1	O RING FOR CASING, P.N. 4250	EPDM	2	2	NOS	4		0.00		0.00
2	SHAFT WITH KEYS, P.N. 1800, 3200, 3250	SS 410	1	1	NOS	2		0.00		0.00
3	SHAFT SLEEVE, P.N. 2100	SS 410	2	2	NOS	4		0.00		0.00
//	SLLEVE NUT (R.H.) P.N. 3032	SS 410	2	2	NOS	4		0.00		0.00
1	SLLEVE NUT (L.H.) P.N. 3031	SS 410	2	2	NOS	4		0.00		0.00
6	WATER THROWER, P.N. 2070	EPDM	2	2	NOS	4		0.00		0.00
7	BEARING, P.N. 2600	SKF/FAG	2	2	NOS	4		0.00		0.00
8	IMPELLER, P.N. 1500	CFB	1	1	NOS	2		0.00		0.00

30.0	PUMP	MODEL : ET - IS			, III.					
			Total Land	ded Price a	•		can including all sexcluding GST	0.00	Total GST	0.00
16	THRUST COLLAR, P.N. 2884	EN8	1	1	NO	2		0.00		0.00
15	LOCK WASHER, P.N. 3020	STEEL	1	1	NO	2		0.00		0.00
14	LOCK NUT, P.N. 3010	STEEL	1	1	NO	2		0.00		0.00
13	GLAND PACKING, P.N. 2410	G.C. COTTON	1	1	SET	2		0.00		0.00
12	STUFFING BOX BUSH, P.N. 2402	CI	2	2	NOS	4		0.00		0.00
11	GLAND, P.N. 2310	CI	2	2	NOS	4		0.00		0.00
10	LOGGING RING, P.N. 2300	GFN	2	2	NOS	4		0.00		0.00
9	NECK RING, P.N. 1181	CFBM	2	2	NOS	4		0.00		0.00

Sl No	Description	м.о.с	Q	ty	UO M	_	Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
	O RING FOR CASING, P.N. 775 - 1	NITRILE RUBBER	1	1	NOS	2		0.00		0.00
')	O RING FOR SLEEVE, P.N. 775	NITRILE RUBBER	1	1	NOS	2		0.00		0.00
3	WATER DEFLECTOR, P.N. 729	EN8	2	2	NOS	4		0.00		0.00
4	LIP SEAL, P.N. 584	RUBBER	2	2	NOS	4		0.00		0.00
5	GLAND, P.N. 026	C.I.	1	1	NOS	2		0.00		0.00
6	LOGGING RING, P.N. 044	GFN	1	1	NOS	2		0.00		0.00

7	GLAND PACKING, P.N. 057	G.R. COTTON	1	1	SET	2		0.00		0.00
8	BEARING(IMP END),P.N. 464-1	SKF/FAG	1	1	NOS	2		0.00		0.00
9	BEARING(IMP END), P.N. 464	SKF/FAG	1	1	NOS	2		0.00		0.00
10	EXTERNAL CIRCLIP[, P.N. 454	STEEL	1	1	NOS	2		0.00		0.00
11	IMPELLER NUT, P.N. 442	CF8	1	1	NOS	2		0.00		0.00
12	SPACER SLEEVE, P.N. 287	SS 316	1	1	NOS	2		0.00		0.00
13	SHAFT SLEEVE, P.N. 286	SS 410	1	1	NOS	2		0.00		0.00
14	KEY IMPELLER, P.N. 084	SS 410	1	1	NOS	2		0.00		0.00
15	KEY COUPLING, P.N. 054	SS 410	1	1	NOS	2		0.00		0.00
16	SHAFT, P.N. 049	SS 410	1	1	NOS	2		0.00		0.00
17	NECK RING, P.N. 032	CF8M	1	1	NOS	2		0.00		0.00
18	IMPELLER, P.N. 031	CF8	1	1	NOS	2		0.00		0.00
			Total Lan	ded Price a	•		ran including all s excluding GST	0.00	Total GST	0.00
	(b) Fire W	ater Engine Spare	es:							
Sl No	PART NO	DESCRIPTION	Q	ty	UO M	_	Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran	1	t Qty	INR	INR	In %	INR
1	605411880009	Lub oil filter v6/v8	4	4	NOS	8		0.00		0.00
2	1200240911/12	Filter element (micro + prime)	2	2	SET	4		0.00		0.00
3	106900000014/ 15	Air filter (inner + outer)	1	1	SET	2		0.00		0.00

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4	123200198518	Coolant additive 5 ltr pack	1	1	NO	2		0.00		0.00
5	To match with Fire Water Engine	Injector	10	10	NO	20		0.00		0.00
6	To match with Fire Water Engine	Gasket set kit	2	2	SET	4		0.00		0.00
7	To match with Fire Water Engine	Washer set kit	2	2	SET	4		0.00		0.00
8	To match with Fire Water Engine	"V" Belts set kit	2	2	SET	4		0.00		0.00
9	To match with Fire Water Engine	Adaptors with 'O' ring & gaskets	2	2	SET	4		0.00		0.00
10	To match with Fire Water Engine	Exhaust flexible spool	2	2	NO	4		0.00		0.00
11	To match with Fire Water Engine	Pressure Gauge	2	2	NO	4		0.00		0.00
		Total Lai	nded Price	at Duliajaı	n, Morar	n includ	ing all liabilities excluding GST	0.00	Total GST	0.00
(c) Fo	am Engine Spares:	Total Lar	nded Price	at Duliajaı	n, Morar	ı includ	_	0.00		0.00
	am Engine Spares: PART NO	Total Lar		at Duliajai		Total Reqm	_	Total amount Excluding GST	Applicabl e GST Rate	0.00 Applicable GST Amount
				J		Total	excluding GST Unit Rate	Total amount	Applicabl e GST	Applicable
			Q	ГҮ		Total Reqm	excluding GST Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate In %	Applicable GST Amount
Sl No	PART NO To match with the	DESCRIPTION	Q ^r Duliajan	ГY Moran	UO M	Total Reqm t Qty	excluding GST Unit Rate Excluding GST	Total amount Excluding GST INR	Applicabl e GST Rate In %	Applicable GST Amount INR
Sl No	PART NO To match with the Foam Engine To match with the	DESCRIPTION Lube Oil Filter	Q ² Duliajan 2	ΓΥ Moran 2	UO M	Total Reqm t Qty	excluding GST Unit Rate Excluding GST	Total amount Excluding GST INR 0.00	Applicabl e GST Rate In %	Applicable GST Amount INR 0.00

5	To match with the Foam Engine	Pressure gauge line(lube oil)	2	2	NO	4		0.00		0.00
6	To match with the Foam Engine	Pressure gauge benzo bolts & washers	4	4	SET	8		0.00		0.00
7	To match with the Foam Engine	Blower fan	2	2	NO	4		0.00		0.00
8	To match with the Foam Engine	Air filter/cleaner assembly	2	2	SET	4		0.00		0.00
9	To match with the Foam Engine	Exhaust flexible spool	2	2	NO	4		0.00		0.00
10	To match with the Foam Engine	Exhaust gasket & 'O' rings	2	2	SET	4		0.00		0.00
11	To match with the Foam Engine	Tappet cover gasket	2	2	SET	4		0.00		0.00
12	To match with the Foam Engine	Gasket kit	2	2	SET	4		0.00		0.00
13	To match with the Foam Engine	V' Belts	4	4	SET	8		0.00		0.00
	Total 1	Landed Price at D	uliajan, Mo	oran includ	ing all li	abilitie	s excluding GST	0.00	Total GST	0.00
(d) Aiı	Compressor:									
Sl No	PART NO	DESCRIPTION	Q	ГΥ	UO M	_	Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
1	271.01.432.5 0	Oil Filter Element	2	2	NO	4		0.00		0.00
2	273.03.772.5 0	Air Filter Element	2	2	NO	4		0.00		0.00
3	273.01.868.5 0	Air-Oil separator element with gaskets	1	1	NO	2		0.00		0.00

4	273.01.044.5 0	Gasket for Air intake valve	1	1	NO	2		0.00		0.00
5	273.50.109.5 0	Gasket for Air end delivery1	1	1	NO	2		0.00		0.00
6	273.01.491.5 0	'O' ring ID 56 x 3.55 DIA	3	3	NO	6		0.00		0.00
7	271.00.532.5 0	'O' ring 1/4"	1	1	NO	2		0.00		0.00
8	271.00.534.5 0	'O' ring 3/8"	7	7	NO	14		0.00		0.00
9	271.00.536.5 0	'O' ring 1/2"	3	3	NO	6		0.00		0.00
10	271.00.538.5 0	'O' ring 3/4"	3	3	NO	6		0.00		0.00
11	271.00.540.5 0	'O' ring 1"	4	4	NO	8		0.00		0.00
12	271.00.544.5 0	'O' ring 1-1/2"	2	2	NO	4		0.00		0.00
13	273.01.904.5	Service Kit for MPVL-40	1	1	NO	2		0.00		0.00
14	271.00.283.5 0	Service Kit for BDV 3/8" BSP	1	1	NO	2		0.00		0.00
15	273.01.453.5 0	Service Kit for intake valve -4"	1	1	NO	2		0.00		0.00
		Total Lar	nded Price	at Duliajar	ı, Morar	ı includ	ing all liabilities excluding GST	0.00	Total GST	0.00
(e) Aiı	Dryer:									
Sl No	PART NO	DESCRIPTION	Q'.	ГҮ	UOM	Total Reqm		Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
1	To match with the Air Dryer	Main Valve Spare Kit	2	2	NO	4		0.00		0.00
2	To match with the Air Dryer	Exhaust Valve Kit	1	1	NO	2		0.00		0.00
3	To match with the Air Dryer	Solenoid Valve	3	3	NO	6		0.00		0.00
4	To match with the Air Dryer	Pre-Filter Element	1	1	NO	2		0.00		0.00

5	To match with the Air Dryer	After- Filter Element	1	1	NO	2		0.00		0.00
6	To match with the Air Dryer	Activated Alumina	1	1	Pack	2		0.00		0.00
		Landed Price at D	ıliajan, Mo	ran includ	ing all li	abilitie	s excluding GST	0.00	Total GST	0.00
(I) K0l Pumpe	ary gear type roam									
	PART NO	DESCRIPTION	QT	ГΥ	UOM	Total Reqm	Unit Rate Excluding GST	Total amount Excluding GST	e GST	Applicable GST Amount
			Duliajan	Moran		t Qty	INR	INR	In %	INR
1	To match with the Pump/s	DE and NDE bearing	2	2	NO	4		0.00		0.00
2	To match with the Pump/s	Set of wear plates	2	2	SET	4		0.00		0.00
3	To match with the Pump/s	V seal	2	2	NO	4		0.00		0.00
4	To match with the Pump/s	Oil seal / Z pack	2	2	NO	4		0.00		0.00
5	To match with the Pump/s	Paper packing	2	2	NO	4		0.00		0.00
6	To match with the Pump/s	R.V.Spring	2	2	NO	4		0.00		0.00
7	To match with the Pump/s	Coupling Spider	1	1	NO	2		0.00		0.00
8	To match with the Pump/s	Rotor Stator Assembly	1	1	NO	2		0.00		0.00
9	To match with the Pump/s	Relief Valve piston	1	1	NO	2		0.00		0.00
	Total 1	Landed Price at D	ıliajan, Mo	s excluding GST	0.00	Total GST	0.00			

Bidder to quote landed price at Duliajan and Moran considering all liabilities but excluding GST

Annexure-IV: Mandatory Spare list (Electrical Equipment/System as described in Part-I of SCC)

Bidder Name 0

A. For Panel Equipment:

Locati	ocation: Switch Room											
List of	f Electrical Com	ponent Spares			Specification	Tank	Total Reqmt		Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
						Farm	Qty	UOM	INR	INR	In %	INR
Sl No	Component	Model	Make	Rating								
1	Soft Starter	PSTX72-600-70	ABB Ltd.	37KW	415V, Control Voltage 240V	1	2	NOS		0.00		0.00
2	Soft Starter	PSTX142-600- 70	ABB Ltd.	75KW	415V, Control Voltage 240V	1	2	NOS		0.00		0.00
3	Motor Protection Relay	REM 610	ABB Ltd.			2	4	NOS		0.00		0.00
/	Fedder Protection Relay	REF 615	ABB Ltd.			1	2	NOS		0.00		0.00
_	Air Circuit Breaker	3P E00, MS Type	ABB Ltd.	800 A	MS Type	1	2	NOS		0.00		0.00
		T4S 320PR221D5- LS/1	ABB Ltd.	320A	415V	1	2	NOS		0.00		0.00
		T4S 250 PR221DS-LS/1	ABB Ltd.	250A	415V	2	4	NOS		0.00		0.00
6	MCCB with Rotary handle	T4S 250 PR221LS/1 R160A	ABB Ltd.	160A	415V	1	2	NOS		0.00		0.00
	add on	T2S160 PR221DS-1	ABB Ltd.	100A	415V	1	2	NOS		0.00		0.00
		T2S 160 PR221DS-1	ABB Ltd.	63A	415V	2	4	NOS		0.00		0.00
		T2S 160 PR221DS-1	ABB Ltd.	25A	415V	1	2	NOS		0.00		0.00
		T2S160FF 3P PR221-LS/1R10	ABB Ltd.	16A	415V	4	8	NOS		0.00		0.00

7	Potential Transformer (PT)				415/V3/110/V 3 cl-1, 110VA	1	2	NOS	0.00	0.00
8	Control Transformer				415/240V, INSULATION CLASS B, 2KVA	1	2	NOS	0.00	0.00
				100/1A , 5VA	Cl 1.0	1	2	NOS	0.00	0.00
				150/1A , 15VA	Cl 1.0	1	2	NOS	0.00	0.00
				100/5A , 15VA	Cl 1.0, 5P10	1	2	NOS	0.00	0.00
				50/1A, 15VA	Cl 1.0	1	2	NOS	0.00	0.00
				30/1A 15VA	Cl 1.0	2	4	NOS	0.00	0.00
9	Current Transformer			150/5A , 15VA	Cl 1.0, 5P10	1	2	NOS	0.00	0.00
				250/1A , 15VA	Cl 1.0	2	4	NOS	0.00	0.00
				800/5A , 15VA	Cl 5P10	1	2	NOS	0.00	0.00
				300/1A , 15VA	Cl 1.0	2	4	NOS	0.00	0.00
				60/1A, 15VA	Cl 1.0	1	2	NOS	0.00	0.00
				400/1A , 15VA	Cl 1.0	1	2	NOS	0.00	0.00
			ABB Ltd.	2A	TPN	2	4	NOS	0.00	0.00
		S202M	ABB Ltd.	6A	DP	10	20	NOS	0.00	0.00
			ABB Ltd.	63A	TP	3	6	NOS	0.00	0.00
			ABB Ltd.	32A	TP	1	2	NOS	0.00	0.00
10	MCB		ABB Ltd.	63A	DP	2	4	NOS	0.00	0.00
			ABB Ltd.	10A	DP	4	8	NOS	0.00	0.00
			ABB Ltd.	32A	DP	2	4	NOS	0.00	0.00
			ABB Ltd.	16A	DP	1	2	NOS	0.00	0.00
			ABB Ltd.	125A	DP	1	2	NOS	0.00	0.00
11	Fuse			25A	415Vac	2	4	NOS	0.00	0.00
12	Switch	OT16F3	ABB Ltd.	16A	415Vac, 3phase	1	2	NOS	0.00	0.00
12	Disconnector	OT400E03 P	ABB Ltd.	400A	415Vac, 3phase	1	2	NOS	0.00	0.00

13 CBCT	0.00
14	0.00
15 Voltmeter	0.00
15 Voltmeter	0.00
16 Selector Switch SESSAP SAYCEE 240V Ac	0.00
17 OLR	0.00
17 OLR	0.00
Reduction Rish End	0.00
ABB Ltd. SOA COIL	0.00
ABB Ltd. 16A 220-240V 10 20 NOS 0.00	0.00
ABB Ltd.	
ABB Ltd. 16A 220-240V COIL 10 20 NOS 0.00	0.00
ABB Ltd. 16A COIL 10 20 NOS 0.00	
Record R	
ABB Ltd. 75A COIL 1 2 NOS 0.00	0.00
ABB Ltd.	
TP Contactor	
TP Contactor	0.00
ABB Ltd.	
ABB Ltd. 95A COIL 2 4 NOS 0.00 ABB Ltd. 185A COIL 2 4 NOS 0.00 ABB Ltd. 185A COIL 2 4 NOS 0.00 ABB Ltd. 260A COIL 2 4 NOS 0.00 ABB Ltd. 260A COIL 2 7 NOS 0.00 ABB Ltd. 260A COIL 2 7 NOS 0.00 ABB Ltd. 260A COIL 1 2 NOS 0.00 Total GST Bidder to quote spare landed price at Duliaian Moran considering all liabilities but excluding GST 0.00 Total GST	
ABB Ltd. 95A	0.00
ABB Ltd. 95A COIL VOLTAGE 3P 2 4 NOS 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
ABB Ltd.	
ABB Ltd. 185A	0.00
ABB Ltd.	
ABB Ltd. 260A COIL 1 2 NOS 0.00 Multi Function Meter SS SS SS SS SS SS SS	0.00
ABB Ltd. 260A COIL VOLTAGE 3P 1 2 NOS 0.00 19 Multi Function Rish EM 3490 Rishabh Instruments SS NOS 0.00 0.00 20 LED indicator Lamp SPLBRL TEKNIC 240V Ac Red, Yellow Green 1 2 NOS 0.00 21 Push Button Switch 0 1 1 2 NOS 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00
ABB Ltd. 260A COIL VOLTAGE 3P 1 2 NOS 0.00 0.00 19 Multi Function Rish EM 3490 Rishabh Instruments	
Multi Function Rish EM 3490 Rishabh Instruments SS 10 each of Lamp SPLBRL TEKNIC 240V Ac Red, Yellow Green 10 20 NOS 0.00 Compatible 10 Compatible Compatibl	0.00
Multi Function Rish EM 3490 Rishabh	0.00
Meter SS Instruments 1 2 NOS 0.00 LED indicator Lamp SPLBRL TEKNIC 240V Ac Red, Yellow Green 1 2 NOS 0.00 Push Button Switch 415V ac Compatible 10 20 NOS 0.00 Ridder to quote spare landed price at Duliaian Moran considering all liabilities but excluding GST 0.00 Total GST	
LED indicator Lamp SPLBRL TEKNIC 240V Ac Red, Yellow Green 1 2 NOS 0.00 0.00 1 1 2 NOS 0.00 1 1 2 NOS 0.00 1 1 2 NOS 0.00 1 1 1 1 1 2 NOS 0.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.00
20 LED indicator Lamp SPLBRL TEKNIC 240V Ac Red, Yellow 1 2 NOS 0.00 21 Push Button Switch 415V ac Compatible 10 20 NOS 0.00 Ridder to quote spare landed price at Duliaian Moran considering all liabilities but excluding GST 0.00 Total GST	
Lamp Push Button Switch 415V ac Compatible 10 20 NOS 0.00 Ridder to quote spare landed price at Duliaian Moran considering all liabilities but excluding GST 0.00 Total GST	0.00
Push Button Switch 415V ac Compatible 10 20 NOS 0.00 Ridder to quote spare landed price at Duliaian Moran considering all liabilities but excluding GST 0.00 Total GST	0.00
Switch Switch	
Ridder to quote spare landed price at Duliaian, Moran considering all liabilities but excluding GST	0.00
	0.00
Amount	3.30

в. ну	/LRM System	Spares: Motor (Spares	Specifica tion	Qty each Tank Farm	Total Reqmt	UOM		Unit Rate Excluding GST	Total amount Excluding GST	Applicab le GST Rate	Applicable GST Amount
Sl No	Description	Make	Ratings			Qty			INR	INR	In %	INR
1	Jet/ Spray movement Motor	Laxmi Hydraulic Ltd	0.18 KW, 415V±6%, 50Hz	3 Ph FLP Induction Motor, Ex- d IIA, IIB, T6, IP-65, S3 duty cycle,	3	6	NOS			0.00		0.00
2	Right Left Movement Motor	Laxmi Hydraulic Ltd	0.37KW, 415V±6%, 50Hz	rpm: 1350, Frame:	3	6	NOS			0.00		0.00
3	Up/Down movement Motor	Laxmi Hydraulic Ltd	0.37KW, 415V±6%, 50Hz	71, Insulation Class F	3	6	NOS			0.00		0.00
4	MOV Motor	Laxmi Hydraulic Ltd	0.75KW, 415V, 50Hz	3 Ph induction motor, 415V, Duty:S2,I P: 67, Insulation class: F	3	6	NOS			0.00		0.00
			Total Land	led Price a	at Duliajan i	ncluding	g all liat	oilities e	xcluding GST	0.00	Total GST Amt	0.00
Spare	es for HVLRM	panel										
	Component	_							Unit Rate Excluding GST	Intal amount	Applicab le GST Rate	Applicable GST Amount

	Сошропені											
Sl No		Make	Rating	Model	Qty each Tank Farm	Total Reqmt Qty	UOM		INR	INR	In %	INR
1	МСВ	ABB	2A	S202M C2	5	10	NOS			0.00		0.00
2	OLR	SIEMENS	240V, 50/60HZ	SIRIUS	5	10	NOS			0.00		0.00
3	SMPS	Trio Power	240Vac/24V Ddc	Compatib le	3	6	NOS			0.00		0.00
4	Switch Amplifier	Pepperl+Fuchs	24Vdc	KFD2 SR2- Ex.2w	3	6	NOS			0.00		0.00
5	Selector Switch	KAYCEE	16A/440Vac , 50Hz	N2U3920	5	10	NOS			0.00		0.00
6	Push Button			ZB2- BE102	5	10	NOS			0.00		0.00
7	LED indicator lamp, Red, Yellow, Blue, geen		110Vdc		5	10	NOS			0.00		0.00
P		Bidder to quot	te spare landed	price at Du	ıliajan, Moran	consideri	ng all lial	oilities bu	nt excluding GST	0.00	Total GST	0.00

C.Lig	htingEquipmen								
Sl. No.	Item	Description	each Tank	Qty Total	UOM	Excluding	Total amount	IA (2871)	Annlicobio
110.				(2yr)		INR	INR	In %	INR
1	HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12	48	NOS		0.00		0.00
2	HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8	32	NOS		0.00		0.00
3	Metal Halide	Type: BS/MH-400, Make: Bajaj	10	40	NOS		0.00		0.00
4	Choke	220V, Tube light chock, 36/40W, Make : Bajaj, Copper	20	80	NOS		0.00		0.00

5	Starter	220V, Tube light starter, Make : Phillips	30	120	NOS			0.00		0.00
6	Capacitor	20 MFD	10	40	NOS			0.00		0.00
7	Capacitor	33 MFD + - 5%,250V	20	80	NOS			0.00		0.00
		Bidder to quote spare landed price at Du	lliajan, Moran	consideri	ng all lial	oilities bu	nt excluding GST		Total GST	0.00

	D.UPS Spares	List of Spares f	for the UPS				7			
Sl No.	Item Description	Make	Rating	Quantity /Tank Farm	Qty Total		Unit Rate Excluding GST	Total amount	I IA (2811	Applicable GST Amount
						UOM	INR	INR	In %	INR
1	Sysytem Manager Card	HITACHI HiREL	Compatible	1	2	NOS		0.00		0.00
2	System Control Card	HITACHI HiREL	Compatible	1	2	NOS		0.00		0.00
3	Rectifier Control Card	HITACHI HiREL	Compatible	1	2	NOS		0.00		0.00
4	SMPS	HITACHI HiREL	Compatible	1	2	NOS		0.00		0.00
5	IGBT gate drive card	HITACHI HiREL	Compatible	4	8	NOS		0.00		0.00
6	Heat Sink Cooling Fan	REXNORD/N A D/NISIKI	Compatible	1	2	NOS		0.00		0.00
7	Inverter IGBT	SEMIKRON/E U PEC	400A/120 0V	4	8	NOS		0.00		0.00
8	Thyristor Module	SEMIKRON/E UPEC	Compatible	3	6	NOS		0.00		0.00
			200A	5	10	NOS		0.00		0.00
9	Fuse	BUSSMANN	250A	3	6	NOS		0.00		0.00
			160A	3	6	NOS		0.00		0.00
10	DC Filter Capacitor	EPCOS/ELEC T ROCION	Compatible	4	8	NOS		0.00		0.00

	AC Filter Capacitor	EPCOS/ALCO N /BHC-RIPA	Compatible	4	8	NOS			0.00		0.00
12	Metal Oxide Varistor		Compatible	3	6	NOS			0.00		0.00
		Bidder to quot	e spare landed	t excluding GST	0.00	Total GST	0.00				

E.		Lightin	g Spares for C	TF Duliaja	n & CTF Mora	ın					
LIGH	ITING SPARES	OF CTF DULIA	JAN								
Sl No	Location							Unit Rate Excluding GST	Latal amount		Applicable GST Amount
Outd	oor Flood Light	Model	Manufacture /Type		Required Qty (Nos)	Qty Total	UOM	INR	INR	In %	INR
1	Control Room / FWPH / Switch Room	FD1 (1 X250 w) HPMV	Philips SNF- 14/250 Bajaj BJEF - 14CAT Crompton FAD-1314	Complete fitting with controlgear box and lamp- 3 nos. Additional ly lamp-6 Nos; Ballast-4 Nos.		6	NOS		0.00		0.00
2	Street lighting	ST- 10 with 1 X 125w HPMV		HPMV Lamp-6 Nos.	6	12	NOS		0.00		0.00
Indoo	r Lighting										
		IND1 (1X40W)	Philips- TMC501/136 Crompton - IGP13- 24HSB Bajaj - BJIR-136140	Fluorescen t tube	4	8	NOS		0.00		0.00

		IND2 (2X40W)	Philips- TMC501/236 Crompton - IGP13- 24HSB Baja- BJIR-236	Fluorescen t tube	3	6	NOS			0.00		0.00
		RSD6 (2X40W)	Philips-HDK- 225HPL250 Darklite. Crompton- CRFD24HSB Bajaj BJDL 236	Fluorescen t tube	15	30	NOS			0.00		0.00
3	Control Room /FWPH /Switch Room	CFL3 (2X11W)	Crompton TLE211 Philips FCS- 518/211 Bajaj BJMS 211	CFL	2	4	NOS			0.00		0.00
		CFL4 (2X11W)	Crompton TLD211 Philips FBS- 518/211 Bajaj BJMR 212	CFL	4	8	NOS			0.00		0.00
		HB1 (1X250W)	Philips HDK- 225HPL250 Crompton IMB1325IH Bajaj BJHBI- 250	HPMV	4	8	NOS			0.00		0.00
		LB2 (1X125W)		HPMV	3	6	NOS			0.00		0.00
		IND4 (2X40W)	Philips- TKC 203/236 Crompton - IGE1324/RS E24 Baja- BJIV-236	Fluorescen t tube	3	6	NOS			0.00		0.00
		BK1 (1X100W)		ULS	1	2	NOS			0.00		0.00
		Bidder to quot	te spare landed		ıliajan, Moran	consider	ing all lia	bilities bu	t excluding GST	0.00	Total GST	0.00
									Unit Rate Excluding GST	Total amount Excluding GST	Applicab le GST Rate	Applicable GST Amount

	High Mast				Required Qty (Nos)	Qty Total	UOM		INR	INR	In %	INR
	High Mast Light	RPV302 2 X SON-T 400W	Complete fit controlgear bo 4 nos. Additio 10Nos; Balla Ignitor-1	x and lamp- nally lamp- st-4 Nos.,	4	8	NOS			0.00		0.00
Power	Plug/Switch											
		5A,240V, RECEPTACLE			12	24	NOS			0.00		0.00
5	Control Room / FWPH / Switch Room	5A,240V, PIANO TYPE			20	40	NOS			0.00		0.00
		5A/15A, 240V, RECEPTACLE WITH SWITCH			12	24	NOS			0.00		0.00
MCB												
	Control Room /	40A MCB TP	Legrand	DX3	5	10	NOS			0.00		0.00
6	FWPH / Switch Room	10A MCB DP	Legrand DX4		10	20	NOS			0.00		0.00
		20A MCB DP	Legrand DX5		10	20	NOS			0.00		0.00
										0.00		0.00
	Bidder to quote spare landed price at Duliajan, Moran considering all liabilities but excluding GST									0.00	Total GST	0.00

F. Spa	F. Spares for High Mast Panel.							Unit Rate Excluding GST	Total amount	16 (÷8 1 1	Applicable GS1
Sl. No.	Item	Make	Model No.	Kalinos	Required Qty (Nos)	Qty Total	UOM	INR	INR	In %	INR
1	I IP Contactor	L&T	MNX45	85A	2	4	NOS		0.00		0.00
1		Havels		63A	2	4	NOS		0.00		0.00
2	DP Contactor	L&T	MNXA2	4A	4	8	NOS		0.00		0.00
		Bussmann	FA	32A, 3W	14	28	NOS		0.00		0.00
3	Fuse		HF 14X	16A, 3pole	6	12	NOS		0.00		0.00

	4	Timer	GIC		Compatibl e	2	4	NOS			0.00		0.00
	5	3P MCB			6A,	4	8	NOS			0.00		0.00
	6	Selector Switch	Recom		10A/16A	2	4	NOS			0.00		0.00
Bidder to quote spare landed price at Duliajan, Moran considering all liabilities but excluding GS										at excluding GST	0.00	Total GST	0.00

G. Da	ny to Day Elect	rical Maintenance Spares:					Unit Rate Excluding GST	Total amount Excluding GST	Applicab le GST Rate	Applicable GST Amount
Sl. No.	Item	Description		Total Qty Reqd (2 yrs)	UOM		INR	INR	In %	INR
1	HPMV Ballast	400 W HPMV Ballast, Make : Bajaj	12	48	NOS			0.00		0.00
2	HPSV Ballast	400W HPSV Ballast, Make : Bajaj	8	32	NOS			0.00		0.00
3	Metal Halide	Type: BS/MH-400, Make: Bajaj	10	40	NOS			0.00		0.00
4	Choke	215V, Tube light chock, 36/40W, Make : Bajaj, Copper	20	80	NOS			0.00		0.00
5	Starter	215V, Tube light starter, Make: Phillips	30	120	NOS			0.00		0.00
6	Capacitor	20 MFD	10	40	NOS			0.00		0.00
7	Capacitor	33 MFD + - 5%, 250V	20	80	NOS			0.00		0.00
8	LED Lights	LED T/L Fittings	15	60	NOS			0.00		0.00
0	LED Lights	Driver for the LED T/L	20	80	NOS			0.00		0.00
		HRC, SS type - 4A, 6A, 10A	12	48	NOS			0.00		0.00
		HRC, E.I.T. Type - 32	10	40	NOS			0.00		0.00
9	Fuse	HBC Fuse link-125A, Type: TSDS, Make: GE	8	32	NOS			0.00		0.00
		HBC, 200A, Type : TSF 200, GE	4	16	NOS			0.00		0.00

		400W, HPSV, Bajaj(HM), Type : BJR	12	48	NOS				0.00		0.00
		400W, HPSV, Bajaj (Threaded)	8	24	NOS				0.00		0.00
10	Bulb	400W, HPSV, 220V Bajaj (Threaded), SON-T	8	24	NOS				0.00		0.00
		20W Fluorescent Lamp, Phillips	20	80	NOS				0.00		0.00
		400W HPMV Lamp	6	24	NOS				0.00		0.00
		40W Fluorescent Lamp, Phillips	12	48	NOS				0.00		0.00
11	Panel Indicator Lamp	Red, Yellow, Blue: LED Type	12	48	NOS				0.00		0.00
	МСВ	DP-6A, 10A,16A, 25A& 32A, Make : Havells	6	24	NOS				0.00		0.00
		SP- 32A, Make : Havells	6	24	NOS				0.00		0.00
12	Cleaning agents	CRC 2-26/ Equivalent	4	16	NOS				0.00		0.00
		Bidder to quote spa	re landed	price at Dulia	ajan, Moi	an consi	_	ll liabilities but excluding GST	0.00	Total GST	0.00

Annexure-V: Mandatory Spare list (Fire Service Equipment/System as described in Part-I of SCC)

Bidder Name 0

(a) S ₂	pare Part list for	r HVLR						Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
Sl. No.	Spare Part	Vendor	MOC	Qty DJN	Qty MRN	Total Qty	UOM	INR	INR	In %	INR
1	Nozzle		SS-316	2	2	4	NOS		0.00		0.00
2	Swivel Joints		SS-316	2	2	4	NOS		0.00		0.00
3	Worm		SS-316	2	2	4	NOS		0.00		0.00
4	Gear		SS-316	2	2	4	NOS		0.00		0.00
5	Spindle for worm		SS-316	2	2	4	NOS		0.00		0.00
	Hand-wheels for Nozzle, horizontal/ver tical movement		SS-316	10	10	20	NOS		0.00		0.00
7	Drain connection	M/s NK	SS-316	4	4	8	NOS		0.00		0.00
8	Drain valve	Fire	SS-316	4	4	8	NOS		0.00		0.00
9	Nuts/bolts at Monitor	Safety	SS-316	20	20	40	NOS		0.00		0.00
10	Mounting Brackets for Motors/Limit switches		SS-316	4	4	8	NOS		0.00		0.00
11	Deflector Set			4	4	8	NOS		0.00		0.00
12	Pressure gauge		SS-316	4	4	8	NOS		0.00		0.00

13	Push Button		6	0	6	NOS		0.00		0.00
14	Limit Switch		6	0	6	NOS		0.00		0.00
15	Proxy Sensor		6	0	6	NOS		0.00		0.00
		To	otal Landed	Price at Dul	liajan and M	Ioran includ	ling all liabilities excluding GST	0.00	Total GST	0.00

	Spare Part t for MEFG	Vendor	мос	Qty DJN	Qty MRN	Total Qty		Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
Sl. No.	Spare Part						UOM	INR	INR	In %	INR
1	Glycerine filled S.S. Pressure Gauge(1- 10kg/cm2)	M/s NK Fire		2	2	4	NOS		0.00		0.00
2	Flexible tube connected to inline inductor	Safety		10	10	20	NOS		0.00		0.00
	Total Landed Price at Duliajan and					liajan and M	loran includ	ling all liabilities excluding GST	0.00	Total GST	0.00

(c) S _J	pare Part list of	Hydrant						Unit Rate Excluding GST	Total amount Excluding GST	Applicabl e GST Rate	Applicable GST Amount
Sl. No.	Spare Part	Vendor	мос	Qty DJN	UOM	INR	INR	In %	INR		
1	Lugs			20	20	40	NOS		0.00		0.00
')	Blank Cap with chain	M/s NK Fire		10	10	20	NOS		0.00		0.00
3	Washer	Safety		30	30	60	NOS		0.00		0.00

4	Hydrant Wheel	Surcij	SS-316	10	10	20	NOS		0.00		0.00
	Total La	nded Pric	e at Dulia	jan and M	Ioran inclu	ıding all li	abilities e	excluding GST	0.00	Total GST	0.00
(d) S	pare Part list	of Inline	Balanced	Foam Pro	portioner			Excluding	Total amount Excluding GST	Application e GST	Applicable GST Amount
Sl.	Spare Part	Vendor	MOC	Qty DJN	Qty MRN	Total Qty		INR	INR	In %	INR
No.	Spare Tart	Vendor	Woe				UOM				
1	Foam Proportioner		SS-304	2	2	4	NOS		0.00		0.00
	Pressure balancing Valve		SS-304	4	4	8	NOS		0.00		0.00
3	Pressure Gauge-Water	M/s FIRETEC H	SS-316	4	4	8	NOS		0.00		0.00
4	Pressure Gauge-Foam		SS-316	4	4	8	NOS		0.00		0.00
5	Gasket	Services Pvt.Ltd.	Nitrile	10	10	20	NOS		0.00		0.00
6	Nut, Bolt	1 (0.200)	SS-304	20	20	40	NOS		0.00		0.00
7	Ferrule Fitting		SS-304	6	6	12	NOS		0.00		0.00
8	Drain Valve		SS-304	6	6	12	NOS		0.00		0.00
9	Flexible Tube			10	10	20	NOS		0.00		0.00
		Total	Landed Pr	ice at Duliaj	an and Mora	0.00	Total GST	0.00			

Annexure-VI: Mandatory Spare list (Cleaning Agent Equipment/System as described in Part-I of SCC)

Bidder Name 0

The spares for Clean Agent system for each Tank Farm:

Sl No	Item details	Part no.	Model	Specificatio n	Qty	Total Qty	UOM	Unit Rate Excluding GST INR	Total amount Excluding GST INR	Applicabl e GST Rate In %	Applicable GST Amount INR
1	N2 storage cylinder (Capacity-20.3 cum)	U4011	NN83CU- E	50 Mpa (HYDROST ATIC)	40 nos	80	NOS	INK	0.00	111 76	0.00
2	Cylinder valve(For N2 storage cylinder)	U2101	PC30BU	27.9 Mpa (operating)	40 nos	80	NOS		0.00		0.00
3	N2 pilot cylinder (Capacity -8.2 cum)	U4002	NN82.5CU	24.5 Mpa (HYDROST ATIC)	2 nos	4	NOS		0.00		0.00
4	Cylinder valve(For N2 pilot cylinder)	U2201	PH10NU	10 Mpa (opearting)	2 nos	4	NOS		0.00		0.00
5	Pressure Gauge 0- 400 bar(For N2 storage cylinder)		PGS21		38 nos	76	NOS		0.00		0.00
6	Pressure Gauge 0- 250 bar (For pilot cylinder)		PGS21		2 nos	4	NOS		0.00		0.00
	Connecting Device (For PH10NU)				2 nos	4	NOS		0.00		0.00
	Releaser(For cylinder valve Model PH10NU)	U2501	PH10-N3	10 Mpa (operating)	2 nos	4	NOS		0.00		0.00

9	LOOP PIPE (Pipe Dia-18.4Xt 2.2 mm . Nut- G 3/4)	U2901	14QSU		38 nos	76	NOS	0.00	0.00
10	NON RETURN VALVE	U3101	14SU	10 Mpa (operating)	38 nos	76	NOS	0.00	0.00
11	CO2 actuating cylinder	U0210	AC2.1U	24.5 Mpa (HYDROST ATIC)	6 nos	12	NOS	0.00	0.00
12	Cylinder Valve(For CO2 actuating cylinders)	U0015	PH5CU	5.6 Mpa (Operating)	6 nos	12	NOS	0.00	0.00
13	Cylinder Valve Solenoid(For cylinder valve Model PH5CU)	U0060	R85M14		6 nos	12	NOS	0.00	0.00
14	Non RETURN VALVE	U0095	4S-B		6 nos	12	NOS	0.00	0.00
15	Non RETURN VALVE	U3001	LCV4A	10 Mpa (Oprating)	3 nos	6	NOS	0.00	0.00
16	Relief Valve (Small leakage valve)	U0090	4BLA	0.098 Mpa (Max relief Pr.)	6 nos	12	NOS	0.00	0.00
17	Safety Vent	U3201	SAV94U	11.9 to 16.2 Mpa (Opearting)	1 nos	2	NOS	0.00	0.00
18	Selector Valve	U0073	PD 50KU	10.0 Mpa (Operating)	3 nos	6	NOS	0.00	0.00
19	Pressure Switch		PR79-1MT		3 nos	6	NOS	0.00	0.00
20	Discharge Nozzle	U3621 U3341	20ZMTU,2 5ZMTu	3/4" (20A) 12 nos 1"(25A)9 nos	21 Nos	42	NOS	0.00	0.00
21	Resetting Tool		TCR65B		1 set	2	SET	0.00	0.00
22	Spanner(For PH type cylinder valve releaser)		PH14D		1 set	2	SET	0.00	0.00

	Fire alarm control panel (which is an intelligent addressable fire alarm system)		S508	S508 fire alarm control panel.	1 no	2	NOS		0.00		0.00
24	Miniature contact module		FRRU004- MCM		3 nos	6	NOS		0.00		0.00
25	Single contact Module		FRRU004- SCM4		3 nos	6	NOS		0.00		0.00
26	Dual Contact Module		FRRU004- DCM4		3 nos	6	NOS		0.00		0.00
27	Monitored Output Module		FRRU004- MOM4		3 nos	6	NOS		0.00		0.00
	MCP Indoor call point range MCP3 NO/NC Contact Model (Red Version)		MCP3A- R00SF- K013-01		3 nos	6	NOS		0.00		0.00
29	MCP Indoor call point range MCP3 NO/NC Contact Model (Yellow)		MCP3A- Y000SF- K013-11		3 nos	6	NOS		0.00		0.00
30	System Sensor (SPECTR Alart)			2-Wire Horn Strove, standardcd, red	1 no	2	NOS		0.00		0.00
31	Pressure relief Damper (500x415 mm)		UL. KUL		3 nos	6	NOS		0.00		0.00
		To	otal Landed	Price at Duliaj	an and Mora	n including	es excluding GST	0.00	Total GST	0.00	

Annexure-VII: Storage Godown (Specifications as per Clause no. 3.8, Part-I of SCC)

Name of Bidder 0

						Unit Rate Excluding GST	Total amount Excluding GST	Applicable GST Rate	Applicable GST Amount
Sl No	Quantity					INR	INR	In %	INR
1	Storage Godown	As per Specification, Clause no. 3.8 of TOR	2	4	NOS		0.00		0.00
	Tota	l Landed Price at	Duliajan and	Moran incl	uding all lia	bilities excluding GST	0.00	Total GST	0.00

Annexure-VIII: Cost of Mandatory spares of Air Conditioners System as described in Part-I of SCC

Name Of Bidder 0

Make: Bluestar. Model No: DPAP1983R1 – I
Capacity: 16.56 TR (3 compressor of 5.5TR capacity) Air Cooled
Total No. of units: 12 nos. (6 No. at CTF Duliajan and 6 No. at Moran Tank farm)

Indicative list of spares and quantity to be maintained by the contractor for two years AMC given below:

Sl.	G .		26.1	D (1	Total	TION	Unit Rate	Total amount		Applicable GST
No.	Component	Model	Make	Rating	Quantity	UOM	Excluding GST INR	Excluding GST INR	e GST In %	Amount INR
1	Compressor Specifications : 5.25KW, 2900rpm motor, Hermitically sealed	DPAN (BLUESTA R)	Emersen	5.5TR	3	Nos	П	0.00		0.00
2	Blower Motor Specification: 415V, 3 phase IM, Duty S1, Encl TE, rpm 1430, Frame:100L		Hindustan Electric Motor	3KW	1	Nos		0.00		0.00
3	Air Filter: 1255X688mm2	Blue Star	Blue Star		18	NOS		0.00		0.00
4 (a)	V Belt (Wet Grinder Belt)	A28	Ecodrive		10	NOS		0.00		0.00
4 (b)		A199L LP/A77	Flexer		10	NOS		0.00		0.00
5	Refrigerant Filter Drier		Danfoss		4	NOS		0.00		0.00
6	MCCB	DL100	L&T	63A	4	NOS		0.00		0.00
7	MCB		L&T	6A	6	NOS		0.00		0.00
8	CT – 60/1A 5VA, Class -1		Kappa Electrical	60/1 A	4	NOS		0.00		0.00
9	Controlling PCB				2	NOS		0.00		0.00
10	Running capacitor				6	NOS		0.00		0.00
11	HPLP switch (8nos HP + 8nos LP switch)				16	NOS		0.00		0.00
12	Expansion valve				2	NOS		0.00		0.00
13	Outdoor fan blade				4	SET		0.00		0.00
14	Condenser fan motor				6	NOS		0.00		0.00

15	R22 refrigerant, 61 kg (per cylinder)				1	CYLIN DER		0.00		0.00
16	Leak Test (detector) N2 cylinder				4	NOS		0.00		0.00
17	Contactor 3phase				10	NOS		0.00		0.00
		Total Landed	Price at Dulia	ajan and Mo	oran includi	ng all lial	oilities excluding GST	0.00	Total GST	0.00

CALCULATION OF LOCAL CONTENT-SERVICES

E-TENDER NO. CDO7246P18

		NAME OF SUPPLIER OF GOODS/PROV	IDER OF SERVICE			Cost Summary		
					Imported		LC	OCAL CONTENT
			Domestic	Rs./Foreign Currency (To be specified by the service provider)	Total	%	Rs./Foreign Currency (To be specified by the service provider)	
				а	b	c=a+b	d = a/c	e = c x d
	ı	Cost component Material used cost	Rs./Foreign Currency			0.00	#DIV/0!	#DIV/0!
Α	II	Personnel & Consultant cost	Rs./Foreign Currency			0.00	#DIV/0!	#DIV/0!
	III	Other services cost	Rs./Foreign Currency			0.00	#DIV/0!	#DIV/0!
	IV	Total cost (I to III)	Rs./Foreign Currency	0.00	0.00	0.00	#DIV/0!	#DIV/0!
В		Taxes and Duties	Rs./Foreign Currency			0.00	#DIV/0!	#DIV/0!
С		Total quoted price	Rs./Foreign Currency	0.00	0.00	0.00	#DIV/0!	#DIV/0!

Note:

6 LC Service =	Total cost (A. IV. c) - Total imported component cost (A. IV .b)	X 100
b LC Service :	Total Cost (A. IV.c)	X 100

LLC Comico	Total domestic component cost (A. IV a)	V 400	
LC Service =	Total cost (A. IV. c)	X 100	

^{1.} As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content.

^{2.} Refer to ITB for Detail of PP-LC.

Bidders Name:	

S1. No.	Clause No.	Description	Compliance		Bidder to indicate Relevant Page No. of their Bid to
	BEC/BRC		Yes	No	support the remarks/ compliance
1	1.0	The bid shall conform to the specifications and terms and conditions given in the Bidding Documents. Bids will be rejected in case material and 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 requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and will not be considered for evaluation. All the documents related to BEC shall be submitted along with the Technical Bid.			
1.1 FI	NANCIAL CR	ITERIA			
2	1.1.1	Annual Financial Turnover of the bidder during any of preceding 03 (Three) financial/accounting years from the original bid closing date should be at least Rs. 4,44,38,100.00 (Rupees Four Crores Forty Four Lakhs Thirty Eight Thousand One Hundred only).			
3	1.1.2	Net worth of the bidder must be Positive for the preceding financial/accounting year.			
4	Note to above Clause 1.1 above	Notes to BEC Clause 1.1 above: a. For proof of Annual Turnover & Net worth, any one of the following documents/photocopies must be submitted along with the bid:			

		(i) Audited Balance Sheet along with Profit & Loss account.	
		OR	
		(ii) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), as per format prescribed in Annexure-X.	
		b. Considering the time required for preparation of Financial Statements, if the last date of preceding financial/accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial/accounting year are not available with the bidder, then the financial turnover of the previous three financial/accounting years excluding the preceding financial /accounting year will be considered. In such cases, the Net worth of the previous financial/accounting year excluding the preceding financial/accounting year will be considered. However, the bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year 2016-17 have actually not been audited so far'.	
		c. In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, bidder to provide documentary evidence for the same.	
1.2	TECHNICAL CI	RITERIA	
5	1.2.1	1.2.1 The Bidder shall have the experience of successful completion/execution of "Maintenance Services" or "Operation & Maintenance (O&M)" in Central Govt./State Govt./PSUs/State Govt. Enterprises/Any Upstream or Downstream Oil/Gas Company of any one of the following:	

		a. Experience of handling Production Facility/Process Facility/Tank Farm with a minimum work experience Rs. 4,44,38,100.00 (Rupees Four Crores Forty Four Lakhs Thirty Eight Thousand One Hundred only) for a minimum period of 01 (One) year during the last 07 (Seven) years to be reckoned from the original bid closing date. OR b. Experience of handling Natural Gas - Production/Gathering/Processing/ Compression facility with a minimum work experience of 01 (One) MMSCUMD or more	
		during the last 07 (Seven) years to be reckoned from the original bid closing date. OR c. Experience of handling Petroleum Production facility for a minimum production of 300 Barrels of Oil per Day during the last 07 (Seven) years to be reckoned from the original bid closing date OR d. Experience of handling "Crude Oil"/"Petroleum Products" of Tank Farm with minimum storage capacity of 10,000 Barrels during the last 07 (Seven) years to be reckoned from the original bid closing date.	
6	Note to BEC clause 1.2.1	 (I) Maintenance Services/O&M Services as referred in 1.2.1 must have to meet the minimum working experience for the following under single contract: a) Maintenance of Process Instrumentation and related control system. b) Maintenance of Fire Fighting Equipments and related control system. c) Maintenance of Electrical Systems including Air 	

	Conditioners.
	d) Maintenance of Mechanical Pumps, Engines, Air
	Compressors etc.
(II)	(A1) In case the work experience is not with OIL, for
	proof of requisite Experience as mentioned in 1.2.1 above,
	bidders shall submit the following document(s) along with the
	bid:
	a) Copies of relevant pages of contract document showing
	Contract Number, period of contract and Detailed Scope
	of work etc.
	b) Copy of Letter of Award (LOA)/Letter of Intent (LOI)
	along with Bill Payment/Service Entry Sheet
	(SES)/Certificate of Payment (COP) for the period of 1
	(one) year indicating the value of the job executed.
	c) Copies of completion Certificate(s) or payment
	certificate(s) or any other documents which substantiate
	completion/ execution of the jobs, issued by the client(s)
	with contact details of the issuing person/organization
	(e-mail address, Phone Number, Fax number etc.). The
	certificate of payment (COP)/payment certificate should
	clearly mention the following:
	clearly mention the lonowing.
	. Departies of Country of
	i. Duration of Contract
	ii. Gross Value of Job Done
	iii. Job start & end date
	(B1) For proof of requisite Experience as mentioned in
	1.2.1, in case Work Experience is against OIL's Contract
	which is completed, a copy of contract document to be
	submitted with the Job Completion Certificate mentioning the
	following:

		i. Contract No. and Work Order No.	
		ii. Period of Contract indicating start date and	
		end date	
		iii. Gross value of the jobs done	
		OR	
		(C1) For proof of requisite Experience as mentioned in	
		1.2.1, in case Work Experience is against running contract	
		with OIL which the bidder has executed for a minimum	
		period of 1(one) year reckoned from the original bid closing	
		date, the following document(s) must be submitted along with	
		the bid:	
		i. A Copy of Contract document & work order	
		no.	
		AND	
		ii. Copy of SES (service entry sheet) for the jobs	
		executed indicating the gross value of job	
		done during the referred period.	
		1.2.2 Bidder must submit an undertaking, in original, from the	
		OEM/Authorized Dealer of Honeywell, Emerson Rosemount,	
		SIEMENS, PHOENIX, ABB Ltd., Bajaj, Philips, HITACHI	
		HiREL, Greaves Cotton Ltd, Kirlosker Oil Engines Ltd.,	
		Kirloskar Pneumatic Pvt., Mather & Platt Pumps Ltd., M/s	
		NK Fire Safety, FIRETECH Equipment & Services Pvt. Ltd.,	
		Bluestar and Brady & Morris Engg. Co. Ltd in a letter clearly	
7	1.2.2	stating that they (OEM/Authorized Dealer) would facilitate the	
		required services to the bidder on regular basis with Maintenance	
		Crew/Technology/Spares/Product updates etc. & also extend all	
		necessary support during the maintenance period of the contract.	
		In the absence of such undertaking, the bid is liable to be	
		rejected. This undertaking shall be valid for the entire duration of	
		the contract. A format of Undertaking is attached as Annexure	
		XP	
		1	

8	1.2.3	A job executed by a bidder for its own organization/subsidiary cannot be considered as experience for the purpose of meeting BEC. Also, any bidder who is extending support by way of entering into consortium/collaboration agreement or MOU with another party cannot be considered as experience for the purpose of meeting BEC		
9	1.3	Bid will be rejected if not accompanied with adequate documentary proof in support of Work experience, Annual turnover and Net worth as mentioned in Para 1.1 & 1.2 above.		
10	1.4	The bidders must have their registered office in India; documentary evidence in this connection has to be provided along with the bid. The bid will be rejected if the applicable supporting document is not being provided in this regard.		
11	1.5	Price bid shall be opened in respect of only the techno-commercially acceptable bidders whose bids have been found to be substantially responsive. A substantially responsive bid is one that meets the terms and conditions of the Tender and/or the acceptance of which bid will not result in indeterminate liability on OIL.		
12	1.6	Bidders are required to quote for all the items as per Price Bid Format, otherwise the offer of the bidder will be straightway rejected.		
13	1.7	If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.		
14	1.8	The quantities shown against each item in the "Price Bid Format" shall be considered for the purpose of Bid Evaluation. It is, however, to be clearly understood that the assumptions made in respect of the quantities for various operations are only for the purpose of evaluation of the bid and the Contractor will be paid on the basis of the actual number of days/parameter, as the case may be.		
15	1.9	The bidders are advised not to offer any discount/rebate separately and to offer their prices in the Price Bid Format after considering discount/rebate, if any.		
16	1.10	Conditional and unsolicited discount will not be considered in evaluation. However, if such bidder happens to be the lowest		

		recommended bidder, unsolicited discount without any condition will be considered for computing the contract price.	
17	1.11	In case of identical overall lowest offered rate by more than 1 (one) bidder, the selection will be made by draw of lot between the parties offering the same overall lowest price.	
18	1.12	PURCHASE PREFERENCE: 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: 1.12.1 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. 1.12.2 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. 1.12.3 Documentation 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 of Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/Statespapers and the lates has registered.	
		entrepreneur should also be enclosed.	

19	1.13	 1.13 PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC) 1.13.1 Purchase preference policy-linked with Local Content (PP - LC) notified vide letter no. O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoP&NG shall be applicable in this tender. (http://petroleum.nic.in/policy-provide-purchase-preference-linked-local-content-pp-lc-all-psus). 1.13.2 Bidders seeking benefits, under Purchase Preference Policy (linked with Local Content) (PP-LC) shall have to comply with all the provisions specified all clauses under clause No. 22 of ITB and shall have to submit all undertakings/documents applicable 	
20	1.14	for this policy. Price Bids shall be evaluated on overall lowest cost to OIL (L-1 offer) basis i.e. considering total quoted price for all services including applicable GST(CGST & SGST/UTGST or IGST).	
21	1.14	 1.14 PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT) (PP-LC) 1.14.1 Purchase preference policy-linked with Local Content (PP - LC) notified vide letter no. O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoP&NG shall be applicable in this tender. (http://petroleum.nic.in/policy-provide-purchase-preference-linked-local-content-pp-lc-all-psus). 1.14.2 Bidders seeking benefits, under Purchase Preference Policy (linked with Local Content) (PP-LC) shall have to comply with all the provisions specified all clauses under clause No. 22 of ITB and shall have to submit all undertakings/documents applicable for this policy. 	
22	1.15	OIL will prefer to deal with registered bidder under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.	

		However, in case any unregistered bidder is submitting their		
		bid, their prices will be loaded with applicable GST while evaluation of		
		bid. Where OIL is entitled for input credit of GST, the same will be		
		considered for evaluation of bid as per evaluation methodology of tender		
		document.		
		1.15.1		
		Price Bid uploaded without giving any of the details of the taxes		
	1.16	(Including rates and amounts) will be considered as inclusive of all taxes		
		including GST.		
		When a bidder mentions taxes as extra without specifying the		
23		rates & amount, the offer will be loaded with maximum value towards		
		taxes received against the tender for comparison purposes. If the bidder		
		emerges as lowest bidder after such loading, in the event of order on		
		that bidder, taxes mentioned by OIL on the Purchase Order/ Contracts		
		will be binding on the bidder.		
	1.17	Input Tax Credit on GST (Goods & Service Tax) for this service is NOT		
24		available to OIL & the bids will be evaluated based on total price		
		including GST.		
		Based on the evaluation of techno-commercially qualified bidders, the		
25	1.18	job will be awarded to L-1 bidder		
2.0	BID REJECTIO	ON CRITERIA (BRC):	<u> </u>	
2.0	DID REGESTIO	· ·		
	2.1	The bids are to be submitted in single stage under 2 (two) bid system		
26		i.e. Un-priced Techno-Commercial Bid and Price Bid together. Only the		
		Price Bid should contain the quoted price.		
	2.2	The price quoted by the successful bidder must be firm during the		
27		performance of the contract and not subject to variation on any account except as mentioned in the bid document. Any bid submitted with		
21		adjustable price quotation other than the above will be treated as non-		
		responsive and rejected.		
	2.3	Bid security shall be furnished as a part of the Techno Commercial Un-		
00		priced Bid. The amount of bid security should be as specified in the		
28		forwarding letter. Any bid not accompanied by a proper bid security will		
		be rejected.		
29	2.4	Bid Documents/User Id & Password for OIL's E-Tender portal are not		

		transferable. Bid made by parties who have not submitted the requisite tender fees will be rejected.		
30	2.5	Any bid received in the form of Physical document/ Telex/Cable/Fax/E-mail will not be accepted.		
31	2.6	Bids shall be typed or written in indelible ink. The bidder or his authorized representative shall sign the bid digitally, failing which the bid will be rejected.		
32	2.7	Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by bidder, in which case such corrections shall be initiated by the persons(s) signing (digitally) the bid. However, white fluid should not be used for making corrections. Any bid not meeting this requirement shall be rejected.		
33	2.8	Any bid containing false statement will be rejected and action will be taken by Company as per Bid Document.		
34	2.9	Bidders must quote clearly and strictly in accordance with the price schedule outlined in Price Bidding Format attached under "Notes and Attachments" tab in the main bidding engine of OIL's e-Tender portal; otherwise the bid will be rejected. All other techno-commercial documents other than price details to be submitted with Un-priced Techno-Commercial Bid as per tender requirement in the c-Folder link (collaboration link) under "Technical RFx Response" Tab Page only.		
35	2.10	Bidder must accept and comply with the following provisions as given in the Tender Document into, failing which offer will be rejected: (i) Firm price (ii) EMD/Bid Bond (iii) Period of validity of Bid (iv) Price Schedule (v) Performance Bank Guarantee/Security deposit (vi) Delivery/Completion Schedule (vii) Scope of work (viii) Guarantee of material/work (ix) Liquidated Damages clause (x) Tax liabilities (xi) Arbitration/Resolution of Dispute Clause (xii) Force Majeure (xiii) Applicable Laws (xiv) Specifications		

		(xv) Integrity Pact		
36	2.11	There should not be any indication of price in the Un-priced Techno-Commercial Bid. A bid will be straightway rejected if this is given in the Un-priced Techno-Commercial Bid.		
30	2.12	Bid received with validity of offer less than 120 (one hundred twenty) days from the date of Technical Bid opening will be rejected.		
37	2.13	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.		
38		 3.1 In case bidder takes exception to any clause of bidding 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 company. The loading so done by the company will be final and binding on the bidders. No deviation will however be accepted in the clauses covered under BRC. 3.2 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 BEC/BRC also and such clarifications fulfilling the BEC/BRC clauses in toto must be received on or before the deadline given by the company, failing which the offer will be will be evaluated based on the submission. However, mere submission of such clarification shall not make the offer responsive, unless company is 		
		satisfied with the substantial responsiveness of the offer.3.3 If any of the clauses in the BRC contradict with other clauses of		

bidding document elsewhere, the clauses in the BRC shall prevail.

- **3.4** Bidders should note that the documents/information submitted by the bidder(s) against the tender are presumed to be genuine, authentic and true copy of the originals. However, in case at any stage of tendering process or during execution of the contract or after expiry of contract, if it is detected that bidder has submitted forged or fabricated documents or furnish false information towards fulfillment of any of the tender/contract conditions, Company shall immediately reject the bid of such bidder(s) or cancel/terminate the contract, as the case may be and forfeit EMD/SD submitted by the bidder. Besides, the bidder shall be dealt as per the Banning Policy (available in OIL's website) of Company.
- **3.5** Bidder(s) must note that requisite information(s)/financial values etc. as required in the BEC/BRC & Tender are clearly understandable from the supporting documents submitted by the Bidder(s); otherwise Bids shall be rejected.
- **3.6** OIL will not be responsible for delay, loss or non-receipt of applications for participating in the bid sent by mail and will not entertain any correspondence in this regard.
- **3.7** The originals of such documents [furnished by bidder(s)] shall have to be produced by bidder(s) to OIL as and when asked for.